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Please note that a faculty member's research administrator will serve as the liaison on all aspects of the internal application process. If you are unsure of whom to talk to, your department contact can be found at the following link. If you pursue any grant opportunity featured in this report, please contact your research administrator first to formulate a submission plan and timeline.
The UMHS Corporate and Foundation Relations team can assist in this process, including providing direct communication with the funding entity to obtain guidance on project appeal/applicability to the funder, provide examples of previously funded UM proposals, and answer general faculty questions.

Grantors: Michigan Center for Therapeutic Innovation (MCTI) and Fast Forward Medical Innovation
Grant Opportunity: Research Grants
Keyword: Drug Discovery & Development; Innovation; Pharmaceutical; Research Grant
Award Amount: $150,000
Deadline: August 25, 2017

U-M Therapeutic Innovation Fund

http://innovation.medicine.umich.edu/internal-funding/therapeutic-innovation-fund/

The Michigan Center for Therapeutic Innovation (MCTI) and FFMI offer a five-year, $2.5 million fund created to accelerate the discovery and translation of therapeutic candidates at the University of Michigan. The fund supports the discovery and optimization of small molecule lead compounds for projects with a specific, novel, and testable drug discovery hypothesis. Selected projects receive funding and resources from MCTI in the areas of drug design, cell biology, medicinal chemistry, structural biology, and pharmacology (up to $150,000 in value for each award for up to 18 months).

A pre-submission application and meeting must be completed on or before August 25, 2017
The submission deadline for the full proposal will be on Friday, September 8, 2017 at 5 pm EST

Grantor: Patient-Centered Outcomes Research Institute
Grant Opportunity: Research Grants
Keyword: Research Grant
Award Amount: $5 million
Deadline: September 6, 2017
Limited PCORI Funding Announcement: Partnerships to Conduct Research Within PCORnet (PaCR) - Cycle 2 2017

http://www.pcori.org/funding-opportunities/announcement/limited-pcori-funding-announcement-partnerships-conduct-research

PCORI funded Patient-Powered Research Networks (PPRNs) to support communities of patients motivated to participate in clinical research through the National Patient-Centered Clinical Research Network (PCORnet) and to develop their capacity to govern the research activities of their networks.

In this limited PFA for PPRNs, PCORI seeks to fund multiple (3–5) high-quality clinical studies to answer important patient- and stakeholder-prioritized comparative clinical effectiveness research (CER) questions that remain unanswered due to insufficient or inconclusive evidence. The focus of this PFA is to promote PCORnet sustainability through collaboration and engagement with non-PCORI funders in the conduct of CER and to promote greater completeness of PCORnet data through linkages of PPRN patient-level data with other data sources, including the electronic data of Clinical Data Research Networks (CDRNs), health plans, and data collected and aggregated in the form of disease registries. This is an important step toward not only achieving a sustainable national research infrastructure that attracts a diverse set of public and private funders of research, but also toward advancing clinical research more generally in the United States.

Note that this funding program does not support applications to conduct cost-effectiveness analyses or systematic reviews (with or without meta-analyses). It also does not support applications to develop or conduct an efficacy evaluation of shared decision making. PCORI will not cover costs for clinical interventions that are being compared in the proposed study.

Applicants may request up to $5 million in total direct costs for a research project period not to exceed three years (not including peer review).

**Applicant Town Hall Session: August 23, 2017; 12:00 p.m. (ET)**

Letter of Intent (LOI) Deadline: September 6, 2017 by 5 p.m. (ET)

Grantor: Michael J. Fox Foundation for Parkinson's Research

Grant Opportunity: Research Grants

Keyword: Basic Science; Chronic Diseases; Neurological Disorders; Neuromuscular Disorders; Research Grant

Award Amount: $500,000

Deadline: September 27, 2017
Michael J. Fox Foundation for Parkinson's Research Therapeutic Pipeline Program

https://www.michaeljfox.org/research/grant-detail.php?id=28

Part of our Edmond J. Safra Core Programs for PD Research, the Therapeutic Pipeline Program supports Parkinson's disease therapeutic development along the pre-clinical and clinical path (both drug and non-pharmacological therapeutics, including gene therapy, biological, surgical and non-invasive approaches). The Michael J. Fox Foundation seeks applications with potential for fundamentally altering disease course and/or significantly improving treatment of symptoms above and beyond current standards of care. Proposals must have a well-defined plan for moving toward clinical utility for patients. The Therapeutic Pipeline Program is open to industry and academic investigators proposing novel approaches or repositioning approved or clinically safe therapies from non-PD indications.

Disease-modifying strategies

Proposals may aim to achieve the following, though there are no restrictions on application goals.

Protect or restore degenerating and/or dysfunctional neurons affected in PD. Proposals may address:

Protein folding
Mitochondrial function
Inflammation
Alpha-Synuclein
LRRK2
GBA

Symptomatic strategies

Proposals may aim to achieve the following, though there are no restrictions on application goals:

Alleviate disabling motor symptoms of PD
Alleviate non-motor symptoms of PD
Alleviate complications of PD treatment

Funding Available:
Pre-Clinical: $100,000-$500,000, appropriate to the stage of research

Clinical: Commensurable with the stage and goals

**Funding Opportunities Informational Webinar: September 7, 2017 12 pm - 1 pm EDT**

This webinar provides an overview of MJFF’s funding strategy, MJFF’s funding opportunities and how to apply for funding and the review process.

Pre-Proposals Due: September 27, 2017 - 5pm US ET

Grantor: Polio Research Committee

Grant Opportunity: Research Grants

Keyword: Chronic Diseases; Infectious Disease; Neurological Disorders; Neuromuscular Disorders; Public Health; Research Grant; Vaccine

Award Amount: $300,000+

Deadline: October 6, 2017

**Polio Research Committee Call for Proposals**


The Polio Research Committee is calling for research proposals supporting the Polio Eradication & Endgame Strategic Plan 2013-2018. Research proposals supporting the strategic plan may be submitted to the Committee for review and funding. Preference will be given to proposals developed by GPEI partner agencies and their research collaborators. However, other institutions may also submit proposals if they address our research priorities.

The current priority of the Polio Research Committee is to generate new data or information in the following areas:

Vaccine schedule immunogenicity

Immunogenicity of poliovirus vaccination options after withdrawal of all oral poliovirus vaccines

Surveillance

Assessment of length of poliovirus environmental circulation after withdrawal of all oral poliovirus vaccines

Development and evaluation of new methods for poliovirus surveillance in areas with poor access

Product development
Development and evaluation of innovative IPV formulations or administration techniques (new mucosal adjuvants, virus-like particle [VLPs] vaccine, IPV patches, etc.)

Epidemiology/virology
Evaluation of factors favouring emergence of vaccine derived polioviruses

Monitoring & evaluation
Development and evaluation of new methods for assessment of quality (& coverage) of polio vaccination mass campaigns

Basic immunology
Assessment of length of priming following IPV administration

The amount of money varies widely depending on the project’s demand. From May 2008 - April 2012, the smallest, median, and largest amounts granted by the PRC for one project were $12,000, $174,000, and $890,000 respectively. The large majority of projects are between $50,000 and $300,000.

The submission deadline is 6 October 2017.

Grantor: Michael J. Fox Foundation for Parkinson's Research
Grant Opportunity: Research Grants
Keyword: Basic Science; Chronic Diseases; Neurological Disorders; Neuromuscular Disorders; Research Grant
Award Amount: $200,000
Deadline: September 27, 2017

Michael J. Fox Foundation for Parkinson's Research: Mitochondrial Biomarkers for Parkinson's Disease

https://www.michaeljfox.org/research/grant-detail.php?id=32

The Michael J. Fox Foundation for Parkinson's Research seeks to support one-to-two year grants that will develop new or improved tools to identify mitochondrial biomarkers for Parkinson's disease. The specific goals of this initiative are to facilitate the development of mitochondrial biomarkers for:

Identifying novel mitochondrial targets relevant to PD
Assessing PD diagnosis, disease progression, and/or patient stratification; and
Identifying mitochondrial readouts that would inform therapeutic efficacy and target engagement

Our understanding of mitochondrial dysfunction in PD has been largely dependent on pre-clinical models. We wish to expand on these discoveries and apply the knowledge gained through these studies to human biospecimens. The purpose of the Mitochondrial Biomarkers RFA is to seek proposals that focus on human biospecimen-derived data to identify relevant PD biomarkers that would inform disease diagnosis, disease progression, patient stratification, and/or pharmacodynamic readouts.

Note: Due to MJFF's current efforts in supporting functional profiling studies in iPSCs, the focus of the current RFA will be restricted to non-iPSC, human biospecimen studies only.

The following types of biomarker outcome measures and assays are encouraged:

Assays

Proposals may aim to develop assays or utilize existing assays to link mitochondrial processes to PD. We encourage:

Assay development studies with clear feasibility to measure proposed mitochondrial biomarkers in human biospecimens (preliminary data demonstrating feasibility of measurements in human biospecimens will be prioritized), or

Studies analyzing existing assays utilized in other human mitochondrial diseases for potential application in PD biospecimens

Cohorts

MJFF will support collection of human biospecimens from PD cohorts--with known genetic mutations linked to mitochondrial dysfunction--for use in the assay development series described above. Our goal is to foster collaborations between groups who have access to these unique cohorts and groups with assay development expertise to expedite novel mitochondrial biomarker discoveries.

PD-relevant cohorts with known mutations that affect mitochondrial function--such as PINK1, Parkin, and DJ-1--will be prioritized.

Funding Available: 1-2 year grants, up to $200,000

**Funding Opportunities Informational Webinar: September 7, 2017 12 pm - 1 pm EDT**

This webinar provides an overview of MJFF's funding strategy, MJFF's funding opportunities and how to apply for funding and the review process.

Pre-Proposals Due: September 27, 2017 - 5pm US ET
Grantor: DEBRA International

Grant Opportunity: Research Grant

Keyword: Chronic Diseases; Genetic Disorders; Rare or Orphan Diseases; Research Grant

Award Amount: $139,703

Deadline: October 3, 2017

Call for Applications: DEBRA International Innovative Research Grant

http://www.debra-international.org/research/calls-for-research-proposals/innovative-research-call.html

The Innovative Research Grant funding scheme is a new opportunity for researchers within and outside the EB field to explore innovative ideas in EB that could ultimately accelerate the field of EB research. The call is for:

Concepts or technology that are novel, or new to EB, that had very limited or zero preliminary evidence for applicability to EB, but where there was a well-argued rationale for testing feasibility based on either understanding of the mechanisms or biology of EB, or parallel evidence from other conditions. The purpose of any grant made will be to gain preliminary evidence of feasibility and relevance.

Research projects that ultimately benefit patients with EB e.g. improving their life quality (either short-term or long-term).

Epidermolysis Bullosa (EB) is an orphan disease with no currently approved treatments and has a significant unmet medical need. EB is an inherited disorder that causes extreme skin fragility, leading to recurrent painful blister formation with even minor trauma. Associated extracutaneous manifestations include anaemia, cardiomyopathy, syndactyly (fusion of the fingers and toes), renal insufficiency, dysphagia (difficulty swallowing), scarring, malnourishment, aggressive skin cancer, constipation, osteoporosis, muscular dystrophy and pyloric atresia.

The scheme aims to identify experimental approaches destined for further exploitation and so major emphasis will be placed on selecting competitive proposals that may have an unusual level of scientific uncertainty but which are never the less realistically planned, feasible and with high potential impact.

Successful projects selected by the scheme may typically be designed to introduce a new paradigm or challenge existing ones, or explore opportunities to investigate existing challenges from new perspectives or develop a research approach with an exceptional prospect for demonstrating uniquely creative qualities. Multi-disciplinary approaches are highly welcomed.

What we are looking for:
Studies that develop a highly innovative concept with the potential to make a step change in our understanding of:

how the disease develops, or

the development of therapeutic or diagnostic capabilities.

Projects that:

bring in new approaches from other indications to tackle unmet problems in EB,

test new therapy concepts based on known biology,

investigate the biological basis for intriguing clinical observations,

fix technical issues that currently limit therapy efficiency, safety or feasibility.

Key facts
Between 6 months and 2 years duration.

Maximum amount 120,000 EUR per project.

This is a one-stage process of online application.

The submission deadline for online applications is 3rd October 2017 at 17:00 GMT.

Grantor: Basser Center for BRCA at Penn Medicine

Grant Opportunity: Research Prize

Keyword: Basic Science; Breast Cancer; Cancer; Chronic Diseases; Prizes; Women’s Health

Award Amount: $110,000

Deadline: September 5, 2017

Basser Global Prize

https://www.basser.org/investigators-clinicians/basser-global-prize

To further enhance the Basser Center's mission, the Basser Global Prize was established by Shari Basser Potter and Leonard Potter to honor a visionary scientist who has conceptually advanced BRCA1/2-related research that has led to improvements in clinical care. The prize will be considered for a broad range of basic, translational and clinical BRCA1/2 cancer researchers worldwide. Outstanding candidates will be those whose research has produced seminal advances in the field and who continue to drive BRCA1/2-related research towards the ultimate goal of mitigating the adverse impact of deleterious BRCA1/2 and related mutations.
The Basser Global Prize provides $100,000 in unrestricted support of the awardee's innovative BRCA1/2 related research efforts. The Awardee will give the Keynote address at the annual Basser Center for BRCA Symposium the following year, at which time they will be awarded the Basser trophy and a personal $10,000 cash prize by the Gray and Potter Families. Applications are due September 5, 2017 by 5:00 p.m. EST.

Grantor: Foundation for the National Institutes of Health
Grant Opportunity: Research Prize
Keyword: Basic Science; Prizes
Award Amount: $100,000
Deadline: September 15, 2017

2018 Lurie Prize in Biomedical Sciences

https://fnih.org/what-we-do/current-lectures-awards-and-events/lurie-prize

In 2018, the FNIH will present the sixth annual Lurie Prize in Biomedical Sciences, a $100,000 award recognizing outstanding achievement by a promising young scientist in biomedical research.

Nominations are broadly solicited and can be made by any member of an accredited educational and/or scientific institution. **There is no limitation on the number of nominations that may be made by a single nominator or institution.** No institutional approval is required.

Nomination Deadline: September 15, 2017 1:00 PM EDT

Grantor: Michael J. Fox Foundation for Parkinson's Research
Grant Opportunity: Research Grants
Keyword: Basic Science; Chronic Diseases; Neurological Disorders; Neuromuscular Disorders; Research Grant
Award Amount: $100,000
Deadline: September 27, 2017

Michael J. Fox Foundation for Parkinson's Research Target Advancement Program

https://www.michaeljfox.org/research/grant-detail.php?id=27
The Michael J. Fox Foundation believes that a major hurdle in the development of promising treatments for Parkinson's disease is the need for well-validated targets linked to the disease process. By promoting critical target validation studies within academic and industry laboratories, MJFF investments can help de-risk subsequent drug development and ultimately accelerate the creation of innovative therapies for Parkinson's patients. Part of our Edmond J. Safra Core Programs for PD Research, the Target Advancement program seeks to build robust evidence to rationalize biological pathways and targets for further translation into new Parkinson's treatments.

Target Advancement Awards support research characterizing promising, novel PD-relevant targets or continuing target biology work on established PD targets. Preferred targets for this program already demonstrate links to PD in human patient populations. These awards are well-suited to projects where hypothetical or experimental rationale for a target is compelling but limited, and study results can make the case for continuing (or discontinuing) a line of research. We invite projects designed to assess emerging PD targets in pre-clinical models, human cellular models, and human tissue and fluid matrices.

Research Models: We invite projects designed to assess emerging PD targets in pre-clinical models, human cellular models, and human tissue and fluid matrices. Please email resources@michaeljfox.org for more information related to biosample requests and resource availability. Funding requests to support use of biosamples from these resources will be considered by the Foundation on a case-by-case basis.

Biological Mechanisms: Target Advancement Awards also support projects addressing roadblocks and knowledge gaps in understanding biological mechanisms associated with established PD targets already supported by a strong body of validation data: alpha-synuclein, LRRK2, GBA, Nurr1, Parkin/PINK1, and trophic factors. Proposals will be reviewed in the context of existing MJFF investments in these areas.

Funding Available: Target Advancement Awards 1-year grants, $100,000

Funding Opportunities Informational Webinar: September 7, 2017 12 pm - 1 pm EDT

This webinar provides an overview of MJFF's funding strategy, MJFF’s funding opportunities and how to apply for funding and the review process.

Pre-Proposals Due: September 27, 2017 - 5pm US ET

Grantor: Propionic Acidemia Foundation

Grant Opportunity: Fellowships and Research Grants

Keyword: Basic Science; Chronic Diseases; Genetic Disorders; Post-Doctoral Fellowship; Rare or Orphan Diseases; Research Grant

Award Amount: $100,000
Deadline: October 1, 2017

Propionic Acidemia Foundation Request for Proposals

http://www.pafoundation.com/grants-how-to-apply/

Primary Research Mission: PAF is a non-profit organization whose primary mission is to help advance research devoted to find treatments and a cure for propionic acidemia. By funding research, we aim to gain new knowledge that can one day be translated into effective cures for all the children and adults affected by PA.

Application categories:

1) Research Projects – Basic and Clinical research
Awards range from $5,000-50,000 per year and may last 1 or 2 years upon competitive renewal.

This program funds research in the areas of basic and clinical science, supporting projects designed to understand the molecular basis of the PA pathology and explore possible therapeutic avenues for the treatment of this condition.

PAF is particularly, but not exclusively, interested in the following areas of research:

Improved treatment including nutrition
Development of chelating compounds for PA toxicity
Risk factors for brain damage in PA
Risk factors for development of pancreatitis in PA
Risk factors for development of cardiomyopathy and/or arrhythmias in PA
Disease modifiers in PA
Development of new animal or cell/tissue-models for the study of PA

2) Fellows Program
This program provides financial support up to $50,000 per one year for a metabolic/genetic fellow working on a research project in PA. This salary is intended to supplement any existing institutional support for the trainee.

Submission Deadline: October 1, 2017

Grantor: Alfred P. Sloan Foundation
Grant Opportunity: Fellowships
Keyword: Basic Science; Post-Doctoral Fellowship
Award Amount: $65,000
Deadline: September 15, 2017

2018 Alfred P. Sloan Research Fellowships in Chemistry

https://apply.interfolio.com/42504

The Alfred P. Sloan Foundation seeks nominations of outstanding early career researchers for the Sloan Research Fellowships in Chemistry. Candidates should have a record of independent research accomplishments that demonstrate creativity, initiative, and the potential to become leaders in the scientific community through their contributions to their field. The Foundation strongly encourages the nomination of qualified women and underrepresented minority candidates.

Successful candidates receive a $65,000 fellowship awarded to the candidate's institution to be used over a two-year period for any activity supportive of the fellow's research, including (but not limited to) equipment, technical assistance, summer salary support, professional travel, or trainee support.

Deadline: To be considered, interested applicants must submit all application materials (including the letter of nomination and all letters of support) no later than September 15, 2017.

Grantor: Alfred P. Sloan Foundation
Grant Opportunity: Fellowships
Keyword: Basic Science; Post-Doctoral Fellowship
Award Amount: $65,000
Deadline: September 15, 2017

2018 Alfred P. Sloan Research Fellowships in Computational & Evolutionary Molecular Biology

https://apply.interfolio.com/42500

The Alfred P. Sloan Foundation seeks nominations of outstanding early career researchers for the Sloan Research Fellowships in Computational & Evolutionary Molecular Biology. Candidates should have a record of independent research accomplishments that demonstrate creativity, initiative, and the potential to become leaders in the scientific community through their contributions to their field. The Foundation strongly encourages the nomination of qualified women and underrepresented minority candidates.
Successful candidates receive a $65,000 fellowship awarded to the candidate's institution to be used over a two-year period for any activity supportive of the fellow's research, including (but not limited to) equipment, technical assistance, summer salary support, professional travel, or trainee support.

Deadline: To be considered, interested applicants must submit all application materials (including the letter of nomination and all letters of support) no later than September 15, 2017.

Grantor: Alfred P. Sloan Foundation
Grant Opportunity: Fellowships
Keyword: Basic Science; Post-Doctoral Fellowship
Award Amount: $65,000
Deadline: September 15, 2017

2018 Alfred P. Sloan Research Fellowships in Neuroscience

[https://apply.interfolio.com/42502](https://apply.interfolio.com/42502)

The Alfred P. Sloan Foundation seeks nominations of outstanding early career researchers for the Sloan Research Fellowships in Neuroscience. Candidates should have a record of independent research accomplishments that demonstrate creativity, initiative, and the potential to become leaders in the scientific community through their contributions to their field. The Foundation strongly encourages the nomination of qualified women and underrepresented minority candidates.

Successful candidates receive a $65,000 fellowship awarded to the candidate's institution to be used over a two-year period for any activity supportive of the fellow's research, including (but not limited to) equipment, technical assistance, summer salary support, professional travel, or trainee support.

Deadline: To be considered, interested applicants must submit all application materials (including the letter of nomination and all letters of support) no later than September 15, 2017.

Grantor: University of Pittsburgh School of Medicine
Grant Opportunity: Research Prize
Keyword: Basic Science; Prizes
Award Amount: $50,000
Deadline: October 6, 2017
Call for Nominations: 2018 Dickson Prize in Medicine

http://www.dicksonprize.pitt.edu/nomination/

Nominees for the Dickson Prize in Medicine should be actively engaged in innovative, paradigm-shifting biomedical research that is worthy of significant and broad attention. This is a prize for someone whose career has been building, who is at an especially productive point currently, and whose research is—or will be—so influential that it deserves major recognition now. The recipient must be a U.S. citizen.

The Prize: The winner of the 2018 Dickson Prize in Medicine will receive a $50,000 award along with a medallion and will present the Dickson Prize in Medicine Lecture during the University of Pittsburgh’s annual showcase of science and research in fall 2018.

Deadline: The deadline for all nomination materials for the 2018 Dickson Prize in Medicine is October 6, 2017.

Grantor: Smith-Lemli-Opitz / RSH Foundation

Grant Opportunity: Research Grants

Keyword: Chronic Diseases; Genetic Disorders; Rare or Orphan Diseases; Research Grant

Award Amount: $25,000

Deadline: February 1, 2018

Smith-Lemli-Opitz / RSH Foundation Grants Program

http://www.smithlemliopitz.org/smith-lemli-opitz-research/grant-application-guidelines/

Smith-Lemli-Opitz Syndrome (SLOS) is an autosomal recessive genetic disorder causing a defect in cholesterol synthesis which results in delays in all areas of development and may be complicated with one or more congenital malformations. SLOS is a life-long disorder with no cure, limited treatment options and is often misunderstood. Many individuals with the syndrome go completely undiagnosed. It is a goal of the Smith-Lemli-Opitz/RSH Foundation to fund research that addresses these issues. Therefore the Foundation seeks and accepts proposals for research into furthering any knowledge related to SLOS.

Proposals and Funding: Research proposals up to $25,000 (USD) and two years in scope (preferably only a single year) for any aspect related to SLOS are accepted and reviewed. Our main interest is in providing funding to experienced investigators for testing of initial hypotheses and preliminary data collection leading to long term funding by major granting institutions (often considered “seed money”), and continuation of ongoing research while other funding is in the final stages of acceptance. However as a secondary goal in the research arena, we wish to
continually attract new investigators into the exciting realm of SLOS and welcome any proposals they may put forth.

Grants are currently approved on a yearly deadline. Deadline is February 1st.

Grantor: Chan Zuckerberg Initiative
Grant Opportunity: Research Grants
Keyword: Basic Science; Innovation; Research Grant
Award Amount: Not Specified
Deadline: August 28, 2017

Request for Applications: Collaborative Computational Tools for the Human Cell Atlas

https://chanzuckerberg.com/initiatives/rfa?utm_source=CZI+Science+Grants&utm_campaign=6923dba4ab-RFA+2+Now+Open&utm_medium=email&utm_term=0_54d3511fe0-6923dba4ab-47273857&mc_cid=6923dba4ab&mc_eid=9b06aab8a5

The Chan Zuckerberg Initiative invites applications to develop computational tools, algorithms, visualizations, and benchmark datasets in support of the Human Cell Atlas. Participants in this project will collaborate with each other and with Chan Zuckerberg Initiative scientists and engineers to accelerate progress, facilitate communication, and maximize open dissemination of the resulting tools.

Opportunity: The goal of the International Human Cell Atlas project is to create a shared, open reference atlas of all cells in the healthy human body as a resource for studies of health and disease. This endeavor will generate molecular and imaging data across a range of modalities and spatial scales, requiring new probabilistic and integrative approaches for analysis and interpretation, systematic comparison of methods on benchmark datasets, and mechanisms for disseminating these methods to a wide community. The Chan Zuckerberg Initiative seeks applications for the development of computational tools, algorithms, visualizations, and benchmark datasets in support of this endeavor. This program welcomes applicants who are new to the Human Cell Atlas — no prior work in this area is required. In a new approach to open, collaborative development, researchers on projects funded by these grants shall work together and share progress with each other to evaluate the strengths of different approaches. To maximize the impact and visibility of this work, members of the Chan Zuckerberg Initiative science and engineering teams will work with successful grant recipients to help enhance and package their tools, and link them to the Human Cell Atlas Data Coordination Platform (DCP), if appropriate and desired.

Project Specifications: Many computational efforts in support of the Human Cell Atlas are underway in the research community, and new methods are needed. This RFA aims to support
further development and systematic comparison of methods across existing and new benchmark datasets derived from single-cell RNA sequencing, bulk RNA sequencing, proteomics, image-based transcriptomics, and other tissue imaging approaches. The RFA will also support new analysis and visualization methods, and new approaches to integrating data across modalities. The goal is to support a diverse set of well-validated tools to analyze, consume, integrate, and explore Human Cell Atlas data.

To help the resulting tools reach the widest possible audience, scientists and engineers from the Chan Zuckerberg Initiative will collaborate with researchers on projects funded by this RFA to help bring tools to the scientific community; for example, by helping to enhance or package software with an emphasis on scale, robustness, speed, interoperability, web-based dissemination, and user experience. There will also be opportunities for new tools to connect to and leverage the Human Cell Atlas Data Coordination Platform (https://www.humancellatlas.org/data-sharing), which provides infrastructure for data sharing and cloud computing.

This effort is also a pilot project for new models of collaborative computational research. With the assistance of the Chan Zuckerberg Initiative, project participants will be expected to share their proposals within the collaborating framework, attend regular meetings, workshops, and hackathons, and communicate their ongoing progress through GitHub and Slack. We welcome submissions that represent pre-existing collaborative efforts, but as part of the broader collaborative goals of this RFA, we require each principal investigator to submit a separate application, rather than serving as a co-principal investigator on a shared application.

The goals of this RFA include, but are not limited to:

Developing standard formats and analysis pipelines for genomic, proteomic, and imaging data, in forms that enable consistent use of these pipelines by numerous experimental labs

Identifying and solving common challenges for web-based interactive visualization of cellular and imaging data

Developing user tools that allow scientists and physicians to extract and analyze data organized by genes, cells, or tissues of interest

Supporting analytical methods and machine learning approaches to solving problems such as multimodal integration, inference of state transitions and developmental trajectories, and representation of spatial relationships at the cellular or molecular level

Generating curated benchmark datasets from new or existing data for evaluating computational methods and designing future analysis competitions

Developing new computational approaches to comparing and normalizing genomic and imaging data across assays, subjects, and species

Generating experimental datasets that directly address computationally-guided questions in quality control, reproducibility, or multimodal integration
Although the focus of the project is analysis of human data, we are interested in new ideas and will consider proposals that focus on data from human tissues, non-human animals, organoids, and cell lines. We encourage proposals from areas of machine learning entirely outside of computational biology, e.g. deep learning. Proposals will be evaluated based on the computational novelty and viability of the method, a commitment to collaboration, the intention to interoperate with existing efforts such as the Human Cell Atlas Data Coordination Platform, and a plan to ensure that software is sharable, portable, and reproducible.

8/28/17: Applications due by 5:00 PM PT

Grantor: JDRF
Grant Opportunity: Program Funding
Keyword: Basic Science; Chronic Diseases; Diabetes; Diabetes – Type 1; Research Grant
Award Amount: Not Specified
Deadline: September 14, 2017

JDRF Requests Proposals for Biomarker Analysis Center(S) for Mass Cytometry and Transcriptome Analysis of TrialNet Samples

JDRF, the world’s leading non-profit organization with the mission to cure type 1 diabetes (T1D), is partnering with TrialNet, an international consortium of clinical research centers with the goal to prevent or delay T1D. Both organizations support researchers worldwide who are working to better understand the natural history of T1D, develop methods to better identify persons at risk for the disease, and evaluate new therapies to potentially delay or reverse the progression of disease.

TrialNet has infrastructure that is world-leading for biomarker discovery, including biosamples collected to common protocols and linked to comprehensive clinical records and pathological outcomes. JDRF requests proposals from qualified laboratories to serve as a Biomarker Analysis Centers. One Center will focus on mass cytometry analysis, and one Center on transcriptome analysis. Applicants may submit a proposal to serve as the Center for Mass Cytometry Analysis, the Center for Transcriptome Analysis, or both. The successful applicant(s) will receive access to TrialNet samples and conduct the project in close collaboration with TrialNet’s Coordinating Center.

Application Deadline: September 14, 2017
Grantor: Michael J. Fox Foundation for Parkinson's Research

Grant Opportunity: Research Grants

Keyword: Basic Science; Chronic Diseases; Neurological Disorders; Neuromuscular Disorders; Research Grant

Award Amount: Not Specified

Deadline: September 27, 2017

Michael J. Fox Foundation for Parkinson's Research Improved Biomarkers and Clinical Outcome Measures Program

https://www.michaeljfox.org/research/grant-detail.php?id=29

The Michael J. Fox Foundation seeks to support research that will develop biomarker tools and clinical outcome measures to assist in target validation for therapeutic development and ultimately inform clinical trial design, execution and interpretation of results. Projects seeking support to develop or optimize imaging, clinical/non-invasive, or biochemical biomarkers are appropriate for this RFA. Particular emphasis will be on projects that explore relationships between physiologic (e.g. corneal confocal microscopy, pilomotor response, etc.) and biochemical biomarkers. Please indicate if the proposed methodology or tool(s) have been demonstrated in human studies, in Parkinson's disease, or in other neurodegenerative diseases.

Funding will be awarded to projects that will improve the ability to enrich subject populations in clinical trials or assist in determining whether experimental treatments are modifying the course of the disease, its symptoms, or its progression.

Prospective studies or retrospective studies utilizing existing data in human biofluids are eligible for this initiative. Please note that studies utilizing biosamples available through the collaborative request to access Parkinson's disease-related biospecimens program or the Parkinson's Progression Markers Initiative should not apply for funding through this initiative. Funding requests to support use of biosamples from these resources will be considered by the Foundation on a case by case basis. Please email resources@michaeljfox.org for more information.

Note: Projects that include voice capture/voice projection or rehabilitation-focused projects (i.e. exercise, stretching, yoga, and/or similar paradigms) will not be considered this cycle.

The following types of proposals are encouraged:

Imaging Studies
Proposals may aim to achieve the following, though there are no restrictions on application goals.

Develop novel imaging ligands for disease-modifying or symptomatic targets of interest that would assist in dose selection and efficacy studies

Validate an imaging end-point that identifies a specific stage of the disease or enables quantitative assessment of pathology/pathophysiology or disease progression

Clinical/Non-Invasive Physiological Studies

MJFF will prioritize projects that explore clinical non-invasive measures with a demonstrated link to underlying PD pathology, accompanied by human biofluid/tissue-based biomarker measurements

Proposals that include tools or measures that will aid in improved diagnostic ability and/or track disease progression are encouraged to apply

Biochemical assays and outcome measures

Proposals may aim to achieve the following, though there are no restrictions on application goals.

Develop target/pathway-based, biochemical or genetic assays

Develop new assays or assay platforms to analyze tissues or biofluids

Refine and validate existing assays

Funding Available: MJFF intends to support multiple projects through this RFA and may fund up to $4 million for this program. There is no set budget limit for proposals.

Funding Opportunities Informational Webinar: September 7, 2017 12 pm - 1 pm EDT

This webinar provides an overview of MJFF's funding strategy, MJFF's funding opportunities and how to apply for funding and the review process.

Pre-Proposals Due: September 27, 2017 - 5pm US ET
The National Football League (NFL) and Football Research, Inc. (FRI) have partnered with Duke University’s Clinical and Translational Science Institute (Duke CTSI) to create the HeadHealthTECH Challenges, a series of innovation challenges intended to deepen understanding of and advance solutions in the areas of head protection, materials science, head kinematics, among others. The TECH Challenges are structured to stimulate research and innovation, as well as encourage connections with mentors and/or venture capitalists, with a goal of spurring developments in engineering, biomechanics, advanced sensors and material science.

TECH Challenge III, which is open from July 25, 2017 through September 29, 2017, invites proposals focused on helmet technologies and surfaces that helmets contact, including turf, grass, other helmets and opponent padding. Support for the most promising opportunities will be provided by FRI. The TECH Challenges are renewable annually for up to the next four years.

Response Due Date: September 29, 2017