SPARC Partnership Opportunity: Custom Arrangements for Device-Based Clinical Studies with Flexible Data and Intellectual Property Rights	
Participating Organization(s)	National Institutes of Health (NIH)
Components of Participating Organizations	This Funding Opportunity (PO) is part of a Common Fund Initiative directed from the NIH Office of the NIH Director, Office of Strategic Coordination. The PO will be administered by the National Center for Advancing Translational Sciences (NCATS) on behalf of the NIH.
Activity Code	OT2 Research Project - Other Transactions
Partnership Opportunity Number	OTA-18-019
Related Notice	NOT-RM-18-012
Catalog of Federal Domestic Assistance (CFDA) Number(s)	93.310
Partnership Opportunity Purpose	The purpose of this Partnership Opportunity (PO) is to create customized partnerships between NIH and successful applicants to maximize the scientific impact of human device studies through the collection of research data beyond those addressing clinical health end-points. Proposals must involve device-based clinical studies of neuromodulation, targeting the peripheral nervous system or the spinal cord. Such data, which might be obtained as part of ongoing, planned or new studies, would serve to enhance mechanistic knowledge about a neuromodulatory intervention and/or provide other physiological or anatomical insights in support of SPARC's mission to create anatomical and functional peripheral neural circuit maps.
Funds Available	Beginning in 2019, NIH plans to fund approximately $23M in total costs over a 3-year period through this PO. Proposal budgets are not limited but need to reflect the actual needs of the proposed project. The program will custom-design arrangements in which budget segments may depend on prepublication sharing of specified data. Award levels and total budget may increase or decrease over time based on programmatic needs, funding availability and awardee performance.
Project Duration	Project duration is anticipated to be approximately three (3) years
Key Dates	Mandatory Letter of Intent – due September 7, 2018 by 11:59pm EST
	Proposal – due October 15, 2018 by 11:59pm EST
	Earliest award start date – February 4, 2019
Scientific Contacts	SPARC3 Program Team – Translational Partnerships for Human Functional Mapping and New Indications Email: SPARC_TPNI@mail.nih.gov
Agreement Officer Contacts	Irene Haas – National Center for Advancing Translational Science (NCATS) Email: haasi@mail.nih.gov

List of Sections

1/Objectives of this Opportunity

This PO seeks to establish custom partnerships for device-based clinical studies that go beyond the immediate primary clinical endpoints (e.g. proof-of-principle demonstrations of efficacy and initial assessments of safety) to collect data to enhance functional understanding of the proposed intervention and to enhance knowledge of the anatomy and physiology of the peripheral nervous system and spinal cord. Awards issued from this PO will include custom and flexible data rights to maximize the scientific impact of the clinical studies through de-identification and sharing of study data relevant to the NIH SPARC program. Such tailored data collection activities may include various invasive (e.g. using implantable pulse generators with expanded research recording capabilities) or non-invasive (e.g. using cutaneous sensors, imaging methods) measurements of neural activity or biomarkers for end-organ function. Applicants may consider taking advantage of acute or short-term procedures (e.g. implantation or pulse generator replacement surgeries) to collect data that would be difficult to obtain chronically (e.g. long-term nerve recording). Examples of the utility of such human data include, but are not limited to:

- Validating translatability of animal models of human neuroanatomy and functional neurobiology of organs.

- Assessing physiological or neural signal candidates for closed-loop control of neuromodulation devices.
- Understanding dose-response relationship between neural input and organ function.
- Contributing to the development or revision of detailed neuroanatomical and functional neural circuit maps of peripheral nerve control of medically-relevant functions.
- Providing insights regarding therapeutic mechanism (which may help optimize existing approaches or lead to new therapeutic interventions).

Proposed projects that involve device-based interventions will need to be justified in terms of their known or expected neuromodulatory effect on relevant organ or medically-relevant biological function(s) involving the peripheral nervous system. To the extent possible, proposals should clearly describe existing evidence for the neuroanatomical pathways (efferent and/or afferent) and/or circuits that lead to the therapeutic effect when stimulation is delivered at the chosen intervention point. Furthermore, applicants are encouraged to familiarize themselves with existing SPARC awards to understand the kinds of human data that would complement ongoing anatomical and functional mapping studies, and take advantage of public-private partnership resources provided by the program that enable applicants pursuing SPARC funding to gain access to neuromodulation technology from industry partners. While proposals need to be based on a strong scientific rationale, this PO will support research within clinical contexts to improve understanding of underlying mechanisms.

The following activities are non-responsive to this PO:

- Direct brain stimulation (indirect activation of brain circuits as a result of spinal or peripheral stimulation is allowed)
- Peripheral or spinal neuromodulation for epilepsy and psychiatric conditions
- Neuromodulation of the sensory organs of the head or the named voluntary muscles
- Non-clinical testing to support regulatory approval
- Initiation of pivotal device trials
- Clinical study proposals exclusively focused on evaluating therapeutic feasibility without explicit additional goals to collect data intended to enhance understanding of human functional neuroanatomy.

Awarded projects will be expected to be managed by interdisciplinary teams that possess the necessary clinical, surgical, research design, and device engineering expertise. Interested commercial stakeholders may be involved either as collaborators or as direct leads. The SPARC program provides the following resources to facilitate access to industry devices for clinical investigators seeking an industry partner:

- A list of SPARC device partners that have agreed to collaborate with applicants pursuing SPARC funding.
- Several template agreement documents (Collaborative Research Agreement, Confidential Disclosure Agreement) to help facilitate formation of collaborations.

While recipients and/or study partners will retain rights to data collected in projects funded by this PO, NIH expects and supports the timely release of all NIH-funded data. At a minimum, awardees must report study results, including both summary data and the underlying data necessary to interpret and replicate the summary data, within one year of award end. In addition, awards negotiated and issued from this PO will include custom-designed arrangements which may include prepublication sharing of specified data sets. The plan for prepublication sharing, including the amount and type of data and proposed timeline and mechanism for doing so, is a critical element in the evaluation of proposals and in any resulting negotiations.

Awarded teams will become part of the SPARC Consortium. Consortium governance is described in the SPARC OT Award Policy Guide and Material Sharing Policy. All members of the Consortium with Other Transaction awards are required to agree to these policies. SPARC is actively managed, and the Consortium will continually be adjusted by adding or subtracting research elements to achieve the overall SPARC goal.

The SPARC program is supporting the development of a collection of online tools and resources which together constitute the SPARC Data and Resource Center (DRC). Awardees must commit to leverage and extend these tools and resources to share, annotate, and analyze data. When available, the SPARC DRC will be linked from the SPARC program page.

2/ How to Respond

Letter of Intent (up to 3 pages)

Prospective applicants must email a Letter of Intent to SPARC_TPNI@mail.nih.gov by the date specified in the Key Dates section. The information provided is not binding and will be used exclusively for review planning purposes. The letter should contain the following information (Arial 11pt, single-spaced with 1" margins):

- Descriptive title of the planned study
- Names of Project Lead(s) and other key personnel
- Applicant organization
- Anticipated key partners (including industry collaborator(s), if applicable)
- Brief description of the planned study (not to exceed 1 page)

Proposals

Applicants wishing to be considered should submit a **Proposal** for consideration as a single pdf by email to SPARC_TPNI@mail.nih.gov. Proposals must be submitted in text-recognizable PDF (Adobe) format, and file size must be no greater than 20 MB. Paper proposals will not be accepted. Proposals exceeding the page limits specified below will not be accepted.

Proposals must be submitted by an authorized organizational representative. The Scientific Contact(s) will review your proposal for completeness and acknowledge receipt within 1 business day. Proposals that are non-responsive will not be reviewed.

Elements of the Proposal

All proposals should include the following (Arial 11pt, single-spaced with 1" margins). Maximum section lengths are given in parenthesis following each section name where applicable. Additional information may be requested during negotiations.

Cover Page (up to 1 page)

1. Project title
2. Project Lead(s) first and last name(s), title(s), email address(es) and phone number(s)
3. Type of applicant (see the "Eligible Applicants" section above as a reference)
4. Name of the applicant's organization and department
5. Authorized Organizational Representative (AOR) first and last name, email address and phone number
6. Period of support requested; assume funded projects would start approximately three months after OT2 proposal submission
7. Approximate budget (direct and total) for the entire project
8. Other key personnel names and organizations
9. Answers to important questions:
    - **Are Human Subjects Involved:** Answer "Yes" or "No"
    - **Are Vertebrate Animals Used:** Answer "Yes" or "No"
    - **Are Biohazardous Materials Used:** Answer "Yes" or "No"

- **Are Select Agents Used:** Answer "Yes" or "No"
- **Are Human Embryonic Stem Cells Used:** Answer "Yes" or "No"

Study Plan (not to exceed 8 pages with a maximum of 2 figures)

Provide an outline of the study objectives that includes a description of the targeted medical condition, proposed neuromodulatory approach and technology, type of clinical study (non-significant risk or significant risk), outcome measures, and the planned collection of additional data in support of enhancing knowledge of human functional neuroanatomy. Briefly describe the clinical study, as greater details will be provided in the "Human Subjects Research Plan". The study plan should include a description of:

- The current state of knowledge on the etiology and clinical characteristics of the condition under study. Provide information about its current and projected prevalence.
- Existing therapies (based on drugs and/or devices) and their limitations to justify the need for new therapeutic efforts.
- The neuroanatomical and functional basis for the proposed therapeutic effect of stimulation at the chosen intervention point. As stated in the 'Objectives of the PO' section, knowledge gaps about therapeutic mechanism can be addressed as part of requirement to collect additional data informing functional neuroanatomy.
- Pre-clinical data (e.g. benchtop, animal, simulations) or prior clinical data in support of safety and efficacy for the proposed clinical studies. For animal model data, describe the suitability of the model and why associated data will be instructive for human clinical outcomes.
- Why a clinical study is needed at this stage to advance the proposed neuromodulation therapy. Justification should include reasoning for why additional non-clinical assessments are not adequate to address study goals.
- Neuromodulation approaches targeting the same neural tissue (e.g. abdominal vagus nerve) in support of similar or different indications. Specifically, describe how the current approach, in terms of neuromodulation technology or stimulation paradigm, compares to previous approaches.
- Neuromodulation technology under study. Description should include evidence for expectation of acceptable clinical use. Applicants should also describe planned development beyond the current clinical studies.
- The planned collection of additional data that informs knowledge gaps or supports existing evidence for the neural pathways involved and mechanisms of action of the neuromodulatory intervention.
- Strong justification for the ability to effectively engage the targeted neural tissue in a spatially selective manner if the proposed technology for neuromodulation does not directly interface with the intended target.

Applicants must propose a well-defined task plan with estimated cost broken out by task. Each task should include a set of milestones with quantitative metrics at 3-month intervals. Milestones should be specific and measurable. The timeline must include targets for transfer of material to the SPARC Data and Resource Center, per the SPARC Material Sharing Policy. The table below is provided as an example of one way in which this information could be submitted.

	Description	Year 1				Year 2				Year 3				Total Cost (Direct + Indirect)
Task 1	Brief description & identify milestones													
Task 2	Brief description & identify milestones													

Task 3	Brief description & identify milestones													
Task 4	Brief description & identify milestones													
Task 5	Brief description & identify milestones													

Human Subjects Research Plan (no page limit, append to the Study Plan)

Applicants must provide information on various aspects of the proposed clinical study as outlined in the SPARC OT Guidance - Human Subjects and Clinical Research Information document. The document covers topics related to the study population characteristics, protection and monitoring plans, and a protocol synopsis. In addition, applicants must describe a plan for the care of patients at the end of the study. These plans may vary from project to project, but examples might include 1) explant of indwelling devices once the approved study period is complete, 2) surgical removal of batteries and 'capping' the exposed metals from leads/connectors, 3) manufacturer-supported device maintenance for patients responding to therapy, 4) manufacturer support for filing of compassionate use exemptions for device maintenance, etc.

Capabilities Statement (up to 2 pages)

The capabilities statement should describe how the key personnel will accomplish the objectives, specifying contribution levels and specific roles for each person. Identify the performance site for each individual. Describe the capabilities of the key personnel and applicant's institutions to conduct clinical research in compliance with all applicable laws, regulations, and best practices. If the proposal involves multiple Project Leads, the governance and organizational structure of the leadership team and the research project should be described, including communication plans, processes for making decisions on scientific direction, and procedures for resolving conflicts. The roles and administrative, technical, and scientific responsibilities for the project or program should be delineated for the Project Lead(s) and other collaborators.

Budget (1 page per performance site)

Provide the overall expected cost for each of the following categories: personnel, equipment, travel, subawards, other direct costs, and total costs (with indirect costs included). Provide a budget justification for all years of the project. For subawards with budgets greater than $100,000, provide details of cost breakdown.

The budget should include travel costs for attending annual meetings of the SPARC consortium (these annual meetings are expected to be held in Bethesda, Maryland).

Institutions with an established Facilities and Administrative (F&A) rate should use the approved rate to calculate indirect costs. Indirect costs on foreign awards will be reimbursed at a rate of 8% of total direct costs, less tuition and related fees, equipment, and subawards in excess of $25,000. Any applicant that has not negotiated an indirect cost rate may elect to propose a rate as a percentage of modified total direct costs for NIH review and consideration.

Cost sharing and/or documented in-kind contribution(s) are allowed under this PO. Regardless, applicants are expected to leverage available resources. Applicants should include a list of available resources. If resources are provided by a collaborator, a letter of support from the providing organization/individual must be included in the proposal.

Any cost sharing identified in the proposal will be subject to the requirements of the SPARC OT Award Policy Guide.

See sample budget below.

	Year 1	Year 2	Year 3	Total
Personnel	$ 162,369	$ 186,450	$ 210,190	$ 559,009
Equipment	$ 31,300	$ 10,200	$ -	$ 41,500
Travel	$ 1,200	$ 6,000	$ 3,200	$ 10,400
Subawards	$ 42,153	$ 58,365	$ 95,110	$ -
Other Costs	$ 22,800	$ 26,203	$ 19,524	$ 68,527
Total Direct Costs	$ 259,822	$ 287,218	$ 328,024	$ 875,064
Total Indirect Costs	$ 108,418	$ 119,364	$ 121,989	$ 349,771
Total Costs	***$ 628,062***	***$ 693,800***	***$ 778,037***	**$ 2,099,899**

Data Deliverable Statement (up to 2 pages)

All proposals must include a plan for timely release of data and resources to the SPARC Data and Resource Center as well as to other projects within SPARC as determined by the SPARC Program Manager, and more broadly to the research community in general. The plan should align with the SPARC Material Sharing Policy. Projects within SPARC must propose information sharing and include expertise for material exchange among teams and with the Data and Resource Center. Specify any conditions requested to protect intellectual property, and process/timelines for licensing. Additionally, describe the data to be contributed to the community in detail, including:

- Number of subjects
- Data types
- Files per subject and size of files
- Where the data will be stored before and after deidentification
- Number and type of de-identified data sets that will be deposited in publicly accessible repositories, and on what time scale
- Timeline and mechanism for prepublication sharing, publication, and dissemination of large supporting datasets

Additional information to include in the submission

- A letter of support from the applicant's organization indicating institutional support and agreement to comply with the SPARC OT Award Policy Guide.
- A letter of support from the recruitment site(s).
- If applicable, a letter of support from industry collaborator(s) indicating commitment to provide necessary technology and/or relevant data. An executed Collaborative Research Agreement is not needed at the time of proposal submission, but will be required within the first three (3) months of any potential award period.
- A bibliography (not to exceed 1 page)

Instructions for Application Submission

This Partnership Opportunity includes a two-step submission process. All applicants are required to complete both processes. **All applicants must complete the Step 1 submission process on time in order for the application to be considered for review.**

Step 1: Application must be submitted in a single email attachment in PDF (Adobe) format to the SPARC3 team at SPARC_TPNI@mail.nih.gov. Applications must be submitted by an authorized representative from your organization by 11:59pm EST. These applications MUST be submitted on time. Late applications will **NOT** be accepted.

Step 2: NIH is piloting a new online submission process for Other Transaction (OT) applications via the NIH eRA ASSIST system. Applicants are required to complete this step, in addition to Step 1.

Registration – To submit an application via ASSIST, the applicant organization must be registered in eRA Commons (see instructions). Organizations already registered in eRA Commons do not need to register.

Once the organization is registered, the individual(s) with the role of Signing Official (SO) and Project Lead must be affiliated with the organization and have eRA Commons credentials to complete the submission process.

Submission – Applicants must submit their proposals electronically via ASSIST (https://public.era.nih.gov/assist). Use OTA-18-019 in the field requesting Partnership Opportunity Announcement. No penalty will be incurred if technical problems are encountered causing a late submission via ASSIST.

Here are instructions for submitting via the NIH eRA ASSIST system. In the future, instructions will also be available in the ASSIST online help (look for the OTA section). Technical help is available at the eRA Service Desk.

3/Objective Review

Proposals will be reviewed by NIH program staff in consultation with external experts not affiliated with any proposals received in this call, according to the following criteria:

Scientific Merit

- Will the study provide a potentially significant contribution to the development or improvement of a device-based neuromodulation intervention to address an important clinical need?
- Does the study incorporate sufficient biological data collection, beyond those addressing clinical health endpoints, to advance scientific understanding of neural control of internal organ(s)/function(s)?
- Is there a specific and realistic plan for making the human data to be collected available to the scientific community, including but not limited to supporting data underlying summary data and conclusions?
- Is there a plan to complete data analysis within the proposed period of the award?
- Is the scientific rationale for the study well supported by preliminary data and/or existing information from literature?
- Are the chosen neuromodulation device(s) and technologies appropriate for the proposed study?
- Are study milestones and associated budgets and timelines clearly defined and reasonable?
- Does the proposal provide strategies to address challenges that may arise during the study?
- Are there clear and feasible plans to obtain regulatory approvals (IRB and/or IDE), if needed, within the first six (6) months of the award? If available, do FDA pre-submission feedback and/or early

communication with the IRB increase confidence in the applicant's ability to obtain approvals to initiate the clinical study?

- Are planned analyses and statistical approaches and, if applicable, methods used to assign participants and deliver interventions appropriate for the proposed study design? Is the Resource Sharing Plan suitable? Is the rationale for sharing, or not sharing, the following types of resources reasonable: (1) Data Sharing Plan; (2) Sharing Model Organisms; and (3) Genomic Data Sharing Plan (GDS).

Personnel and Environment

- Do the past performance and experience of the Project Lead(s) and collaborators, demonstrated by the significance and impact of previous research, publications, professional activities, awards and other recognition, etc., indicate strong qualifications to lead the study?
- Is the necessary expertise (e.g. clinical, surgical, research design, regulatory, data management, and device engineering) committed to the degree required to organize, manage and implement the clinical study and meet milestones and timelines?
- Is there a reasonable leadership plan for multiple Project Leads, if applicable?
- Is there a reasonable coordination plan between multiple sub-teams if applicable?

Clinical Study Practices

- Is the clinical study design and approach justified and appropriate in terms of the following attributes: proposed outcome measures or endpoints, study population (size, gender, age, demographic group), statistical power to provide interpretable results, feasibility of recruitment plans, inclusion/exclusion criteria, proposed intervention arms, randomization, masking (if appropriate), controls, and duration of the clinical study?
- Is the proposed Data and Safety Monitoring Plan appropriate for the proposed clinical trial? What is the quality of the DSM Plan to monitor the site and participating facilities?
- Is the plan for long-term care appropriate, if applicable?
- Are potential ethical issues adequately addressed? Is the process for obtaining informed consent or assent appropriate? Is the eligible population available? Are the plans for recruitment outreach, enrollment, retention, handling dropouts, missed visits, and losses to follow-up appropriate to ensure robust data collection? Are the planned recruitment timelines feasible and is the plan to monitor accrual adequate?
- Are the procedures for data management and quality control of data adequate at clinical site(s) or at center laboratories, as applicable? Have the methods for standardization of procedures for data management to assess the effect of the intervention and quality control been addressed?

Protections for Human Subjects

For research that involves human subjects but does not involve one of the six categories of research that are exempt under 45 CFR Part 46, the reviewers will evaluate the justification for involvement of human subjects and the proposed protections from study risk relating to their participation according to the following five review criteria: 1) risk to subjects, 2) adequacy of protection against risks, 3) potential benefits to the subjects and others, 4) importance of the knowledge to be gained, and 5) data and safety monitoring for clinical trials.

For research that involves human subjects and meets the criteria for one or more of the six categories of research that are exempt under 45 CFR Part 46, the reviewers will evaluate: 1) the justification for the exemption, 2) human subjects involvement and characteristics, and 3) sources of materials.

For additional information on review of the Human Subjects research, please refer to the Guidelines for the Review of Human Subjects.

Inclusion of Women, Minorities, and Children

When the proposed project involves human subjects and/or NIH-defined clinical research, the reviewers will evaluate the proposed plans for the inclusion (or exclusion) of individuals on the basis of sex/gender, race, and ethnicity, as well as the inclusion (or exclusion) of children to determine if it is justified in terms of the scientific goals and research strategy proposed.

For additional information on review of the Inclusion component, please refer to the Guidelines for the Review of Inclusion in Clinical Research.

Institutional Capabilities

- Is there evidence of sufficient commitment to the study, for example in the form of a letter of support, by the applicant's institution and collaborators?
- Are the proposed administrative, data coordinating, enrollment and laboratory/testing centers appropriate and capable of accommodating the clinical study?
- Does the proposal adequately address the capability and ability to conduct the trial at the proposed site(s) or centers? Are the plans to add or drop enrollment centers, as needed, appropriate?
- If international site(s) is/are proposed, does the proposal adequately address the complexity of executing the study?
- If a multi-site/center study is proposed, is the organizational structure appropriate and does the proposal identify a core of potential center investigators and staffing for a coordinating center? Are the individual sites capable of planned enrollment numbers, adherence to protocol and compliance with data collection standards?

Biohazards

Reviewers will assess whether materials or procedures proposed are potentially hazardous to research personnel and/or the environment, and if needed, determine whether adequate protection is proposed.

Proposals that include Foreign Components

Reviewers will assess whether the project presents special opportunities for furthering research programs through the use of unusual talent, resources, populations, or environmental conditions that exist in other countries and either are not readily available in the U.S. or augment existing U.S. resources.

4/ Eligible Applicants

Higher Education Institutions

- Public/State Controlled Institutions of Higher Education
- Private Institutions of Higher Education

The following types of Higher Education Institutions are always encouraged to apply for NIH support as Public or Private Institutions of Higher Education:

- Hispanic-serving Institutions

- Historically Black Colleges and Universities (HBCUs)
- Tribally Controlled Colleges and Universities (TCCUs)
- Alaska Native and Native Hawaiian Serving Institutions
- Asian American Native American Pacific Islander Serving Institutions (AANAPISIs)

Nonprofits Other Than Institutions of Higher Education

- Nonprofits with 501(c)(3) IRS Status (Other than Institutions of Higher Education)
- Nonprofits without 501(c)(3) IRS Status (Other than Institutions of Higher Education)

For-Profit Organizations

- Small Businesses
- For-Profit Organizations (Other than Small Businesses)

Governments

- State Governments
- County Governments
- City or Township Governments
- Special District Governments
- Indian/Native American Tribal Governments (Federally Recognized)
- Indian/Native American Tribal Governments (Other than Federally Recognized)
- Eligible Agencies of the Federal Government
- U.S. Territory or Possession

Other

- Independent School Districts
- Public Housing Authorities/Indian Housing Authorities
- Native American Tribal Organizations (other than Federally recognized tribal governments)
- Faith-based or Community-based Organizations
- Regional Organizations

Foreign Organizations - Foreign components, as defined here, are allowed:

- Non-domestic/non-U.S. components of U.S. Organizations;
- Collaborations with investigators at a foreign site anticipated to result in co-authorship;
- Use of facilities or instruments at a foreign site;
- Receipt of financial support or resources from a foreign entity.

Applicant organizations **must complete and maintain** the following registrations to be eligible to receive an award. All registrations must be completed prior to award issuance. Registration can take 6 weeks or more, so applicants should begin the registration process as soon as possible.

- Dun and Bradstreet Universal Numbering System (DUNS) - All registrations require that applicants be issued a DUNS number. After obtaining a DUNS number, applicants can begin SAM registration. The same DUNS number must be used for all registrations, as well as on the proposal.

- System for Award Management (SAM) (formerly CCR) – Applicants must complete and maintain an active registration, **which requires renewal at least annually**. The renewal process may require as much time as the initial registration. SAM registration includes the assignment of a Commercial and Government Entity (CAGE) Code for domestic organizations which have not already been assigned a CAGE Code.

Applicants registering a new entity in SAM.gov must provide an original, signed notarized letter stating that you are the authorized Entity Administrator before your registration will be activated. Read FAQs to learn more about this process change.

- NATO Commercial and Government Entity (NCAGE) Code – Foreign organizations must obtain an NCAGE code (in lieu of a CAGE code) in order to register in SAM.

5/ Potential OT Awards Resulting from Negotiations Under This Opportunity

Negotiations under this opportunity may result in Other Transactions Awards (OT2) to applicants. Other Transactions Awards are not grants, contracts or cooperative agreements. Other Transactions awards will involve active NIH program management as described in the NIH Other Transaction Award Policy Guide for the SPARC Program. **The other transaction award mechanism allows this PO to accommodate issuance of unique clinical awards where Terms & Conditions (e.g. cost-sharing, intellectual property, or award milestones and structure) are customized on a case-by-case basis to fit the objectives of the program.** The OT funding mechanism provides SPARC with the flexibility to design unique collaborations with private sector entities that may not have experience with commonly used assistance and acquisition mechanisms such as grants and cooperative agreements, and contracts, respectively.

The OT mechanism allows significant ongoing involvement from SPARC Program and Project Managers and provides the NIH the flexibility to alter the course of the project in real-time to meet the overarching goal. This may mean that awarded activity could be expanded, modified, partnered, not supported or discontinued based on program needs, emerging methods or approaches, and availability of funds. Performance during the award period will be reviewed on an ongoing basis and course corrections will be made as necessary.

6/ Regulatory and IRB Approvals

The regulatory scope for supported studies spans both Institutional Review Board (IRB)-approved Non-Significant Risk studies and Significant Risk studies (e.g. involving chronic implants) requiring an Investigational Device Exemption (IDE) from the FDA.

For studies determined to be significant risk to human subjects and thus requiring an IDE, applicants may consider using the FDA's Early Feasibility Studies (EFS) program which provides a regulatory path to conduct early clinical evaluations of early stage technology in order to inform final design and functionality. As described in the FDA's EFS Guidance, the proposed clinical study is expected to provide information that cannot be practically obtained through additional non-clinical assessments.

Approvals (IDE and/or IRB) to conduct the clinical study are not required at the time of response; however, they need to be secured within the first six (6) months of any potential award period (must be included as part of first year milestones). Prior engagement with the FDA for proposals that require an IDE (either new or an amendment to an existing IDE) is not required before award initiation; however, a pre-submission meeting with the FDA must occur prior to or within the first three months of award issuance. Applicants that have already communicated with the FDA regarding the clinical study must include resulting feedback (e.g. from pre-submission meetings or IDE submissions) as part of the proposal. Similarly, applications for non-significant risk studies will need to provide documentation of risk determination from an IRB and/or the FDA (final arbiter on risk determination) prior to or within the first three month of award issuance. **Use of funds for any awards resulting from negotiations under this PO will be restricted until all necessary regulatory approvals are obtained and provided to the NIH by an authorized organizational representative.**