2015 Research Support Proposal

APPLICATION INSTRUCTIONS

Application Submission Due: March 27, 2015 by 5:00 p.m.

Applications must be submitted electronically in WORD format* to:
The Center for Innovation and Research by email at:
Sharon.Baer@Sparrow.Org

*Your application in its entirety (to include Biosketches, Letters of Support, etc.) may be scanned into a PDF file; however, the following pages must also be submitted in Word: Abstract Page, Purpose and Specific Aims/Innovation Page, and Pages 2-7.
RESEARCH PROPOSAL GUIDELINES

DEADLINE DATES:
• Proposals due: Date to be determined each semester.

PURPOSE OF GRANT:
The purpose of the Center for Innovation and Research is to support health care delivery research that will affect patient outcomes, safety, quality and cost. Research projects may include pilot or feasibility studies or a new area of research. The research must address the Mission and Vision of the Center of Innovation and Research.

All research grant awards are up to $50,000. Grants target specific areas of focus.

There are no indirects.

The intent of these funds are to obtain preliminary work to lead to federal level funding (NIH, NSF, DOD).

Training grants, marketing, staffing, or equipment purchase grants will not be supported. These funds are not to be used for instrument development nor developing software apps.

ELIGIBILITY:
The principal investigator must actively be a clinician or researcher from MSU or Sparrow. Active team members must be from each site. (Consultants are not generally considered active key personnel.) Funding preference will be given to research projects that focus on health care quality, patient outcomes (including safety), and cost. Outcome variables must be specific and clear, and questions or Aims clear.

FUNDING PERIOD:
The maximum funding period is one (1) year from the receipt of the award notification. “No cost” extensions will not be permitted. Funding will be given in two increments. The second part of the funds will be awarded only after a receipt of 6 month report demonstrating progress.

GENERAL INSTRUCTIONS:
• All projects should have a scientist as a co-investigator who has an established track record of independent (extramural) research funding. The team must include investigators from MSU and Sparrow.
• One of the goals of the Center for Innovation and Research is to develop partnerships of researchers/clinicians at MSU and Sparrow who can go on to submit grant proposals for external/extramural funding. (National Institute of Health [NIH], Agency for Healthcare Research and Quality [AHRQ], Department of Defense [DoD], National Science Foundation [NSF], Blue Cross Foundation, Heart Failure Society of America, American Lung Association, and other Foundations.)
• Partners from MSU and Sparrow need to have a specific and active role and not just be a consultant or receive an honorarium. They need to be an integral, active, and on-going team member.
• Consultants can be included; they just do not count as the desired partnership.
• Data should be stored on a secure network drive with appropriate back-up and intrusion protection.
• Patient data for CFIR research must be kept for three (3) years, and the CFIR must retain a copy of the data. Ownership of the data resides with the CFIR.
  - Patient consents should be kept in a locked location. Locked files are available at the CFIR office.
  - Consents must be filed and locked in a separate location from other data.
  - Other information, separate from the patient consents, can also be stored in locked files in the CFIR office.
• Hard Copy/Patient Consents

EXPECTATIONS FOR RECIPIENTS
Two major reports are due for all projects, a six-month report and a final report.
ADDITIONAL REPORTS
Reports are to be provided to the CFIR at requested intervals and will be distributed to the CFIR Advisory Board and the CFIR Governing Board.

- **Reports may be requested at more frequent intervals by Advisory Board and/or Governing Board.**

- **Six (6) Month Progress Reports:** For all funded projects, a progress report is required for release of final funds. Guidelines for submitting these reports will be provided to all grant recipients.
  - Writing progress reports is the responsibility of the Principal Investigator. Reports should be submitted to the Center for Innovation and Research for their office files.
  - Sparrow Reports should be submitted to the IRB (as part of the continued review, if necessary, prior to the annual report)

Six (6) month Progress Reports are to include the following information:
  - Date of report.
  - Timeline progress.
  - Report on activities in statement of work and details on status of project.
  - Budget spending progress.
  - Summary of achieving Specific Aims.
  - Barriers to implementing study.

- **Final Reports**
  - A final report of expenditures and a final scientific report must be submitted 30 days following the end of the project funding period. Unexpended funds revert to the Center for Innovation and Research.
  - Narrative Report – Writing the required narrative report is the responsibility of the Principal Investigator.
  - Financial Report – MSU will prepare the final financial report. The Administrative Assistant will receive a copy of the financial report for review prior to submission to the study sponsor.
  - Reports should be submitted to the Center for Innovation and Research for their files.

Recipients will agree to complete a follow-up survey at one, three, and five years after the completion of the funding project addressing future activities and funding related to seed funds. The purpose of the survey is to track dissemination activities.

ACKNOWLEDGEMENT OF FUNDING: Investigators must acknowledge that this research was funded by the Michigan State University/Sparrow Health System Center for Innovation and Research. This must be on all dissemination formats, posters, manuscripts, presentations, etc. Poster templates are available at the CFIR office, and are also hosted on the CFIR website: [http://sparrowmsuinnovations.msu.edu/](http://sparrowmsuinnovations.msu.edu/).

INSTRUCTIONS FOR COMPLETION OF THE APPLICATION: Please see the CFIR Website for the Application Instruction Packet information located under the Resources tab at [http://sparrowmsuinnovations.msu.edu/](http://sparrowmsuinnovations.msu.edu/).

*Please use the provided formats of the attached templates to complete these sections.*

COVER PAGE:
- Name of the applicant(s).
- Team of Investigators with Institutional affiliation for each person identified.

ABSTRACT:
Provide the following information on the project: *(SEE FORMS SECTION)*
- At the top of the abstract page, list the title of the project. Limit to 75 characters.
- The abstract should be limited to one page (500 words), using a 1 inch or ½ inch margin. Indicate the number of words in the abstract at the bottom of the page.
• Name of the applicant(s).
• Team of Investigators with Institutional affiliation for each person identified.
• Purpose/Specific Aims/Innovations.
• Rationale/Significance of Study.
• Approaches, Design, Setting, Sample, Methods. Outcomes should be specified.
• Future Funding Opportunity, be specific.

PROPOSAL:
Format:
• Include the Purpose/Specific Aims/Innovation through Data Analysis.
• The narrative is not to exceed 6 single-spaced typewritten pages using a 12-point font (preferably Times New Roman, Arial, or Courier)
• Half-inch margins top/bottom, right, and a ¾ inch left margin.
• The consistent use of one format (American Psychological Association [APA], American Medical Association [AMA], etc.) for the text, citations and reference list is required.
• Please number all pages of the narrative.

PRESENT THE PROJECT NARRATIVE INFORMATION IN THE FOLLOWING ORDER:

TITLE OF PROJECT. Limit to 75 characters.
Purpose/Specific Aims. (SEE FORMS SECTION)
  • Purpose and Specific Aims. Clearly state the purpose of the study and list specific aims in numerical sequence. This needs to be in the form of research questions or research aims, not goals and objectives of projects that are not research in nature.
  • Innovation: How will this transform Care? Evidence that this deals with a gap in existing science. (SEE FORMS SECTION)
    • Describe how the project challenges existing paradigms or clinical practice; addresses an innovative hypothesis or critical barrier to progress in the field. Describe how the project develops or employs novel concepts, approaches, methodologies, tools or technologies. The service /care recipients need to be in the Sparrow Health Care System. At this point we cannot support community projects.

Background Significance, Rationale, and Review of Literature Approach – (SEE FORMS SECTION, Proposal Pages 2-7).
  • The research will contribute to the understanding of human responses and to advances in science or clinical practice. Description should indicate effect on patient outcomes, cost, and quality of care.
  • The research should present a succinct, focused, and critical review and synthesis of the literature that provides rationale for need of the study and lack of current evidence.
  • The research should identify how the study will address a knowledge gap and contribute to the patient care at Sparrow Health system.

Preliminary Work.
Describe any previous research on the topic that has been done by the PI or research team and provide preliminary findings to demonstrate how this is the next step.

Approach, Methods and Design. Use the following subheadings:
  • Design. Describe the research design in detail.
  • Indicate if the project is a pilot study and the need for a pilot study. Some reasons for conducting a pilot study include: feasibility, protocol development, safety determination.
  • Sample and Settings. Describe the number and type of participants and all sampling and assignment procedures. Provide evidence that patients are available and would participate is important. Indicate the rationale for the sampling process and sample size. Eligibility criteria should be specified. If a power analysis was conducted to justify the sample size, include the results of this analysis.
- **Describe the process for recruitment** of participants. Identify potential problem areas and include alternative strategies. Provide a rationale for the use of the selected setting(s) and patient population.

- **Experimental Variables (experimental and quasi-experimental designs).** Describe the independent and dependent variables in sufficient detail to allow evaluation of its strength of the measure and clinical soundness. Outcomes and measures have to be clear. A more complete description of the intervention or experimental manipulation may be appended for further clarification. Existing and validated measures should be used.

- **Instruments.** List and describe all instruments and measures, and include a discussion of the validity and reliability of each or other psychometric properties. Describe the scoring methods. Append a copy of all instruments.

- **Data Collection Schedule and Procedures.** Describe how and when data will be collected and any procedures for data collection.

- **Data Analysis and Interpretation.** Describe the statistical or analytic techniques that will be used to answer each research question of the project. Include the name of the statistical support person and their role.

**OTHER COMPONENTS OF THE PROPOSAL SUBMISSION PROCESS:** (Not part of the 6-page narrative)

- **Research Priorities and Implications for Practice and Research.** (See Forms Section)
  - Describe how the project addresses the Priorities of the Center for Innovation and Research.
  - Describe the implications for quality, patient care outcome, cost, and safety.
  - Describe how this project will provide the groundwork for seeking additional funding in the future.

- **Future Funding (See Forms Section)**
  - Be specific and detailed about funding source, including institutes and/or foundations, RFA number or Program announcement number, or page of instructions and strategic plan. Identify future research that may develop from this project. What is the potential for garnering future, extramural support?
  - Detail fully how completion of this project will lead to further extramural funding or support, inventions and/or intellectual property, or other benefits to Sparrow and MSU.

**Provide 1-2 paragraphs addressing each of the following areas:**

- **Research on Human/Animal Subjects.** The principal investigator must obtain approval from an Institutional Review Board (IRB) or Animal Welfare Committee if the proposed project pertains to human or animal research. The IRB must be registered with the office for Human Research Protections, DHHS and the assurance identification number must be provided as instructed in the application submission process. If approval has been received, list the approval date and upload the approval letter. If approval is pending, indicate this in the appropriate place in the submission process and upload proof of submission to the IRB.

  - Describe how informed consent will be obtained and steps taken to protect participants’ rights or the welfare of animals. Identify any potential risks associated with participation in the project.

- **Women, Children and Minority Inclusion in Clinical Research.** The inclusion of women, children and minorities must be addressed in developing a research design appropriate to the scientific objectives of the study. Provide information on the composition of the proposed study population in terms of sex/gender and racial/ethnic group. Provide a rationale for selection of such subjects.

- **Facilities and Resources (Environment).** Describe the facilities and resources available to carry out the project at all research sites, e.g., computers, statistical and data management support, access to patients, if relevant.

**APPENDICES** (Not included as part of the 6-page narrative)
• **Reference List.** The reference list should follow the format chosen for the project narrative (APA, AMA, Chicago, etc.).

• **Timetable for Accomplishing the Work.**
  The project should be confined to a maximum of one year. Please include a time line with details for benchmarks. The timetable should reflect a realistic work schedule so the project can be completed within the funding period as no “no cost” extensions are permitted. Include milestones. All major activities should be on the timeline.

• **Mandatory Letters of Support:**
  - Partners from MSU and Sparrow need to have a specific and active role and not just be a consultant or receive an honorarium. They need to be an integral, active, and on-going team member.
  - Consultants can be included; they just do not count as the desired partnership.
  - Include letters of support from key administrators and consultants, as necessary, about time and fund allocation.
  - Letters of support should document access to performance sites and research participants, institutional resources committed to the project, and matching funds, if any.
  - Any consultants should describe their role and involvement with the research project.
  - Salary Support or in-kind Personnel. [If requesting salary support for the PI or Co-PI, submit a letter from the individual’s immediate supervisor] that gives assurance that release time will be provided from existing job responsibilities.
  - The period of release time must be specified. The percentage of release time must reflect and discuss the percentage of salary support requested in the budget and/or in-kind personnel contributions.
  - Provide a letter from an appropriate administrator that shows effort will be supported.
  - If there is going to be a change in the kind of personnel used in a department (a new type of personnel), a letter of support from the Department Manager must be supplied.

• **Biographical Sketches for All Key Personnel.** *(SEE FORMS SECTION)*
  - (INVESTIGATORS) Use the PHS Form 398 (6/09) biographical sketch form. Submit a biosketch for the PI and any key participants, e.g., all co-investigator(s), consultant(s), clinician collaborators and mentors.
    Each biosketch is limited to 2-4 pages. Note that the biosketch personnel statement needs to include the contributions (role) of that person to the grant proposal. (Consultants and statisticians)
  - Name the one individual who is primarily responsible for implementing this proposal and for reporting.
    Enter your position and institutional address.

• **Instrument(s).** Include all instruments or interview schedules that will be used to collect data. Include any letters of permission to use a copyrighted instrument.

**BUDGET:**
The budget should not exceed $50,000.00. There are no indirects. Other sources of support must be indicated to assure that funding to support the project’s activities, which are in excess of the grant funding, will be met and will not hinder the completion of the project.

The budget must be consistent with the role of the team member and not their current salary. Ex: If their role is as an interviewer, payment will be at the interviewer level, not that of a unit manager.

**The Center for Innovation and Research will not support:**
- Payment of tuition
- Publication costs
- Journal subscriptions or books
- Travel costs to professional meetings
- Institutional indirect costs
Travel for conference attendance or presentation
- Preparation of posters
- Educational Training
- Equipment purchase, except in situations where that will support better patient outcomes and is central to the proposal. Equipment must be justified and directly related to care.
- Marketing or advertising
- Licenses

Total Budget Requested: The budget requested should not exceed $50,000.00. See the section entitled “Line Item Budget and Budget Justification”. The budget should be planned for one year. Please provide the details of the budget plan.

No funds will be released until Institutional Review Board [IRB], Institutional Animal Care and Use Committee [IACUC], or other approvals have been confirmed. If these are intellectual property areas of concern, these will need to be resolved before the proposal is submitted if possible. Funding will not occur until resolved.

Budget Justification/ Line Item Budget: (SEE FORMS SECTION)
The justification is a description that includes a justification for all itemized expenses including personnel. Each section of the justification should: (1) list the specific items or project personnel noted below, (2) describe why the items or personnel are essential to the conduct of the study, and (3) include any cost calculations.

One line item budget may be submitted for the entire project or separate budgets are permitted from each performance site. Consortium or contractual arrangements and costs should be itemized. Items labeled as miscellaneous will not be funded. The line item budgets may include the following:

Personnel: These funds are not to support summer salaries or salaries to carry over staff while other funding is being sought.
- A description of the activities and role of each person involved in the research project including the principal investigator, co-investigators, consultants, research assistants, secretaries, data collection and data management staff, statistician, etc. Include the percentage of time devoted by each person. If a percentage of any person’s time is to be supported by the institution/another grant or as “in-kind”, indicate and explain in the justification of the budget request for the position.
- All research project personnel, consultants. Include the name, position, % time devoted to project, fringe benefit percent and amount, total fringe requested, and total salary requested.
- Vendors and services, such as survey centers and transcription services, must be HIPAA certified.
- Funds for Sparrow personnel will be provided to Sparrow.
- Subcontracts:
  o Subcontracts with Sparrow may be the mechanism used to pay Sparrow personnel when they are involved.
  o Under those circumstances, a Statement of Work (SOW) will be prepared for those personnel covered in the subcontract.
  o In addition, a Protocol Statement should be attached, which can come from the IRB document.
  o Subcontracts will not be made to companies or vendors that are not registered with Michigan State University and Sparrow Hospital.

Supplies:
- Details are needed. Supplies are defined as items with a unit cost of $500 or less. Examples include: photocopying, telephone, postage, computer time, paper, envelopes, transcription machines, flash drives, audio recorders, etc.

Equipment: Details and Specs are needed.
- Equipment requests should not represent a major portion of the budget or the only budget item. The narrative for equipment requests should: (1) identify the availability of matching funds, if any, or other funds that will contribute to the purchase of the item, (2) explain why the item is absolutely essential to the study, (3) Ownership of the item at the completion of the study will be individually assessed, but will belong to Sparrow or MSU.
• Equipment is defined as items with a unit cost greater than $500.

**Travel:**
• Only travel for data collection and study costs will be considered. Specify the purpose, personnel involved, distance, number of trips, mode of travel, and cost of travel.
• *Conference travel and expenses will not be supported since this is only a one-year project and findings before the end of the project are unlikely.*

**Software:**
• Request purchase of software only if the institution does not provide it. Include the name, version number, and unit cost.

**Other Expenses:**
• Do not list the expenses as miscellaneous. These must be listed specifically, i.e., lab fees or supplies, lab assays, standardized testing, or reimbursement of study participants.

**Other Support:**
• Identify the total amount of other sources of funding for the study. Specify source, amount and funding period.
• Identify any additional funding that has already been awarded for the proposed study, including any funding obtained by a co-investigator. Explain how the work supported by other sources is different from the present request. Overlaps in funding are generally not funded.

**Pending Funding:**
• If there is other pending funding for the proposed project, identify the amount, agency, and date the funding is expected to be initiated, if awarded. If no additional funding is available or pending for the project, write “Not Applicable” in this section of the narrative. The USPHS Form 398 Page entitled, “Other Support” may be submitted.

**Total Funds Requested** — there are no indirect funds.

**FORMS** — see CFIR Website, Resources Tab, for complete document of Grant Application Instructions with forms: [http://sparrowmsuinnovations.msu.edu/](http://sparrowmsuinovations.msu.edu/)
Title of Project (Limit to 75 characters)

Abstract (Limited to one page [500 words] – indicate number of words at bottom of page)

To include: 1) Name of Applicant(s)/Institutional affiliation for each person identified. 2) Purpose/ Specific Aims. 3) Rationale/Significance of Study. 4) Approaches, Design, Setting, Sample, Methods. 5) Main Research Variable(s). 6) Future Funding.

Number of words:
• Purpose and Specific Aims:

• Innovation: How will this transform care? Evidence that this deals with a gap in existing science.
Research Priorities and Implications for Practice and Research. (½ page)

Future Funding Sources. (½ page)
BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors in the order listed on Form Page 2. Follow this format for each person. DO NOT EXCEED FOUR PAGES.

<table>
<thead>
<tr>
<th>NAME</th>
<th>POSITION TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>eRA COMMONS USER NAME (credential, e.g., agency login)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EDUCATION/TRAINING</th>
<th>DEGREE</th>
<th>MM/YY</th>
<th>FIELD OF STUDY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NOTE: The Biographical Sketch may not exceed four pages. Follow the formats and instructions below.

A. Personal Statement

Briefly describe why your experience and qualifications make you particularly well-suited for your role (e.g., PD/PI, mentor, participating faculty) in the project that is the subject of the application. Within this section you may, if you choose, briefly describe factors such as family care responsibilities, illness, disability, and active duty military service that may have affected your scientific advancement or productivity.

B. Positions and Honors

List in chronological order previous positions, concluding with the present position. List any honors. Include present membership on any Federal Government public advisory committee.

C. Selected Peer-reviewed Publications

NIH encourages applicants to limit the list of selected peer-reviewed publications or manuscripts in press to no more than 15. Do not include manuscripts submitted or in preparation. The individual may choose to include selected publications based on recency, importance to the field, and/or relevance to the proposed research. When citing articles that fall under the Public Access Policy, were authored or co-authored by the applicant and arose from NIH support, provide the NIH Manuscript Submission reference number (e.g., NIHMS97531) or the PubMed Central (PMC) reference number (e.g., PMCID234567) for each article. If the PMCID is not yet available because the Journal submits articles directly to PMC on behalf of their authors, indicate "PMC Journal - In Process." A list of these Journals is posted at: http://publicaccess.nih.gov/submit_process_journals.htm. Citations that are not covered by the Public Access Policy, but are publicly available in a free, online format may include URLs or PMCID numbers along with the full reference (note that copies of publicly available publications are not accepted as appendix material.)

D. Research Support

List both selected ongoing and completed research projects for the past three years (Federal or non-Federally-supported). Begin with the projects that are most relevant to the research proposed in the application. Briefly indicate the overall goals of the projects and responsibilities of the key person identified on the Biographical Sketch. Do not include number of person months or direct costs.
BIOGRAPHICAL SKETCH
Provide the following information for the Senior/key personnel and other significant contributors in the order listed on Form Page 2. Follow this format for each person. **DO NOT EXCEED FOUR PAGES.**

<table>
<thead>
<tr>
<th>NAME</th>
<th>POSITION TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>eRA COMMONS USER NAME (credential, e.g., agency login)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

**EDUCATION/TRAINING** *(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable.)*

<table>
<thead>
<tr>
<th>INSTITUTION AND LOCATION</th>
<th>DEGREE (if applicable)</th>
<th>MM/YY</th>
<th>FIELD OF STUDY</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**A. Personal Statement**

**B. Positions and Honors**

**C. Selected Peer-reviewed Publications**

**D. Research Support**
<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th></th>
<th>Year 2</th>
<th></th>
<th>Grand Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Salary</td>
<td>Fringe</td>
<td>Total</td>
<td>Salary</td>
<td>Fringe</td>
</tr>
<tr>
<td>Personnel</td>
<td>% Effort</td>
<td>$</td>
<td>%</td>
<td>$</td>
<td>% Effort</td>
</tr>
<tr>
<td>Supplies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equipment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Travel</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Software</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Expenses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** The budget justification must include a justification of all of the above itemized expenses including personnel. Each section of the justification should describe why the items or personnel are essential to the conduct of the study.