



**Cleon C. Arrington**  
**RESEARCH INITIATION GRANT PROGRAM**  
University Research Services & Administration  
Application Deadline: Tuesday January 12, 2016

**PURPOSE & GENERAL INFORMATION ABOUT AWARD**

The purpose of the Cleon C. Arrington Research Initiation Grant (RIG) Program is to promote the scholarly, research activity of the faculty and to foster academic excellence within the University. This award specifically aims to promote new scholarly, research initiatives from early career through more senior faculty scholars. One campus-wide competition is held each fiscal year.

**AMOUNT AND TIME FRAME OF AWARD**

Research Initiation Grants (RIGs) are limited to a maximum of \$25,000. Applicants must justify that the expenses budgeted are essential to the completion of the proposed project. All internal grant awards follow the fiscal year budget period that runs from July 1<sup>st</sup> through the following June 30<sup>th</sup> and must be expended within the one-year budget period of the award, no exceptions.

**GENERAL ELIGIBILITY**

**PI eligibility**

RIGs are available to full-time, tenured and tenure-track faculty (not available to instructors, full-time research professionals, or non-tenure track faculty) in any academic discipline at Georgia State University. Faculty members may only receive one Research Initiation Grant during a four-year period (eligible faculty may apply who received previous RIG award in FY2012 or before). Moreover, while faculty applicants may apply to more than one internal grant program during a given fiscal year (RIG and Scholarly Support) they may receive only one of these awards in a fiscal year.

**Type of proposal**

Proposals must be for starting up new scholarly, research or creative initiatives. These include projects from early career faculty (*i.e. new investigators*) who have not previously received funding for the work outlined in their proposal. If the proposal is from a more senior (tenured) faculty, the work outlined in the proposal must include a compelling written justification for why it is considered a “new initiative” for this investigator. Moreover, the senior faculty applicant should be able to show clearly that the work is not just an extension of something they have already done and that they have not received funding for work similar to that outlined in the proposal over their career (whether at Georgia State or elsewhere). Finally, these internal grant awards are not intended to be used as bridge funds or to fund ongoing scholarly or research initiatives.

**FACULTY MENTOR OPTION**

Early career faculty applying for a RIG may choose to add a faculty mentor (internal or external to GSU), who will provide specific mentorship to the Principal Investigator and project. Faculty applying for a mentor option cannot be tenured and should not already have a strong record of

external funding for their research, if applicable. A strong justification needs to be provided to outline the role of the mentor and specific tasks to be completed that go above and beyond the mentoring expected by senior faculty as part of their typical duties and service to the university and their departments.

Mentors are expected to have a record of external funding for their own research, if applicable, and to provide at least very basic guidance and feedback to the mentee faculty in the form of reviewing and proofing documents related to the project (e.g. project plan, manuscript proofs, grant proposal proofs, etc.). In addition, mentors are expected to be available to the mentee faculty on a regular basis decided and agreed upon between the mentor and mentee and described in this RIG application. For the mentor's contribution to the project, PIs may request up to \$5,000 in funds (to be taken from the \$25,000 total allowed budget) to compensate the mentor for their effort. These funds may be used towards mentor salary, supplies, travel, or any other type of expense that is considered allowable to pay with state funds. Mentors should provide their C.V. and a letter of commitment to illustrate their expertise and commitment to mentoring the applicant on this proposed project (see application instructions below).

## **GENERAL CONDITIONS OF AWARDS**

### **Timeline**

All activities covered under this award mechanism must be completed within the fiscal year of the University, which runs July 1<sup>st</sup> through June 30<sup>th</sup>. Failure to complete the project and expend funds in a manner that fits within this one-year budget period may result in the return of all or some portion of the award funds at such a time deemed appropriate by the URSA Office in consultation with the Principal Investigator.

### **Compliance with federal, state and university regulations**

Principal Investigators (PIs) are responsible for ensuring that activities conducted under the program are in compliance with all applicable federal, state and university policies. Upon receiving a Notice of Award for an internal grant, the PI is responsible for submitting all compliance protocols required for their project as soon as possible (e.g. use of human subjects, use of animal subjects, use of radioactivity, bio-hazardous or hazardous materials). PIs must receive official compliance approval before they can be given access to their internal grant funds and begin work on their project under the award. A prolonged delay in obtaining appropriate compliance approvals that significantly delays the work on the project may result in cancellation of the award at such a time deemed appropriate by the URSA Office in consultation with the Principal Investigator, if it is determined that the project cannot be completed within the time remaining on the award budget period.

### **Progress and final reporting**

All internal grant awards will require the submission of a brief project progress report 6 months after the start date, a brief budget status report 3-4 months prior to the end of the award and a final report within 90 days after the end of the award. Continued access to awarded funds will be contingent upon timely submission of a satisfactory report of progress on the awarded project. Future access to other internal grant awards will be contingent upon timely submission of final reports.

### **Project completion and outcomes**

Awardees are expected to complete the project as proposed or, if the scope of work changes during the project period, the awardee must submit a revised Scope of Work to the Internal Grants Program staff for approval within 6 months of the end of the project period. Future access to other internal grant awards will be contingent upon successful completion of the proposed work and the outcomes specified in the proposal.

### **APPLICATION INSTRUCTIONS**

Because proposals are evaluated by an interdisciplinary peer review panel, they should be written to be understood by faculty who are not experts in the applicant's immediate discipline of study. Applicants should limit their use of jargon and acronyms whenever possible.

*Applications should directly address the review and award criteria described below.*

### **Access to application forms**

Applications for this internal grant must be submitted online via the Research Portal in Sharepoint. You can access Internal Grant online applications the Research Portal through the URSA home page by selecting Research Solutions in the top menu then selecting Internal Grants Program under Research Portal in the dropdown menu. Log in using your Campus ID and Password. To begin your submission, click on "Submit a New Grant" and select the type of internal grant application you are submitting. This will bring you to the online form and instructions for completing, routing, and submitting your internal grant application. The online form is very simple and one page only. It requires very minimal information.

### **Drafting, routing, and submitting the application**

Note, that you may begin your online submission and "Save A Draft" each time you input information until you are ready to complete the submission. Complete all items required on the online application form, upload and attach your final and complete proposal with all appendices as one PDF file, and enter the correct names for all required approvers in the "Workflow" section (more on this below) of the online form. The applicant is responsible for officially submitting the final application. A saved draft is not considered a submitted application. Once you select "Submit," the application will automatically be routed to the persons you specify in the Workflow section of the online form, and the Applicant will be notified by email that the application has been routed for these internal approvals. The Applicant will be alerted again when all approvals are completed and the application is "officially completed." If this final notification is not received by the deadline, the Applicant should follow up with people they listed as approvers on their application to ensure the approvals are completed during the 48-hour grace period provided for approvals after the deadline.

### **More on routing the application for approvals**

Typically internal grant applications should be routed for approval to the same persons as external grant applications with the exception of routing to OSPA. The final approver will typically be the Applicant's dean's office and the application does not get routed to OSPA. Applicants must check with their departmental or college grants administrator to determine who needs to be listed in the "Workflow" section of their internal grant online application form for official approval. Failure to rout the application appropriately for approvals (e.g. failure to list the right people in the "Workflow" section for routing) may result in delay and missing the deadline for submission and approvals.

Applications are routed for approval electronically and email notices sent to all approvers once the Applicant selects "Submit" at the bottom of the online application form. Each approver

listed in the routing workflow will receive an email notifying them that the application is on their Task list in the Research Portal waiting for their approval. Applicants do not need to do anything to make sure the application is routed, however it is the responsibility of the Applicant to check the status of their application in the Research Portal to make sure that the routing is completed by the submission deadline (or within the 48-hour grace period). To check the status of an application, the Applicant should click on the item under “Your Submissions” on their personal the Research Portal homepage and check the status beside this item. The status will show “pending approvals” and the Applicant can open the application form to determine which person(s) still need to approve the application. The Applicant can follow-up directly with the person or office where an application is currently “sitting” if the application approval needs to be expedited. If any of the approvers listed in the routing workflow reject the application, they will be guided to provide specific feedback as to why the application was not approved and an email will be sent directly back to the Applicant to address the issue.

Applicants receiving a rejection from any of their approvers will need to address the issue as indicated in the email notification received about the rejection. The Applicant should reopen the application in their submissions list and make any corrections needed, replacing the attached PDF proposal file with changes as needed. Once the issue has been addressed the Applicant can re-submit the Application for re-routing through the approval process. The approver who rejected the application should look specifically to make sure the issue was properly addressed before approving. Once approved, the application process will proceed as described above.

### **Completion of submission and routing**

Once all approvals have been completed, an email will be sent to the Applicant to notify them that their application has been “successfully submitted.” The Manager of the Internal Grants Program in URSA will also receive an email that the application has been received and awaits the formal review. **NOTE:** applications will be given a 48-hour grace period after the final deadline for final approvals to be received and applications to be “officially submitted.” Any applications not receiving final approval within this period might not be accepted for review.

### **Formatting of application**

1. **Online Application Form:** The online Application form includes relevant information about the application and the applicant. This “page” is completed in the Research Portal and will be attached to the main body of the application once the application is submitted. All information noted as “required” must be included on this form before the application can be submitted.
  - Project title; Name(s) of PI(s) and their department(s), email address(es) and phone number(s); Name of departmental grants and contracts officer, their email and phone number; Compliance requirements of the proposed project (will it require IRB, IACUC, IBC, etc., approvals); Email addresses of persons to whom the proposal will be routed.
2. **Compliance approvals:** PIs on proposals for work that uses human subjects, non-human animal subjects, bio-hazardous agents, recombinant DNA molecules, ionizing radiation, and/or biologically-derived toxins must obtain the appropriate approval(s) before funding will be made available. If approval is pending at the time of application, approval must be obtained by July 1<sup>st</sup>. Failure to obtain appropriate approval within a reasonable amount of time after the start of the budget period is grounds for withdrawing support for an award. Note that it can take up to 8 weeks to complete the compliance approval process so awardees should begin the process by the end of April

prior to the start of the award.

3. The **main text of proposal** will be attached as a Word file or PDF file to your application in the Research Portal. This part of the application must be prepared using 12 point Arial or Times New Roman font with one (1) inch margins on all sides. The main text should include the following sections with the following section titles:
  - a. **Abstract** (no more than one-half page, single-spaced): This summary should include a statement of the main question being addressed by the project, the primary aims or objectives of the project, the significance or potential impact of the proposed project, and a statement or two about the general methods to be employed.
  - b. **Project Description** (no more than five pages, single-spaced): This section should outline briefly the past work in the area (i.e., theoretical and empirical work, including the applicant's own work) as a framework for discussing why the work outlined in the proposal is important. The project description should also include the specific aims or objectives for the proposed project and provide a clear, detailed account of the project design and methodology. Applicants who are not new investigators (as defined under eligibility) must provide a compelling justification of how the proposed project is a **new initiative** for them in this section. **New initiatives** are not to be extensions of work the applicant is already doing or has done in the past. References should be included in the section (if appropriate), but references are not subject to the page limitations.
  - c. **Potential Impact of Project and Plans to Obtain Extramural Support** (no more than one page, single-spaced): Describe the potential impact of the proposed research to the field of work or to human quality of life in general, and describe specific plans to obtain extramural support for this work. Include the types of funding to be sought based on the results of the project (i.e. sponsoring agency, specific program announcement, and approximate deadlines if information is available). **NOTE:** Establishing plans to submit for sponsored funding and following through on these plans is a required outcome of all RIG awards.
  - d. **Status Reports from Prior Internal Awards:** Provide a status report listing the accomplishments *seeded by* any internal award funded through a University Research Services & Administration internal grant program within the last five years (*seeded by means "would not have been possible without"*) These include publications (e.g. books, book chapters, journal articles, etc.) that are IN PRINT and that resulted in any part from work completed under an internal grant award, any external funding applied for and external funding obtained as a result of work completed under an internal grant award, and any major professional accomplishment or product (e.g. art installation, musical composition, major award for PI, etc.) that resulted from work completed under an internal grant award. ***Applicants who have been funded in the past by URSA's RIG program where external funds were required as an outcome are expected to prove they have applied for such funding since the completion of that internal RIG award.***
  - e. **For Resubmissions Only** (no more than one additional page, single-spaced): If your application is a resubmission from the previous year, you must address the primary concerns of the reviewers provided in the reviewer comments from the previous submission round. In this section, list each concern from previous reviewers and describe how each has been addressed. Note that previous reviews will be provided to

reviewers for resubmitted applications. This section should be added to or weaved into the Project Description and is allowed up to one additional page (in addition to the 5-page limit).

- f. **For Mentored RIG Applications Only** (no more than one-half page, single-spaced): Provide a brief description of the commitment that the mentor will make to this project and to the applicant over the life of the project including % effort they plan to devote and what exactly they will be doing to support the applicant and project. As mentioned above, the mentor should provide commitment above and beyond the expected reading and reviewing of the applicant's work. Some examples might include mentoring the applicant in the art of managing sponsored projects and people, grant-writing skills, actively collaborating on the project, etc. If the mentor will be getting some of the awarded funds, that will need to be itemized in the budget (see below). In addition, both a current C.V. or biosketch of the mentor and a letter of commitment written by the mentor, outlining what they will do to support the project and the applicant, should be appended to the end of the application (using any standard format).
- g. **Applicant's Vita** (no more than four pages, single-spaced): A copy of the applicant's vita must be submitted with the application to support the investigator's qualifications in the proposed research area. The following information should be included in the vita:
- i. Education (listing degrees and dates awarded, period of any additional training)
  - ii. Professional employment (listing dates and titles)
  - iii. Top 15 publications most relevant to the proposal (preferably books, book chapters or peer-reviewed articles, but can include abstracts of presentations if there are no other publications)
  - iv. Scholarly products (e.g. patents) and/or artistic productions (these could be in lieu of publications)
  - v. Relevant external grant support with the following details (including those submitted and pending review, but do not include grant proposals that have not yet been submitted). Include any funds obtained for like or similar projects as that described in this application:
    - a. Funding Agency
    - b. Title of award
    - c. PI and Co-PIs as listed in proposal with their primary affiliations
    - d. Total period of the award (since last competing renewal)
    - e. Total amount of award (since last competing renewal)
    - f. Amount of award for current award year if a multi-year award.
    - g. For multi-year awards with competing renewals, list date of initial funding.
- h. **Budget: The total budget cannot exceed \$25,000 for 1 year of support.** A budget format is included in these guidelines for instructional purposes. When including a Mentor option, the Mentor's portion of the budget must be included in the \$25,000 maximum budget allowed.
- i. **Salaries and Personnel Effort:** Any portion of salary being paid from an internal grant budget must clearly specify the name of the person (if current employee) or title for the position being paid, the base salary for that position, and total salary being budgeted for project. Budget must specify how much to allocate to specific summer months (July of initial year, May and/or June of following year) NOTE:

faculty may not request summer salary and a course release on internal grants (see below). NOTE: Summer salary requests must include a strong, written justification (see budget justification below). DO NOT INCLUDE FRINGE BENEFITS IN BUDGET. Fringe benefits are paid from another university source and will not need to come from your internal grant budget. Personnel percent effort for academic year and summer salaries must be included on the budget so that we can make sure effort is in compliance.

- ii. GRAs, student workers: Support may be requested for graduate research assistants and student assistants as long as they are being paid only for their work on the funded project. GRAs cannot work more than 20 hours (50% effort) on a funded project).
  - iii. Course releases: Support may be requested for ONE course release during the academic year or summer salary, but not for both. Also, please note that for course releases for fall and spring, the PI should only request the **actual cost** for a replacement instructor and not a percentage of faculty salary as with external grants. Applicants should consult with their chair to determine whether they are allowed to obtain a course release during the academic year and to get the estimated or actual cost of a replacement instructor for the course release.
  - iv. Supplies, travel and other expenses: Support may also be requested for supplies, participant remuneration, equipment, and travel (see details in Budget Justification section below) to engage in research activity. Purchase of food for participants (e.g., for focus groups) is not an allowable expense. This internal grant program should not be used to cover expenses typically funded by departments. Therefore, computers are not an allowable expense except when the research project cannot be accomplished with the typical computer supplied to faculty members.
  - v. Equipment: Only equipment that is considered “capital” costing over \$4,999 should be listed as “equipment.” Anything less than this amount can be listed as a “supply.”
  - vi. Mentor’s funding (if applicable): For a Mentored RIG application, funds up to \$5,000 may be provided to the mentor for any expenses that are allowable on state funds (these funds come under state restrictions), including supplies, salary, professional travel, and anything that the applicant is allowed to cover with these funds is allowable for the mentor, as well. These funds will come from the total award budget (no more than \$25,000).
- h. **Budget Justification:** A justification must be included for **each budget item**. All items (including equipment) should be justified in terms of how they will be used in the proposed project. More details are required for travel and to purchase electronic equipment (e.g. computers, iPads or tablets, etc.) – see below.
- i. Faculty Summer Salary – Summer salary requests must include a strong, written justification that specifies the exact nature of the effort that the person will commit to the project during the summer months they will be paid (e.g. 10 hours per week writing grant proposal, 5 hours per week analyzing data, 15 hours per week collecting data from archives, etc.). If a summer salary justification is deemed not adequate, applicants may be asked for a revision or the requested amount may be reduced, if awarded.
  - ii. Travel that is required to conduct research is eligible for funding (not to be used for travel for professional development or to professional conferences to present

work). Air and train travel must be calculated on the basis of economy rates. Estimated costs for food and lodging must be reasonable, and charges to grant funds for these items must be based on University regulations. Mileage must be figured at no more than the approved University mileage rate. Travel expenses to attend or present at a professional meeting or conference will not be funded unless there is a specific justification provided in the Budget Justification that directly relates to the completion of the project. Funding for conference travel to present results of the project is not a sufficient rationale. Justification of travel should include the following points (when appropriate):

- a. Where the proposed trip fits within the overall plan and the importance of the project;
  - b. The reasons for the choice of the specific location. If the travel is to access a specific resources (e.g. a special piece of equipment, an archive or collection, a repository of information, etc.), describe the need to access the unique resource and why it must be accessed in person rather than via other methods (online, loan, etc.).
  - c. Evidence of competence in the special areas required to utilize the equipment or collection.
- iii. If an applicant is requesting support for travel to access to specific resource, a letter or other appropriate documentation from the institution where the work will take place, signed by the director, archivist, curator, or other responsible official, indicating their agreement to provide access should be provided. The documentation should indicate that the specific resource that the applicant wishes to utilize is accessible and will be made available to the applicant during the period requested in the application. A published statement indicating that the specific laboratory or collection will be accessible to researchers during the period requested maybe substituted for the letter or documentation.
- iv. To purchase electronic equipment, particularly computers, ipads or tablets, the justification must address how the equipment will be used, why the project cannot be completed without this equipment and assurance that this equipment will be designated solely for the project for the life of the award. Electronic equipment should be purchased within the first 6 months of the project.
- i. **Letters of cooperation.** If the project depends on collaboration or cooperation of others, a letter of cooperation may be included. However, general letters of support from chairs or colleagues should not be included in the application.
  - j. **Appendices.** Appendices are only to be used for C.V.s, biosketches, or other required information that is to be attached to the main content. Appendices cannot be used to provide additional information about the main content of the proposal (e.g. details on methodology, etc.).
4. **Creating a single PDF file** from multiple documents for submission (if you need to combine your main text, C.V.s, etc.):
- a. Creating a single PDF file from multiple documents requires Adobe Acrobat –standard or professional (not the same as Adobe Acrobat Reader).
  - b. Once you have all your Word and/or PDF files to be merged, open Adobe Acrobat and click on “Create PDF” in the toolbar on the main screen. If this tool is not visible, click on “View” “Task Buttons” “Show All Task Buttons.”



- c. A window will pop up. Under “Add Files” area click “Browse” to locate and add PDF files to this compilation. You should add them in the order you wish them to appear.
  - d. Once you have selected all the files to be added in the order you want them to merge, click “OK.”
  - e. This creates the new merged PDF file and you will need to save it with a new name by clicking on “File” “Save As” and entering the new name for this file. Make sure you note where you are saving it on your computer (e.g. desktop, documents, etc.)
- A single Word or PDF file with all of the application items in the order listed above should be uploaded into the Research Portal as instructed. Be sure to check the final document before uploading to make sure it looks that way you need it to look.

### **Submission of application**

*When you have submitted the proposal in the Research portal, please also send an email to internal [grants@gsu.edu](mailto:grants@gsu.edu) to notify us of the submission in the Portal.* Please allow time for the entire application to be routed electronically (recommend 2-3 business days) prior to the deadline. Late applications will not be accepted. Applicants will be notified by email when the routing of the application is completed and the application successfully submitted.

### **REVIEW PROCEDURES**

The Vice President for Research & Economic Development awards funding to proposals based on the recommendations of the GSU Internal Grants Program Faculty Peer Review Committee. This interdisciplinary committee is composed of faculty scholars from across the university. This should always be kept in mind when crafting the language in an internal grant proposal. Reviewers use the review criteria detailed below to evaluate and assign a single, global score for each application. Reviewer comments will be sent to all applicants at the time Notice of Awards are sent. Neither scores nor rankings are provided to applicants as these provide no useful information to the applicant regarding the quality of their application or chances for funding upon resubmission.

### **Review and Award Criteria**

1. Does the proposed project have merit? Does the project have the potential for high impact to the field of study?
2. Are the methods and measures to be used in the project adequate and appropriate for and achieving the primary goals or aims of the project?
3. Is the timeline for completion of the project feasible (e.g. can the proposed project be completed within the 1-year budget period)?
4. Does the proposal provide a reasonable plan for seeking future external funding within a reasonable timeframe after the completion of the proposed project?
5. Does the applicant show adequate expertise and / or a track-record, appropriate to their rank, of conducting work in the field in which their proposed project falls?

6. Applicants who have received Internal Grant Program funding in the past are expected to have applied for external funding (in disciplines where appropriate). If this applicant has received internal grant funding before, do they provide adequate information that they applied for external funding from previous internal grant projects?
7. For applicants who are more senior at Georgia State University, does the applicant provide a strong case that the proposed work is a **new initiative** for the applicant (as described in the Call for Proposals under “type of proposal”)?
8. For RIGs including a mentor option, does the mentor have appropriate expertise and track record to provide mentoring to the applicant where indicated? Will the mentor provide mentoring to the applicant for this project and professionally that is above and beyond what is considered part of their typical service to the university?
9. Does the application include appropriate letters of cooperation from collaborators or organizations providing key resources (this does not refer to letters of recommendation, but letters regarding specific support or resources)?

#### **OTHER INFORMATION**

Further information about the Research Initiation Grant described in this announcement may be obtained by contacting:

Dr. Kelly Stout  
Associate Director, Special Research Initiatives  
229 Dahlberg Hall  
Email: [kpowellstout@gsu.edu](mailto:kpowellstout@gsu.edu)  
Phone: 404-413-5475

#### **RESEARCH INITIATION APPLICATION BUDGET FORMAT**

**Note:** This is simply a guideline on what to include in your budget page for this proposal. Budget

cannot contain both course release and summer salary. Also, do not include fringe benefits on this budget (those come from a separate budget are not included in the award total). For Mentored RIG proposals, please note which items listed are allocated to the mentor's portion of the funding.

<b>Budget Item</b>	<b>Amount Requested</b>
Faculty academic year salary (list and calculate for each faculty included) DO NOT INCLUDE FRINGE	Percent effort: Base salary: Total requested:
Faculty summer salary (list and calculate for each faculty included; note which months to pay and how much each month – e.g. July 2015, Maymester, June 2016) DO NOT INCLUDE FRINGE	Percent effort: Base salary: Total requested:
Staff salary (list individual staff positions and amount to pay each person listed) DO NOT INCLUDE FRINGE	Percent effort: Base salary: Total requested:
Graduate Research Assistants (GRAs) Cannot exceed 20 hrs/wk or 50% effort (list each individual and amount to pay each person listed) DO NOT INCLUDE FRINGE	Percent effort: Max monthly or semester salary: Total requested:
Student Assistants (list requested stipend for each individual) NO FRINGE ALLOWED	Total stipend requested:
One course release at cost for replacement instructor (not to exceed 10% of 9-month base salary). Cannot request summer salary and course release for the same faculty	Total requested cost for replacement instructor:
Equipment (itemize)	
<sup>1</sup> Travel (location, dates and amount for each trip and itemize)	
<sup>2</sup> Participant Support costs (itemize)	
<sup>3</sup> Other Direct costs including supplies (itemize)	
<b>PROJECT TOTAL BUDGET</b>	<b>\$</b>

<sup>1</sup>Travel expenses must be itemized and each item should be justified in the budget narrative.

<sup>2</sup> Participant support costs may include payment on behalf of human subjects to participate in activities, but not as incentives for participation as a research subject (see human subjects remuneration under Other Direct costs)

<sup>3</sup> Other Direct costs may include, general supplies and materials, consultants, computer software, publication costs, rental costs, sub-award costs, human subjects remuneration, etc.