CVI Office of Research Development
American Heart Association: Institutional Research Enhancement Award Guidebook
# Proposal Central Components

<table>
<thead>
<tr>
<th>Done</th>
<th>Section</th>
<th>Notes</th>
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<tbody>
<tr>
<td></td>
<td>Stanford PIF</td>
<td>SeRA system form to work with Derek Harrison</td>
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<tr>
<td></td>
<td>Project Title</td>
<td>Up to 120 Characters</td>
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<td>Start &amp; End Dates</td>
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<td>Personnel</td>
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<td>Letters of Reference</td>
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<td>Summary for Non-Scientists (Lay Summary)</td>
<td>2500-character limit</td>
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<td>Written at a 10\textsuperscript{th} grade level</td>
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<td>Project Summary</td>
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<tr>
<td></td>
<td>Budget Period Detail</td>
<td>Refer to the <a href="#">AHA Award Guide</a> for a list of Allowable and Non-allowable budget items.</td>
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<tr>
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<td>Budget Summary</td>
<td>Read-only display of the budget items entered in the Budget Period Detail section.</td>
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<td>Alternative &amp; Overlapping Funding</td>
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<td>Organization Assurances</td>
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<td>Data Sharing Plan</td>
<td>Research Output (2050-character limit)</td>
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<td>Explain any limits to data sharing that might be required. (1000-character limit)</td>
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## Documents to upload

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<tr>
<th>Done</th>
<th>Document</th>
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<tr>
<td></td>
<td>Applicant</td>
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<tr>
<td></td>
<td>Research Plan</td>
<td>8 pages</td>
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<td></td>
<td>Biosketch</td>
<td>NIH Format. 5 pages</td>
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<tr>
<td></td>
<td>Budget Justification</td>
<td>2 pages</td>
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<td>AHA template</td>
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<td></td>
<td>Research Project Environment Form (DOC)</td>
<td>2 pages</td>
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<td>AHA template (attached)</td>
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<tr>
<td></td>
<td>Literature Cited</td>
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<td>Vertebrate Animal Subjects</td>
<td>No page limit. Only upload if applicable.</td>
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<td>Resubmission Modifications</td>
<td>2 pages. Only if applicable</td>
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<td>Third Party Personnel</td>
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<td></td>
<td>Provost’s Letter of Institutional Eligibility</td>
<td>1 page. Required</td>
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<tr>
<td></td>
<td>Collaborating Investigator’s Letter</td>
<td>5 pages. Optional</td>
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<tr>
<td></td>
<td>Collaborating Investigator’s Biosketch</td>
<td>NIH format. 5 pages</td>
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<td>Optional</td>
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<tr>
<td></td>
<td>Consultant’s Letter</td>
<td>5 pages. Optional</td>
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</tbody>
</table>
Guidelines:
- Page limit: 8 pages
- Include the following:
  1. Specific Aims: Provide a clear, concise summary of the aims of the work proposed and its relationship to your long-term goals. State the hypothesis to be tested.
  2. Background and Significance: Sketch the background leading to this proposal. Summarize important results outlined by others in the same field, critically evaluating existing knowledge. Identify gaps that this project is intended to fill.
  3. Preliminary Studies: Describe concisely previous work by the applicant related to the proposed research that will help to establish the experience and competence of the investigator to pursue the proposed project. Include pilot studies showing the work is feasible.
  4. Research Design and Methods: Description of proposed tests, methods or procedures should be explicit, sufficiently detailed, and well-defined to allow adequate evaluation of the approach to the problem. Describe any new methodology and its advantage over existing methodologies. Discuss the potential difficulties and limitations of the proposed procedures and alternative approaches to achieve the aims.
  5. Ethical aspects: Discuss any ethical circumstances or issues of note in the research plan.
BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors. Follow this format for each person. **DO NOT EXCEED FIVE PAGES.**

**NAME:**

eRA COMMONS USER NAME (credential, e.g., agency login):

**POSITION TITLE:**

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

<table>
<thead>
<tr>
<th>INSTITUTION AND LOCATION</th>
<th>DEGREE (if applicable)</th>
<th>Completion Date MM/YYYY</th>
<th>FIELD OF STUDY</th>
</tr>
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**A. Personal Statement**

Tailor this section to your specific application. Share your long-term career goals and your unique background and experiences that make you suited to carry out this proposal.

**B. Positions, Scientific Appointments, and Honors**

**C. Contributions to Science**
BUDGET JUSTIFICATION (two-page limit)

- The following items must be addressed. These are the only items to be addressed.
- See page 2 for example. DELETE the example page.
- After completing the form, convert it to Portable Document Format (pdf) and upload it.

PERSONNEL

- All personnel receiving salary or consultant fees from the project should be listed, such as the Principal Investigator, Technicians/Postdoctoral Fellows, Consultants, Collaborating Investigators and Other Professionals
- For each person include: Name, degree(s), role on the project, percent of time to be devoted to project, and a description of the role on the project.

COMPUTER EQUIPMENT AND EQUIPMENT COSTS

- The AHA does not, in general, favor project support requests wherein the budget is devoted primarily to equipment purchase. However, such costs may be allowed if the equipment is essential to the conduct of the proposed research, well justified, and approved by the peer review committee and Research Committee or otherwise stated within the Request For Applications.
- Any computer equipment cost of $5,000 or more should be listed, with a brief justification.
- Total annual equipment costs (not including computer equipment above) of $10,000 or more should be listed, with a brief justification.

SUPPLIES

- In general, supplies are items that are consumable, expendable or of low unit cost, and are directly related to the functioning of the Research Project, such as chemicals, glassware, small pieces of equipment costing less than $100, etc.

TRAVEL

- Cost for travel to scientific meetings is not required to be included in the budget justification. The peer review committee will comment on the need for the additional travel funds; final approval will come from the Research Committee if the application is funded, unless otherwise stated within the Request For Applications.
- Other travel fund requests should be for the essential conduct of the project and must be described. For example, if requesting travel costs to reimburse for human subjects, provide a rationale here.

PUBLICATIONS/PRINTING

- Reasonable expenditures connected to publication of results of research, including research information services and library services, and purchase of reprints are acceptable charges during the term of the Award, which includes any authorized extension period.

OTHER PROJECT EXPENSES

- May include sub-categories such as Subcontracts, Patient Incentives\Reimbursement, and Animal Housing, amongst others.
BUDGET JUSTIFICATION EXAMPLE

Personnel:

Jane Smith, MD, PhD, Principal Investigator (30% effort) will be responsible for the overall administration and direction of the project. She will analyze reaction of soluble IV9-HLA-A*0201 complex with TCR on 68A62 and Iv9CTL.

Helen Thomas, MS, Other Professional (Research Technician) (25% effort) will focus on investigating the ability of various SL9-specific CD88 CCI clones from various HIV infection individuals whose T-cell receptors bind with different strength to the cognate pepMHC complex (SL9-HLA-A*0201) to suppress viral replication in HIV infected cells in vitro. In addition, she will maintain initial preparation of the CTL clones and will characterize them on a regular basis to ensure maintenance of their initial quality.

Thomas Club, PhD, Technician/Postdoctoral Fellow (100% effort) will be involved in all the measurement of SD50 and SD25 for RT- and gag-derived peptides required to induce various responses of anti-HIV CTL. Most of this effort will be directed towards measurement of the intervals of epitope densities on target cells required for various responses on anti-HIV CTL.

Jane Jones, PhD, Technician/Postdoctoral Fellow (100% effort) will be responsible for the isolation and characterization of recombinant MHC class I modules using Drosophila Melanogaster and E.coli expression systems and measurement of kinetics and affinity of reactions between soluble complex of immunodominant peptide SL9 with HLA-A-*0201 soluble protein and TCR on various clones of live anti-SK9 CTL. Dr. Jones will also measure levels of a,b-TCR and CD8 molecules on anti-SL9 CTL.

Equipment:

Purchase of a Thermocycler ($10,000) and HPLC Fraction Collector ($15,000) is requested during the first year. The requested equipment is necessary for this project and will be used extensively to analyze IV9-HLA-A*0201 complex.

Publications:

A total of $5,000 is requested in Year 3 to support publication of research findings in peer-reviewed journals.
AHA RESEARCH PROJECT ENVIRONMENT

This page is similar to the NIH SF424 (R&R) Facilities & Other Resources. You may copy and paste the information from the NIH document into this form. Upon completion, convert this form to Portable Document Format (pdf).

Two-page limit, unless noted below.
• **Collaborative Sciences Award** – Each co-PI is to upload a Research Project Environment (two-page limit each)
• **Merit Award** - One additional page may be used if a more extensive description is required, for a maximum of three pages
• **Predoctoral and Postdoctoral Fellowship Programs** - Sponsor’s Research Environment has no page limit

Applicant’s Name ______________________

**FACILITIES:**
(Specify the facilities to be used for the conduct of the proposed research. Indicate the performance sites and describe capacities, pertinent capabilities, relative proximity, and extent of availability to the project.)

**LABORATORY:**

**CLINICAL:**

**ANIMAL:**

**COMPUTER:**

**OFFICE:**

**OTHER:**
(Identify support services and specify the extent to which they will be available to the project.)

**MAJOR EQUIPMENT:**
(List the most important items already available to this project, noting the location and pertinent capabilities of each.)
Literature Cited

Guidelines:
1. Page limit: 4 pages
2. List all literature cited in your research plan.
3. Literature citations should be marked in the text of the Proposed Research Plan. Letters or numbers can be used to mark the text, and can be a superscript or a bracket.
4. Each reference must list:
   - Corresponding mark in the Proposed Research Plan
   - Authors in the same order as they appear on the paper (list all or up to 15)
   - Full Title
   - Name of the book or journal
   - Volume number
   - Page numbers
   - Year of publication
Tips for how to write an AHA Non-Scientist Summary

Address the following points:
1. What is the major problem being addressed by this study?
2. What specific questions are you asking and how will you attempt to answer them?
3. Please do not list your specific aims - this is a brief overview targeted for a lay audience.
4. What is the potential overall impact of this work on the mission of the AHA?

Note: The AHA recommends that the lay summary be written at an 8th grade level.
- Click on Home → Editor → Insights → Document Stats → Readability → Flesch Kincaid Grade Level to find your summary’s readability grade.

Address the: who/what/where/when/how many/why?

- Justify your research - predict and cover the “so what?” factor. Why does it matter?
- Give some background and context to the research. What prompted you to do it?
- Follow a logical order. This may not always coincide with a temporal order.
- Explain the impact of the work – what is going to change (especially in relation to wider society)
- Use short and simple sentences. Imagine you’re talking to a high school student who’s just stepped into an introductory class or a distant family member who works in an unrelated field
- Avoid jargon unless absolutely necessary
- Use first person and active voice (“we agreed” instead of “it was agreed”).
- Use positive sentences: “You will have repeat appointments at least once a fortnight”

Refer to this article for more tips