**Cluster 0**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Leveraging large-scale national data to understand, reduce, and prevent benzodiazepine-related harms among older adults | UNIVERSITY OF MICHIGAN AT ANN ARBOR | R01 | 2020 | 0.16 |
| Older Adults & Drug Decisions: Collaboration & Outcomes | UNIVERSITY OF WISCONSIN MADISON | R01 | 2005 | 0.15 |
| Changes in Multimorbidity and Disability Among Race/Ethnic Older Adults (AD/ADRD-Focused Administrative Supplement) | OREGON HEALTH & SCIENCE UNIVERSITY | R01 | 2018 | 0.14 |
| Polypharmacy, Potentially Inappropriate Medications, and Adverse Outcomes in Older Adults with Advanced Cancer Receiving Chemotherapy | UNIVERSITY OF ROCHESTER | R03 | 2020 | 0.14 |
| Sense4Safety: Supporting socially vulnerable older adults | UNIVERSITY OF PENNSYLVANIA | R03 | 2020 | 0.13 |

**Cluster 1**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Genetic Factors in Keratoconus | CEDARS-SINAI MEDICAL CENTER | R01 | 2019 | 0.086 |
| Creating a Myelomeningocele Exome Variant Map | UNIVERSITY OF TEXAS HLTH SCI CTR HOUSTON | R01 | 2018 | 0.086 |
| Statistical Tests for Mapping Genetic Determinants of Complex Traits | EMORY UNIVERSITY | R01 | 2019 | 0.083 |
| From GWAS loci to blood pressure genes, variants & mechanisms | NEW YORK UNIVERSITY SCHOOL OF MEDICINE | R01 | 2020 | 0.082 |
| Enhanced Gene Identification in Complex Traits Using Kernel Machines | EMORY UNIVERSITY | R01 | 2015 | 0.077 |

**Cluster 2**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Genotype and phenotype predictors in therapy response in renal cell carcinoma | UNIVERSITY OF PENNSYLVANIA | R01 | 2013 | 0.075 |
| Quantitative Multimodal Image Guidance for Improved Liver Cancer Treatment | YALE UNIVERSITY | R01 | 2020 | 0.071 |
| UCSC-Buck Inst. Genome Data Analysis Center for TCGA Research Network (GDAC) | UNIVERSITY OF CALIFORNIA SANTA CRUZ | U24 | 2016 | 0.07 |
| Integrated Discovery Pipeline for Tumor Neoantigens | UNIVERSITY OF PENNSYLVANIA | R01 | 2020 | 0.069 |
| Antigen-independent prediction and biomarker identification of cancer-specific T cells | UT SOUTHWESTERN MEDICAL CENTER | R01 | 2020 | 0.069 |

**Cluster 3**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Functional and Structural Optical Coherence Tomography for Glaucoma | OREGON HEALTH & SCIENCE UNIVERSITY | R01 | 2020 | 0.066 |
| Detection of Glaucoma Progression with Macular OCT Imaging | UNIVERSITY OF CALIFORNIA LOS ANGELES | K23 | 2016 | 0.066 |
| IEEE Medical Imaging Conference | MASSACHUSETTS GENERAL HOSPITAL | R13 | 2020 | 0.058 |
| Medical Advice from Glaucoma Informatics (MAGI) | UNIVERSITY OF CALIFORNIA SAN DIEGO | R33 | 2005 | 0.056 |
| Bayesian Parallel Imaging For Arbitrarily Sampled MR Data Using Edge-Preserving S | WEILL MEDICAL COLL OF CORNELL UNIV | R21 | 2009 | 0.054 |

**Cluster 4**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Assessing ASL CBF as a biomarker for early Alzheimer's disease detection and disease progression | UNIVERSITY OF MARYLAND BALTIMORE | R01 | 2020 | 0.29 |
| Disparities in the Diagnosis of Alzheimer's Disease Among African American and European American Veterans | SEATTLE INST FOR BIOMEDICAL/CLINICAL RES | R56 | 2018 | 0.27 |
| Computational Prediction and Functional Validation of Novel Epigenetic Risk Loci in Alzheimer's Disease | EMORY UNIVERSITY | R56 | 2018 | 0.26 |
| Temporal Trends, Novel Imaging and Molecular Characterization of Preclinical and Clinical Alzheimer's Disease in the Framingham Cohorts | UNIVERSITY OF TEXAS HLTH SCIENCE CENTER | R01 | 2020 | 0.26 |
| Computational methods for regional hippocampal morphometry in AD | UNIVERSITY OF PENNSYLVANIA | K25 | 2011 | 0.25 |

**Cluster 5**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Automating assessment of obesity care quality | KAISER FOUNDATION RESEARCH INSTITUTE | R18 | 2011 | 0.047 |
| Automatic Acquisition of Knowledge for Senior Care Planning | MY HEALTH CARE | R44 | 2011 | 0.044 |
| Comp B-Western Intermountain Regional NMD STARnet | UNIVERSITY OF UTAH | U01 | 2018 | 0.043 |
| IMPROVING OUTCOMES IN MECHANICALLY VENTILATED PATIENTS | UNIVERSITY OF PITTSBURGH AT PITTSBURGH | R01 | 2003 | 0.038 |
| Quality of Care and Outcomes of Healthcare-Associated Pneumonia | BAYSTATE MEDICAL CENTER, INC. | R01 | 2012 | 0.038 |

**Cluster 6**

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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 | 0.4 |
| Sleep apnea after stroke: Implications for screening and treatment | UNIVERSITY OF MICHIGAN AT ANN ARBOR | R01 | 2019 | 0.4 |
| Fast and Easy Assessment of Stroke | ALVA HEALTH, INC. | R43 | 2019 | 0.39 |
| Whole Transcriptome Studies of Patients with Transient Ischemic Attacks (TIAs) | UNIVERSITY OF CALIFORNIA AT DAVIS | R01 | 2020 | 0.38 |
| Enhancing Stroke Prehospital and Emergency Evaluation and Delivery (E-SPEED) | UNIVERSITY OF CHICAGO | R18 | 2020 | 0.36 |

**Cluster 7**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Enhancing an EMR-Based Real-Time Sepsis Alert System Performance through Machine Learning | WAYNE STATE UNIVERSITY | R21 | 2017 | 0.39 |
| Using Big Data to Understand Sepsis in an Immunocompromised Population | UNIVERSITY OF WASHINGTON | F31 | 2020 | 0.39 |
| Sepsis Early Prediction and Subphenotype Illumination Study (SEPSIS) | UNIVERSITY OF WISCONSIN-MADISON | R01 | 2020 | 0.37 |
| Sepsis Early Prediction and Subphenotype Illumination Study (SEPSIS) | UNIVERSITY OF CHICAGO | R01 | 2019 | 0.37 |
| Using clinical treatment data in a machine learning approach for sepsis detection | DASCENA, INC. | R43 | 2018 | 0.35 |

**Cluster 8**

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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 | 0.38 |
| Big Data Analysis of HIV Risk and Epidemiology in Sub-Saharan Africa | STANFORD UNIVERSITY | R01 | 2020 | 0.36 |
| 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 | 0.35 |
| Developing an artificial intelligence-based mHealth intervention to increase HIV testing in Malaysia | YALE UNIVERSITY | R21 | 2020 | 0.34 |
| HIV Testing, Linkage and Retention in Care: Contextual Factors and Disparities | UNIVERSITY OF CALIFORNIA LOS ANGELES | R01 | 2017 | 0.34 |

**Cluster 9**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| A Multisite Neurobehavioral Assessment of Fetal Alcohol Spectrum Disorders | SAN DIEGO STATE UNIVERSITY | U01 | 2020 | 0.29 |
| Spectrum of and Nutritional Risk Factors for FASD in Russia and Ukraine | UNIVERSITY OF CALIFORNIA, SAN DIEGO | U01 | 2011 | 0.29 |
| Mouse Model Neuro-Facial Dysmorphology: Tanslational and Treatment Studies | INDIANA UNIV-PURDUE UNIV AT INDIANAPOLIS | U01 | 2011 | 0.28 |
| Administrative Core of the CIFASD | SAN DIEGO STATE UNIVERSITY | U24 | 2020 | 0.24 |
| Identification of fetal alcohol-affected children: Alterations in imprinted gene expression and methylation as biomarkers of neurobehavioral and growth impairment. | COLUMBIA UNIVERSITY HEALTH SCIENCES | R01 | 2020 | 0.22 |

**Cluster 10**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Digital Mammography: Advanced Computer-Aided Breast Can\* | UNIVERSITY OF MICHIGAN | R01 | 2007 | 0.27 |
| Improving Breast Cancer Detection and Diagnosis with CAD | UNIVERSITY OF PITTSBURGH AT PITTSBURGH | R01 | 2011 | 0.26 |
| Digital Tomosynthesis Mammography: Computer-Aided Analysis of Masses | UNIVERSITY OF MICHIGAN AT ANN ARBOR | R33 | 2009 | 0.24 |
| Toward Diagnostics and Therapies of Molecular Subcategories of CAD | ICAHN SCHOOL OF MEDICINE AT MOUNT SINAI | R01 | 2018 | 0.23 |
| Information-Theoretic Based CAD in Mammography | DUKE UNIVERSITY | R01 | 2008 | 0.22 |

**Cluster 11**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Multimodal Biomarkers in Frontotemporal Lobar Degeneration | UNIVERSITY OF PENNSYLVANIA | K01 | 2017 | 0.068 |
| New Tools for the interpretation of Pathogen Genomic Data with a focus on Mycobacterium tuberculosis | HARVARD MEDICAL SCHOOL | K01 | 2019 | 0.068 |
| Improving Prediction of Medical Responsiveness and Clinical Outcomes in Crohn's Disease | UNIVERSITY OF MICHIGAN AT ANN ARBOR | K23 | 2019 | 0.064 |
| Vaccine Development for Falciparum Malaria in Pregnant Women and Their Offspring | RHODE ISLAND HOSPITAL | K08 | 2017 | 0.064 |
| Using data science to measure the impact of opioid agonist therapy in patients admitted with Staphylococcus aureus bloodstream infections | UNIVERSITY OF CALIFORNIA LOS ANGELES | K08 | 2020 | 0.061 |

**Cluster 12**

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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 | 0.28 |
| Multimodal Speech Translation for Assistive Communication | NORTHEASTERN UNIVERSITY | R21 | 2015 | 0.26 |
| Functional Architecture of Speech Motor Cortex | UNIVERSITY OF CALIFORNIA, SAN FRANCISCO | U01 | 2018 | 0.26 |
| INTELLIGIBILITY ASSESSMENT IN DYSARTHRIA | UNIVERSITY OF WISCONSIN MADISON | R01 | 2005 | 0.25 |
| SPEECH MOVEMENT CLASSIFICATION FOR ASSESSING AND TREATING ALS | MGH INSTITUTE OF HEALTH PROFESSIONS | R01 | 2018 | 0.25 |

**Cluster 13**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| fMRI-based Biomarkers for Multiple Components of Pain | UNIVERSITY OF COLORADO | R01 | 2017 | 0.4 |
| Mechanistic Characterization of Pain in Temporomandibular Disorders: Does Pain Centralization Influence Responsiveness to Peripherally Targeted Treatments? | EMORY UNIVERSITY | R00 | 2020 | 0.38 |
| Neuroimaging-based biomarkers for two components of pain | COLUMBIA UNIV NEW YORK MORNINGSIDE | RC1 | 2010 | 0.38 |
| Development of a deep neural network to measure spontaneous pain from mouse facial expressions | UNIV OF NORTH CAROLINA CHAPEL HILL | R01 | 2020 | 0.38 |
| A Multimodal Approach for Monitoring Prolonged Acute Pain in Neonates | UNIVERSITY OF SOUTH FLORIDA | R21 | 2020 | 0.37 |

**Cluster 14**

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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 | 0.25 |
| NESTED CASE CONTROL STUDY OF MAMMOGRAPHIC DENSITY | UNIVERSITY OF HAWAII AT MANOA | R01 | 2002 | 0.25 |
| Migraine, Migraine Medication Use, and Risk of Breast Cancer | FRED HUTCHINSON CANCER RESEARCH CENTER | R03 | 2010 | 0.25 |
| Informatics Techniques to Optimize Mammography for Aging Populations | UNIVERSITY OF WISCONSIN-MADISON | R01 | 2016 | 0.25 |
| EPIDEMIOLOGY OF MOLECULAR RISK FACTORS FOR BREAST CANCER | VANDERBILT UNIVERSITY | R01 | 2004 | 0.24 |

**Cluster 15**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Shape up! Kids | UNIVERSITY OF HAWAII AT MANOA | R01 | 2020 | 0.014 |
| Optical Body Composition and Health Assessment | UNIVERSITY OF HAWAII AT MANOA | R01 | 2020 | 0.013 |
| Regular Exercise Among Women at Risk for Preeclampsia | UNIVERSITY OF MICHIGAN AT ANN ARBOR | R01 | 2005 | 0.013 |
| Periodontal Disease and Prematurity | NEW YORK UNIVERSITY | R01 | 2006 | 0.012 |
| GESTATIONAL DIABETES: DIAGNOSTIC CRITERIA AND OUTCOMES | KAISER FOUNDATION RESEARCH INSTITUTE | R01 | 2003 | 0.011 |

**Cluster 16**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| A systems analysis of drug tolerance in Mycobacterium tuberculosis | INSTITUTE FOR SYSTEMS BIOLOGY | R01 | 2020 | 0.13 |
| Predicting Drug Cardiotoxicity Targets Using iPSC-Derived Cardiomyocytes and Machine Learning | CORNELL UNIVERSITY | F31 | 2020 | 0.11 |
| Peripheral Nerve-on-a-chip for Predictive Preclinical Pharmaceutical Testing | AXOSIM, INC. | R42 | 2018 | 0.1 |
| An integrative multi-phenotype pipeline for drug evaluation, pharmacogenomics, and attribute prediction | PHENVOGEN, LLC | R41 | 2017 | 0.1 |
| HIGH THROUGHPUT IN VIVO DRUG DISCOVERY-PHASE 1 | PSYCHOGENICS, INC. | R43 | 2005 | 0.097 |

**Cluster 17**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Mammography Visits to Improve Colon Cancer Screening | UNIVERSITY OF MICHIGAN AT ANN ARBOR | K07 | 2009 | 0.27 |
| Reducing disparities in colorectal cancer screening in Vietnamese Americans | CANCER PREVENTION INSTIT OF CALIFORNIA | R01 | 2012 | 0.27 |
| Promoting Colon Cancer Screening Among African Amercians | INDIANA UNIV-PURDUE UNIV AT INDIANAPOLIS | R01 | 2010 | 0.25 |
| Promoting Colon Cancer Screening Among African Americans | INDIANA UNIV-PURDUE UNIV AT INDIANAPOLIS | R01 | 2009 | 0.25 |
| Increasing CRC Screening in Primary Care Settings | UNIVERSITY OF ILLINOIS | R01 | 2007 | 0.24 |

**Cluster 18**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Co-occurring ADHD in young children with ASD: Precursors, detection, neural signatures, and early treatment | DUKE UNIVERSITY | P50 | 2020 | 0.2 |
| Investigating quantitative signatures of autism in toddlers | COLUMBIA UNIVERSITY TEACHERS COLLEGE | R01 | 2020 | 0.19 |
| Novel video-based approaches for detection of autism risk in the first year of life | UNIVERSITY OF CALIFORNIA AT DAVIS | R01 | 2020 | 0.19 |
| Evaluating Plasma and Urine Porphyrins as Biomarkers of ASD | BATTELLE CENTERS/PUB HLTH RES & EVALUATN | R21 | 2015 | 0.18 |
| Cerebellar connectivity and error-based learning in infants at risk for autism | WASHINGTON UNIVERSITY | F31 | 2020 | 0.17 |

**Cluster 19**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| PEDIATRIC ASTHMA DISPARITIES: PERCEPTIONS AND MANAGEMENT | RHODE ISLAND HOSPITAL | U01 | 2008 | 0.52 |
| Asthma ascertainment and characterization through electronic health records | MAYO CLINIC ROCHESTER | R01 | 2017 | 0.48 |
| Nasal biomarkers of asthma | ICAHN SCHOOL OF MEDICINE AT MOUNT SINAI | R01 | 2019 | 0.46 |
| DISPARITIES IN ASTHMA AMONG ELDERLY IN WEST TEXAS | TEXAS TECH UNIVERSITY HEALTH SCIS CENTER | R03 | 2003 | 0.45 |
| Secondary use of EMR for residency training in asthma care and documentation | MAYO CLINIC ROCHESTER | R21 | 2020 | 0.44 |

**Cluster 20**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Very large datasets and new models to predict and design protein interactions | MASSACHUSETTS INSTITUTE OF TECHNOLOGY | R01 | 2014 | 0.21 |
| Computer Studies of Protein Structure and Function | COLUMBIA UNIVERSITY HEALTH SCIENCES | R01 | 2016 | 0.18 |
| Advanced approaches to protein structure prediction | UNIVERSITY OF MICHIGAN AT ANN ARBOR | R35 | 2020 | 0.18 |
| Proteomics of ciliopathy protein complexes | UNIVERSITY OF TEXAS, AUSTIN | F31 | 2019 | 0.17 |
| Understanding molecular rules governing protein allostery by deep mutational scanning | UNIVERSITY OF WISCONSIN-MADISON | DP2 | 2018 | 0.17 |

**Cluster 21**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| ABCD-USA Consortium: Research Project | UNIVERSITY OF CALIFORNIA, SAN DIEGO | U01 | 2019 | 0.26 |
| ABCD-USA Consortium:Research Project | UNIVERSITY OF PITTSBURGH AT PITTSBURGH | U01 | 2017 | 0.2 |
| Project START: Screening to Augment Referral to Treatment | YALE UNIVERSITY | R01 | 2014 | 0.18 |
| Data Driven Strategies for Substance Misuse Identification in Hospitalized Patients | UNIVERSITY OF WISCONSIN-MADISON | R01 | 2020 | 0.14 |
| Automated assessment using facial coding | TREATMENT INNOVATIONS, LLC | R43 | 2016 | 0.13 |

**Cluster 22**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Better Outcomes for Children: Promoting Excellence in Healthcare Genomics to Inform Policy | CINCINNATI CHILDRENS HOSP MED CTR | U01 | 2019 | 0.14 |
| From enrichment to insights | STANFORD UNIVERSITY | R01 | 2020 | 0.13 |
| Semi-supervised Algorithms for Risk Assessment with Noisy EHR Data | HARVARD SCHOOL OF PUBLIC HEALTH | R21 | 2020 | 0.13 |
| EHR-Based Strategies to Improve Outcomes in Familial Hypercholesterolemia | MAYO CLINIC ROCHESTER | R01 | 2020 | 0.11 |
| EHR-based Genomic Discovery and Implementation | MAYO CLINIC ROCHESTER | U01 | 2019 | 0.1 |

**Cluster 23**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Digital Monitoring of Agitation for Short-Term Suicide Risk Prediction | MASSACHUSETTS GENERAL HOSPITAL | K23 | 2020 | 0.43 |
| Seasonality of Suicide and Airborne Allergens | UNIVERSITY OF MARYLAND BALTIMORE | R01 | 2009 | 0.43 |
| SEASONALITY OF SUICIDE AND AIRBORNE ALLERGENS | UNIVERSITY OF MARYLAND BALTIMORE | R01 | 2008 | 0.43 |
| Treatment Utilization Before Suicide (TUBS) | HENRY FORD HEALTH SYSTEM | R01 | 2018 | 0.41 |
| Computerized Adaptive Suicidal Risk Stratification and Prediction | ADAPTIVE TESTING TECHNOLOGIES | R44 | 2020 | 0.41 |

**Cluster 24**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Histopathology correlated quantitative analysis of lung nodules with LDCT for early detection of lung cancer | UNIVERSITY OF MICHIGAN AT ANN ARBOR | U01 | 2020 | 0.25 |
| EARLY DETECTION OF LUNG CANCER USING METABOLOMIC LIPID PROFILING | RUSH UNIVERSITY MEDICAL CENTER | R21 | 2014 | 0.24 |
| Macro-vasculature: A Novel Image Biomarker of Lung Cance | UNIVERSITY OF PITTSBURGH AT PITTSBURGH | R01 | 2020 | 0.24 |
| A diagnostic model for malignant pulmonary nodules | UNIVERSITY OF MARYLAND BALTIMORE | R21 | 2020 | 0.24 |
| Lung cancer in East Africa and the relationship to HIV-1 infection: epidemiology, molecular characterization and imaging | CASE WESTERN RESERVE UNIVERSITY | U54 | 2020 | 0.23 |

**Cluster 25**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| A NON INVASIVE DERMATOLOGICAL LESION CLASSIFIER | WESTERN RESEARCH COMPANY, INC. | R44 | 2001 | 0.053 |
| In-field FAST Procedure Support and Automation | KITWARE, INC. | R43 | 2014 | 0.032 |
| A Molecular Diagnostic Assay for Accurately Differentiating Melanoma from Benign Lesions | FRONTIER DIAGNOSTICS, LLC | R44 | 2020 | 0.029 |
| Characterizing Trauma Outcomes: From Pre-trauma Risk to Post-trauma Sequelae | BOSTON UNIVERSITY MEDICAL CAMPUS | R01 | 2020 | 0.027 |
| Computer Assisted Trauma Triage (CATT) | UNIVERSITY OF CENTRAL FLORIDA | R15 | 2007 | 0.027 |

**Cluster 26**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| SCH: INT A.Soclotechnilcal Systems Systems Approach for Improving Tuberculosis Diagnostics Using Mobile Health Technologies | UNIVERSITY OF MASSACHUSETTS LOWELL | R01 | 2019 | 0.027 |
| Discovering hidden groups across tuberculosis patient and pathogen genotype data | RENSSELAER POLYTECHNIC INSTITUTE | R01 | 2010 | 0.026 |
| Precision immunoprofiling to reveal diagnostic biomarkers of latent TB infection | UNIVERSITY OF MICHIGAN AT ANN ARBOR | R01 | 2020 | 0.021 |
| Scalable Learning with Ensemble Techniques and Parallel Computing | INSILICOS | R44 | 2011 | 0.017 |
| Signature of profiling and staging the progression of TB from infection to disease. | BOSTON UNIVERSITY MEDICAL CAMPUS | R21 | 2020 | 0.017 |

**Cluster 27**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Cross-frequency coupling: its role in brain function and dysfunction | GEORGETOWN UNIVERSITY | RF1 | 2020 | 0.069 |
| Neural mechanisms of attentional priority for visual features and objects | MICHIGAN STATE UNIVERSITY | R01 | 2016 | 0.069 |
| Analysis of Nonstationary Point Process Data | CARNEGIE-MELLON UNIVERSITY | R01 | 2020 | 0.066 |
| CRCNS: Machine Learning for Analysis of fMRI | STATE UNIVERSITY NEW YORK STONY BROOK | R01 | 2005 | 0.06 |
| Machine Learning for Analysis of functional MRI of Underlying Inhibitory Control | STATE UNIVERSITY NEW YORK STONY BROOK | R01 | 2010 | 0.058 |

**Cluster 28**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Data-Driven Identification of the Acute Respiratory Distress Syndrome | UNIVERSITY OF MICHIGAN AT ANN ARBOR | K01 | 2020 | 0.58 |
| A Real-Time Computational System for Detecting ARDS Using Ventilator Waveform Data | UNIVERSITY OF CALIFORNIA AT DAVIS | F31 | 2020 | 0.58 |
| Acute Respiratory Distress Syndrome after Isolated Traumatic Brain Injury: Platelet Biology, Endothelial Activation, and Mechanical Ventilation | UNIVERSITY OF CALIFORNIA, SAN FRANCISCO | K23 | 2020 | 0.58 |
| The Role of the Microbiome in the Acute Respiratory Distress Syndrome | UNIVERSITY OF MICHIGAN AT ANN ARBOR | K23 | 2020 | 0.56 |
| Rule Based Semantics and Big Data Based Methods for Early Identification of Patients at Risk of Acute Respiratory Distress Syndrome (ARDS) | COMPUTER TECHNOLOGY ASSOCIATES, INC. | R43 | 2017 | 0.53 |

**Cluster 29**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Effectiveness of Treating Prenatal Depression to Reduce Postpartum Depression | KAISER FOUNDATION RESEARCH INSTITUTE | R01 | 2016 | 0.12 |
| Predicting Internet-Based Treatment Response for Major Depressive Disorder | MCLEAN HOSPITAL | R56 | 2017 | 0.096 |
| Leveraging Artificial Intelligence for the assessment of severity of depressive symptoms | MASSACHUSETTS GENERAL HOSPITAL | R01 | 2020 | 0.091 |
| Human Microbiome and Perinatal Depression | UNIVERSITY OF ILLINOIS AT CHICAGO | R03 | 2019 | 0.091 |
| An Expert System to Reduce Depression in Primary Care | PRO-CHANGE BEHAVIOR SYSTEMS, INC. | R44 | 2004 | 0.086 |

**Cluster 30**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Gene-Gene Interactions and Their Functional Roles in Prostate Cancer Aggressiveness | LSU HEALTH SCIENCES CENTER | R21 | 2017 | 0.33 |
| Genetic & epigenetic analysis of angiogenesis genes in recurrent prostate cancer | H. LEE MOFFITT CANCER CTR & RES INST | R01 | 2012 | 0.33 |
| Modifiable Risk Factors for Fatal Prostate Cancer: A Prospective Study In Asia | VANDERBILT UNIVERSITY | R03 | 2013 | 0.32 |
| CLINICAL AND EPIDEMIOLOGICAL CENTER--PROSTATE CANCER | JOHNS HOPKINS UNIVERSITY | U01 | 2004 | 0.31 |
| MRI Imaging and Biomarkers for Early Detection of Aggressive Prostate Cancer | UNIVERSITY OF MIAMI SCHOOL OF MEDICINE | U01 | 2020 | 0.3 |

**Cluster 31**

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| --- | --- | --- | --- | --- |
| Title | Awardee | Award Activity | Year | Sample Silhouette Score |
| Does Screening for HCC in Cirrhotic Patients Reduce HCC-related Mortality? | SEATTLE INST FOR BIOMEDICAL/CLINICAL RES | R01 | 2018 | 0.25 |
| Novel Machine Learning Methods for Analysis of MALDI-TOF Mass Spectrometry Data | GEORGETOWN UNIVERSITY | R03 | 2008 | 0.25 |
| Surveillance for Hepatocellular Carcinoma among HCV-infected Veterans | BAYLOR COLLEGE OF MEDICINE | R01 | 2009 | 0.25 |
| Development of mosaic mouse models of HCC for genetic interspecies inference | RESEARCH INST OF FOX CHASE CAN CTR | R00 | 2019 | 0.22 |
| Guideline-based surveillance and treatment of hepatocellular carcinoma | BAYLOR COLLEGE OF MEDICINE | R01 | 2013 | 0.21 |