Participating Organization: The Saban Research Institute (TSRI) of Children’s Hospital Los Angeles (CHLA)

Funding Opportunity Title: The Saban Research Institute 2020 Pre-Doctoral Award

Funding Opportunity Purpose: Each year, TSRI provides funding aimed at developing the next generation of leaders in pediatric research. The Pre-Doctoral Award supports the stipend of USC graduate student research assistants working at TSRI under the mentorship of a CHLA-based faculty member.

Number of Applications: Applicants can receive this award only once. A principal investigator (Mentor) can sponsor only one application per year. TSRI will fund applications based on availability of funds and quality of applications.

Award Description and Eligibility: The Pre-Doctoral Award supports the stipend and health benefits of a USC graduate student research assistant (RA) working at CHLA under the mentorship of a CHLA-based faculty member who is a member in good standing of the USC Graduate School and a specific PhD program.

- The applicant must possess “Advanced to Candidacy” status under USC’s PhD graduate program by the date that funding begins (July 1, 2020).
- Any change in awardee’s status may result in a termination of funding.
- Mentors must be full-time USC faculty at CHLA.
- Mentors whose trainees have received previous TSRI intramural awards must document that prior commitments (first author publication, grants, etc.) have been fulfilled.
- The award will provide up to two years of funding to cover stipend and health benefits at current USC PIBBS Program rates for each respective year.
- Funds must be spent the fiscal year in which they are awarded. Carry over is not permitted.
- Any difference in stipend and benefit costs will be the responsibility of the mentor and division/department/program.

Responsibilities of Award Recipients and Mentors:

- Award recipients must provide up to a 400-word lay abstract at the time of funding. Recipients will be expected to prepare a progress report at the end of the first year, including up to a 400-word lay abstract of results and findings.
- Funding for the second year will be contingent upon satisfactory progress made during the first year, as reported in the year one progress report. (Scientific Merit Review).
- The awardee is required to submit a progress report within 45 days after completion of funding, including up to a 400-word lay abstract of results and findings.
- The awardee is required to complete an Individual Development Plan (IDP) and meet with her/his Mentor to discuss the IDP. A sample IDP format may be found at http://myidp.sciencecareers.org.
- The awardee must maintain a current certificate of completion of Requirement for Instruction in the Responsible Conduct of Research, per the National Institutes of Health (NIH), see NOT-OD-10-019 (https://grants.nih.gov/grants/guide/notice-files/NOT-OD-10-019.html).
- The awardee is required to participate in TSRI academic activities, including research seminars, Annual Poster Session and Annual Symposium.
- The Faculty Mentor of the awardee must be willing to serve as a mentor of a junior scientist through TSRI programs at least once during the 2-year award period, including the summer following completion of the award.
award. Mentorship includes, but not limited to: the Samuels Family Latino and African American High School Internship Program (LA-HIP), Short-Term Education Program for Underrepresented Persons (STEP UP), and Saban Scholars (mentorship for USC Keck medical students). This may occur at the discretion of the Chief Scientific Officer.

- Funds must be spent the fiscal year in which they are awarded. Carry over is not permitted.
- At the discretion of the Chief Scientific Officer, failure to meet award requirements may prohibit the awardee’s division or research program from participating in future intramural applications.

**Key Dates**

**Fund Announcement Date:** December 2019

**Letter of Intent Due Date:** February 18, 2020, by 5:00 PM, PST

**Mandatory Pre-Review Deadline:** March 16, 2020 by 5:00 PM, PST

**Application Due Date:** March 20, 2020, by 5:00 PM, PST

**Application Review Period:** April – May 2020

**Award Announcement Date:** May 31, 2020

**Funding Start Date:** July 1, 2020

**Scientific Merit Review:** May 2021. Scientific Merit Review refers to review of the year one progress report to determine year two funding.

**Funding Expiration Date:** Year 1 expiration date is June 30, 2021. If Year 2 funds are approved, expiration date is June 30, 2022. Carry over and no-cost extensions will not be granted under any circumstances.

**Required Application Instructions**

**FORMATTING REQUIREMENTS FOR ALL SECTIONS**

Conformance to all requirements is required and strictly enforced. Applicants and Mentors must read and follow all application instructions in the “Required Application Instructions” section. Applications that do not comply with these instructions may be delayed or not accepted for review.

Applications should be generated using word processing software and then converted to PDF using PDF generating software for submission. Avoid scanning text attachments to convert to PDF since that causes problems for the administrators handling the application.

**Font**

Prepare the application using Arial typeface in black font color. After text is converted to PDF, font size in each final PDF document must be at least 11 points (or larger). (A Symbol font may be used to insert Greek letters or special characters; the font size requirement still applies.)

**Paper Size and Page Margins**

Final PDF documents should be formatted to be no larger than standard paper size (8 ½ x 11”). The final PDF document should have at least one-half (.5) inch margins (top, bottom, left, and right) for all pages. Aside from page numbers, no information should appear in the margins.
Figures, Graphs, Diagrams, Charts, Tables, Figure Legends, and Footnotes
You may use a smaller type size but it must be in a black font color, readily legible, and follow the font typeface requirement. Color can be used in figures; however, all text must be in a black font color, clear and legible.

Grantsmanship
Use English and avoid jargon.

If terms are not universally known, spell out the term the first time it is used and note the appropriate abbreviation in parentheses. The abbreviation may be used thereafter.

Page Limits
Page limits referenced in these instructions must be followed. Administrative validations will include checks for page limits. Applications found not to comply with the requirements will lead to rejection of the application during administrative validation.

Unless otherwise specified, Internet Web site addresses (URLs) may not be used to provide information necessary to the review because reviewers are under no obligation to view the Internet sites. Moreover, reviewers are cautioned that they should not directly access an Internet site as it could compromise their anonymity.

Applicants are prohibited from using other application sections to circumvent page limitations in any section of the application for which a page limit applies.
Required Application Instructions

**Letter of Intent:** Applicants should submit a Letter of Intent (LOI) by February 18, 2020 to both the Research Operations Grants Team at tsripreaward@chla.usc.edu and tsrifunding@chla.usc.edu. Refer to the announcement for the LOI form with details and instructions. LOIs are used for review planning and applicant communications; LOIs are not competitive.

**TO BE COMPLETED BY THE APPLICANT AND MENTOR:**

1. Applications must include a completed Cover Sheet, grants intake form, and submission checklist. Refer to the announcement for these forms.

**TO BE COMPLETED BY THE MENTOR**

Mentor submissions should keep their Mentor Statement, Mentoring Plan and list of previously awarded intramural funding recipients mentored to no more than 4 pages. Mentor’s NIH biographical sketch and budget are not subject to the page limit.

1. **Mentor Statement and Mentoring Plan** (4 page limit)

Mentor Statement: A statement written by the Mentor is required, describing the qualifications of the USC graduate student research assistant (RA) to conduct the proposed research project. Elaborate on the potential of the candidate to perform the experiments, to interpret the data and understand the biological implications. Elaborate on the commitment of the RA to continue her/his research and how this award would benefit her/him in continuing a career in science. The Mentor should describe her/his own qualifications to supervise the training of the applicant and elaborate on how the RA’s proposed research project fits in with research conducted in the Mentor’s laboratory. The RA will spend at least 50% of her/his time on the proposed project.

Mentoring Plan: The mentoring plan will require the information below:

- Mentoring Meetings and Resources - Indicate how often the Mentor will meet with her/his RA to discuss research progress, personal/professional goals, challenges and career development. The Mentor must provide written assurance that s/he has research space, equipment, financial resources, and the commitment to train the candidate.
- Educational Activities - List proposed TSRI educational opportunities and events that the RA will attend (i.e. research seminars, poster session, workshops, symposia, etc.). Please also describe the strategy for ensuring regular attendance.
- Lab Meetings - Describe existing or planned lab meetings where the RA will be required to present her/his research progress on the funded project.
- Feedback on Documents - Describe the plan to ensure timely feedback by the Mentor on RA manuscripts and abstracts.
- Additional Educational and Professional Development Opportunities - Describe relevant opportunities available to the RA for presentation of research at local, regional and national meetings/conferences.
- Other important resources available to the RA, if applicable.

2. **A list of any previous CHLA TSRI intramural funding recipients mentored** over the previous five years. Indicate the year(s) when the Awards were granted, and a list of publications that resulted from the support. Indicate if the Awardees have obtained independent peer review funding and/or have been promoted. Include information on their current positions. (To be included in the four page limit).

3. **Mentor’s NIH Biographical Sketch** (no curriculum vitae) – use the most recent NIH Biographical Sketch Templates. Visit (https://grants.nih.gov/grants/forms/biosketch.htm) for blank format page, instructions, and examples.
4. **Budget** Complete a budget form for Year 1 (use NIH detailed budget form). Include only the budget for applicant’s stipend and health benefits. If stipend exceeds USC PIBBS rate for a graduate student (RA) at 50 percent effort, include a description of how the variance will be supported.

**TO BE COMPLETED BY THE APPLICANT:**

Should your application be a resubmission of a previous application for the same award program, you must include in your a one-page Introduction addressing previous reviewer concerns, point by point, as for an NIH resubmission. Modification of Specific Aims of a previous submission still constitute a resubmission. Completely new Specific Aims would constitute a new application. This determination is at the discretion of the TSRI CSO.

Page Limits: See below

1. **Abstract**
   A summary of the proposed project. No more than 30 lines of text.

2. **Specific Aims** (1 page)
   State concisely the goals of the proposed research and summarize the expected outcome(s), including the impact that the results of the proposed research will exert on the research field(s) involved. List succinctly the specific objectives of the research proposed, e.g., to test a stated hypothesis, create a novel design, solve a specific problem, challenge an existing paradigm or clinical practice, address a critical barrier to progress in the field or develop new technology.

3. **Research Strategy** (6 pages)
   Organize the Research Strategy in the specified order and using the instructions provided below. Start each section with the appropriate section heading—**Significance, Innovation, Approach**. Experimental details should be cited using the “Literature Cited” section and need not be detailed in the Research Strategy.

   **Significance**
   - Explain the importance of the problem or critical barrier to progress in the field that the proposed project addresses.
   - Explain how the proposed project will enhance scientific knowledge, technical capability, and/or clinical practice in one or more broad fields.
   - Describe how the concepts, methods, technologies, treatments, services, or preventative interventions that drive this field will be changed if the proposed aims are achieved.
   - Describe which of CHLA’s strategic plan themes the work most closely aligns with and how the results will contribute to advancing that theme:
     - **Best starts to life**: Identify early risk factors and interventions, from fetal development to early childhood, to improve the lives of all children.
     - **Personalized prevention and care**: Develop an understanding of each patient down to the cellular level to intervene early and effectively for a lifetime.
     - **From discovery to pediatric care innovation**: Transform knowledge gleaned from clinical care provided today into the new and innovative approaches of tomorrow.
     - **Pediatric disease models and mechanisms**: Discover the underlying causes of pediatric disease to drive development of new interventions and cures.

   **Innovation**
   - Explain how the application challenges and seeks to shift current research or clinical practice paradigms.
   - Describe any novel theoretical concepts, approaches or methodologies, instrumentation or intervention(s) to be developed or used, and any advantage over existing methodologies, instrumentation or intervention(s).
   - Explain any refinements, improvements, or new applications of theoretical concepts, approaches or methodologies, instrumentation or interventions.
**Approach**
- Describe the overall strategy, methodology and analyses to be used to accomplish the specific aims of the project. Include how the data will be collected, analyzed, and interpreted.
- Discuss potential problems, alternative strategies and benchmarks for success anticipated to achieve the aims.
- If the project is in the early stages of development, describe any strategies to establish feasibility, and address the management of any high-risk aspects of the proposed work.

**Preliminary Data**
- Include relevant preliminary data (graphs, tables, micrographs, etc.) that support your hypothesis and are in line with your Specific Aims.
  **Note:** The purpose of preliminary data is to demonstrate that the trainee has already initiated her/his research project, but not to demonstrate full competency in the trainee’s research approach.

4. **Personal Statement by the applicant** (4 pages)
A personal statement by the candidate describing her/his research and academic background, current training goals, future commitment to a career in research, and how this research project would help her/him to achieve these goals.

5. **Literature Cited**
Authors, title, journal, volume, pages, and year.

6. **NIH Fellowship Biographical Sketch**
(no curriculum vitae) – use the most recent NIH Biographical Sketch Templates. Visit [https://grants.nih.gov/grants/forms/biosketch.htm](https://grants.nih.gov/grants/forms/biosketch.htm) for blank format page, instructions, and examples. Be sure to use the “Fellowship Only” format. An eRA Commons username is not required for this application.

7. **Letter of Reference** (no more than one letter)
Please submit one letter of reference.
- Referee must be a qualified scientist outside of CHLA
- Referee must be in a nonsupervisory position
- Additional supplementary letters of recommendation will not be accepted.

We ask that the letters of reference be included in the application PDF as one file. However, if the referee prefers, s/he may email the letter to tsrifunding@chla.usc.edu, separately. Please indicate in your application if a letter is to be emailed separately. It is the applicant’s responsibility to ensure that letters of reference are submitted by the March 20 application final due date.

Letters of collaboration should be included as appropriate.

**Submission:**
Starting this year, submissions will be processed by the Research Operations Grants Team. The applicant must submit his/her application as one (1) electronic PDF to TSRIPreAward@chla.usc.edu for pre-review no later than March 16, 2020 at 5:00 PM PST. The Grants team will review and reach out to each applicant with required and/or recommended corrections per these application instructions. The final application will be submitted to the Intramural Funding team by the Grants team on or before final application due date of March 20, 2020 by 5:00 PM PST.

Applications must include a signed Grants Intake Form, Cover Sheet, and Submission Checklist. Refer to the announcement for these forms,
Applications that do not fully comply with application requirements will not be accepted. Applications not submitted by the due date and time will not be accepted. Applicants are strongly encouraged to apply early to allow adequate time to make any corrections to errors found in the application during the submission process by the due date.

**Application Review:** This award is granted following a highly competitive review process.
- All applications are reviewed by the TSRI Intramural Funding Study Section following the NIH review criteria.
- **Funding Decision:** Funding recommendations are made by the TSRI Intramural Funding Study Section based on application review scores. Final decisions will be made by the Chief Scientific Officer based on reviewers’ comments and programmatic alignment.
- **Written feedback:** All applicants, regardless of whether they are recommended for funding, will receive written reviews after funding notifications are issued.

Incomplete applications and applications submitted after the deadline shall not be considered for review.