BACKGROUND
The Lupus Research Alliance (LRA) is the largest private funder of lupus research worldwide. The organization aims to transform lupus treatment while advancing towards a cure by funding cutting-edge, innovative research and fostering diverse scientific talent. Addressing the challenges of lupus requires a talented and tenacious workforce capable of decoding the inherent complexity of the disease and devising innovative medicines.

At present, therapy for lupus is mostly empiric and involves largely non-specific anti-inflammatory and immunosuppressive agents. While these treatments are frequently beneficial, many patients do not respond adequately or suffer significant side effects. Importantly, even patients with low disease activity accrue organ damage over time. There are many unanswered questions regarding the pathogenesis of lupus. Thus, new conceptual and therapeutic approaches are urgently needed.

PROGRAM DESCRIPTION
The LRA Diversity in Lupus Research Postdoctoral Award (DLR PDA) is designed to support qualified and promising underrepresented minority (URM) scientists with an interest in bridging the gap between the bench and the bedside in lupus research. The DLR PDAs provide robust and sustained support (US$85,000 per year for up to two years) for awardees to generate the scientific data and unique research ideas necessary to
transition to an independent research role in areas that reflect the LRA’s strategic priorities, which include defining human lupus heterogeneity and stratifying patients by active disease mechanism to advance new therapeutics.

ELIGIBILITY
At the time of submission of the letter of intent and application, applicants must have an advanced degree (MD, PhD, DO, or equivalent) from an accredited institution and hold a postdoctoral or clinical fellowship at an academic, medical, or research institution in the United States or Canada.

Applicants must have no more than four years of postdoctoral research experience at the time of full application submission. Time spent conducting postgraduate clinical training that does not involve research does not contribute to the four-year research training limit. The LRA recognizes that personal circumstances can impact career timelines (e.g., care of a parent/spouse/child/dependent or personal health issues). Applicants who have taken leave from their career and thus fall outside the eligibility timeline should contact LRA staff before submitting a letter of intent to confirm eligibility.

Applicants must be members of a racial or ethnic group underrepresented in the science and engineering fields compared to their representation in the US population. For the purposes of this grant mechanism, these racial and ethnic groups are Blacks or African Americans, Hispanics or Latinos, Indigenous American Indians or Alaska Natives, Native Hawaiians, and other Pacific Islanders.

There is no citizenship requirement.

APPLICATION PROCESS AND INSTRUCTIONS
A two-stage application process will be employed. At the first step of the application process applicants must submit a Letter of Intent (LOI) indicating their intention to apply. The LOI is required and will be used for the purposes of convening an appropriate review panel. Applicants will be invited to submit a full application in the second stage of the application process.

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<th>KEY DATES</th>
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<tr>
<td>RFA Release:</td>
<td>June 20, 2023</td>
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<tr>
<td>Letters of Intent Due:</td>
<td>September 25, 2023 – extended</td>
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<tr>
<td>Letter of Intent Decision:</td>
<td>October 10, 2023</td>
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<td>Full Applications Due*:</td>
<td>December 5, 2023</td>
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<tr>
<td>Full Application Decision:</td>
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<td>Expected Start Date:</td>
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*By invitation only with an approved LOI

LETTER OF INTENT
LOIs must be submitted electronically, via ProposalCentral, by 11:59pm US ET on the stated deadline. LOIs will not be accepted via any other means.
The following information is required to submit a complete LOI. Numbers correspond to the application sections found on the left side of the ProposalCentral website.

1. **Title Page:** Enter the title of the proposed project. Indicate whether the LOI is a resubmission and, if so, select the prior application from the dropdown menu.

2. **Download Templates & Instructions:** The Request for Applications and Letter of Intent template can be downloaded from this page.

3. **Enable Other Users to Access this Proposal:** Enter the information for any other users who will need to work on the LOI.

4. **Applicant:** The applicant’s information is pre-loaded with the contact information from their ProposalCentral profile. Click the Edit Professional Profile button if any changes need to be made. Upload as a single document a standard NIH Biosketch and Other Support Format Page, which should detail other financial support available to the applicant for their research endeavors. Applicants who are not based in the United States may submit a copy of their curriculum vitae, which must be limited to five pages in length.

5. **Institution:** The lead institution will be pre-loaded with the applicant’s institution.

6. **Letter of Intent:** Upload the Letter of Intent. The Letter of Intent template provided on ProposalCentral must be used. Margins must not be less than .5 inches on each side and 12-point Times New Roman or the equivalent should be used for the text. The LOI should include the applicant’s name, degree, position, institution, the project’s title and specific aims, an impact statement explaining how the proposed research could improve the standard of care or quality of life of people with lupus, and the names of three references for the applicant. Please note that the applicant’s primary mentor cannot serve as a referee. The LOI should not exceed two pages.

7. **Validate:** Click the “Validate” button to check for any missing required information or attachments.

8. **Sign:** Click the “Sign” button to electronically sign the LOI. By signing, the applicant certifies that the information contained in the LOI is true, complete, and accurate to the best of their knowledge.

9. **Submit:** After successfully passing the validate check, click the “Submit” button. An e-mail will be sent confirming submission.

**Restriction on number of LOIs**

Only one LOI will be accepted per applicant in a grant cycle.
FULL APPLICATION
Full applications may be submitted only by applicants whose LOIs have been approved to advance to the next stage of the review process. Applications must be submitted electronically, via ProposalCentral, by 11:59pm US ET on the stated deadline. Applications will not be accepted via any other means.

The following information is required to submit a complete full application. Numbers correspond to the application sections found on the left side of the ProposalCentral website.

1. **Title Page:** Enter the title of the proposed project. Indicate whether the application is a resubmission and, if so, select the prior application from the dropdown menu.

2. **Download Templates & Instructions:** The Request for Applications, Research Plan Template, and Milestones Template can be downloaded from this page.

3. **Enable Other Users to Access this Proposal:** Enter the information for any other users who will need to work on the application.

4. **Applicant:** The applicant’s information is pre-loaded with the contact information from their ProposalCentral profile. Click the Edit Professional Profile button if any changes need to be made. Upload as a single document a standard NIH Biosketch and Other Support Format Page, which should detail all other existing financial support (institutional, federal, commercial, etc.) available to the applicant for their research endeavors as well as a clear explanation of research overlap between the proposed and funded research projects. Applicants who are not based in the United States may submit a copy of their curriculum vitae, which must be limited to five pages in length.

5. **Institution & Contacts:** The lead institution will be pre-loaded with the applicant’s institution. Enter the requested information for the Signing Official and Financial Officer.

6. **Key Personnel:** Enter the requested information for all key personnel, including the applicant’s primary mentor. For the primary mentor, upload as a single document a standard NIH Biosketch and Other Support Format Page. For each co-investigator, upload a standard NIH Biosketch. For co-investigators and mentors not based in the United States, a copy of their curriculum vitae, which must be limited to five pages in length, may be submitted.

7. **Letters of Reference:** Enter an e-mail address for each referee submitting a letter of reference. **Please note that the applicant’s primary mentor cannot serve as a referee.** Three letters of reference are required. Letters of reference are to be limited to two pages in length and should describe the scientific abilities and potential of the applicant. These letters are confidential and will not be released to the applicant. The letters of reference are uploaded directly by the referees to ProposalCentral. Please be aware that applications cannot be submitted without the three letters of reference.
8. **Lay & Scientific Abstracts**: Provide both lay and scientific abstracts, limited to 3,000 characters each, for the proposed project. The lay abstract should be suitable for public distribution. Provide an impact statement, limited to 1,000 characters, explaining the potential of the proposed project to translate to the clinic and how the proposed research will impact people with lupus.

9. **Budget Period Details**: Enter the budget periods for each year of the grant and complete the budget information for each budget period. Please keep the following in mind:
   - DLR PDA grants will be supported for up to US$85,000 per year for up to two years.
   - Funds may be used for the salary of the applicant and relevant training programs.
   - Applicants must devote at least 75% effort to the proposed project. The percentage of salary requested may not exceed the percent effort of the applicant.
   - The LRA follows the NIH salary limitation guidelines for principal investigators and post-doctoral fellows.
   - Indirect costs are not allowed.
   - Funds cannot be used to pay for laboratory supplies or equipment.

10. **Budget Summary & Justification**: A detailed budget justification, limited to 5,000 characters, must be provided.

11. **Organizational Assurances**: Answer all organizational assurance questions and provide their status, if applicable.

12. **Research Plan & Other Attachments**: Upload the Research Plan, Summary Statement (if applicable), Milestones, Diversity Statement, Mentor Training Plan, and Letters of Collaboration (if applicable). Please note that when a template or form is provided, it must be used. Indicated page limits must be strictly adhered to. All documents should be uploaded to ProposalCentral as PDFs.

   A. **Research Plan**: The Research Plan template provided on ProposalCentral must be used. Margins must not be less than .5 inches on each side and 12-point Times New Roman or the equivalent should be used for the text. The information listed below must be included in the indicated order.

   i. **Resubmission Statement (if applicable)**: Revised applications are required to include a resubmission statement, not to exceed one page. The statement should highlight changes from the original submission and explain how the application has been modified to address the concerns of the original review panel. A copy of the summary statement provided by the LRA for the original application must be uploaded as a separate document.
      - A resubmission is an application that was not funded in one of the previous
two application cycles.
- An applicant who is unsuccessful may revise their original application only once.
- If substantial changes are made to the original application, the application should not be submitted as a resubmission.

ii. **Career Plan:** The candidate should describe their current and long-term research and career objectives as well as their plan for training and career development activities during the award period. The candidate should describe how the skills and knowledge obtained during the mentored postdoctoral training will enhance their research productivity, facilitate their development of new approaches or directions for investigation, and ensure their commitment to a career in lupus research or translation. (2 pages)

iii. **Research Plan:** List specific aims and state the relevance, significance, feasibility, innovation, and approach of the proposed research. Provide a detailed rationale, experimental approach, and expected and alternative outcomes for the proposed studies. Describe the applicant’s current research and its relation to the proposed research, including any preliminary supporting data. The applicant should also describe their current research and its relation to the proposed research, including any preliminary supporting data. The applicant should detail how they will separate scientifically from their mentor and advance to research independence. The plan should include objectives, milestones, and associated timelines for the award period. (7 pages, excluding references)

iv. **Facilities and Resources:** Specify the facilities to be used for the conduct of the proposed project. Indicate the performance sites and describe capacities, pertinent capabilities, relative proximity, and the extent of availability for the project. Under "Other" identify support services (machine shop, electronics shop, etc.) and specify the extent to which they will be available to the project. List all major equipment items already available for the proposed project, noting the location and pertinent capabilities of each. (2 pages)

B. **Milestones:** Using the template provided on ProposalCentral, list all aims and sub-aims necessary to complete the proposed project. Indicate during which months of the grant term each aim and sub-aim are proposed to be completed by filling the corresponding cells with a light color. Upload as a PDF document.

C. **Diversity Statement:** The applicant’s institution should describe how support of this specific applicant will address the issue of diversity within the national scientific workforce and, more specifically, the lupus scientific workforce. (1 page)

D. **Mentor Training Plan:** The applicant’s primary mentor must provide a letter that includes: 1) information on the mentor’s research qualifications and previous experience as a research supervisor, including the mentoring of URM scientists/clinicians; 2) a plan on how the applicant will be mentored during the
award period, including how the applicant’s scientific and professional independence will be promoted; 3) a description of the planned career development activities, including any formal coursework; and 4) a statement identifying the components, reagents, or models in the proposed research that the candidate can inherit when they ultimately transitions to research independence. (3 pages)

E. Letters of Collaboration (if applicable): Signed letters from each co-investigator or consultant stating their role in the project and confirming their agreement to participate in the project must be provided. These letters should include a detailed explanation of the programmatic, fiscal, and administrative arrangements made between the applicant institution and collaborating organizations and individuals. The letters should be combined into one PDF document.

13. PI Data Sheet: Please verify the applicant’s gender, race, and ethnicity. This information will not be used in any way during the selection process.

14. Validate: Click the “Validate” button to check for any missing required information or attachments.

15. Sign: Click the “Sign” button to electronically sign the application. By signing, the applicant certifies that the information contained in the application is true, complete, and accurate to the best of their knowledge and agrees to facilitate the availability of data and materials by executing a Data Sharing Plan based on the 2023 NIH Data Management and Sharing Policy should the proposed project be funded by the LRA. The institution's signing official must also sign.

16. Submit: After successfully passing the validate check, click the “Submit” button. An e-mail will be sent confirming submission.

Resubmission information
Applicants resubmitting full applications that were not funded in the last award cycle must include a one-page resubmission statement highlighting the planned overall modifications to address the concerns of the original review panel. A copy of the summary statement must be included in the appendix of the resubmission. If you have not received a statement, please contact LRA research staff.

Change of Institution or Position
If you change your institution or professional position after submitting your application, you are required to promptly contact the LRA to present and discuss your new circumstances.
REVIEW CRITERIA

The scientific review committee will consider each of the following criteria in assigning an application's overall score, weighting them as appropriate for each application.

- **Applicant:** Is the applicant appropriately trained and well suited to carry out this work? Is the work proposed appropriate to their experience level? Is the applicant likely to transition to an independent role based on research productivity, training, and reference letters? Do they demonstrate a commitment to a career in lupus research?

- **Career Plan:** Will the proposed career plan enhance the scientific and professional development of the applicant? Is the plan likely to enhance their research productivity, facilitate their development of new approaches or directions for investigation, and ensure their commitment to a career in lupus research or translation? Will this plan position the candidate for a successful transition to an independent career?

- **Training Plan:** Does the primary mentor have relevant prior experience to advise the applicant effectively? Will the training plan and the projected career development activities provide the required framework and support for the applicant?

- **Relevance:** Is the proposed project aligned with the goals of the DLR PDA grant mechanism, as well as the mission and strategic priorities of the LRA?

- **Significance:** Is the project based on novel explorations of lupus biology, including innovative studies that use human material to address the physiological, cellular, molecular, or genetic basis of human lupus? Does this project prompt investigations into the fundamental mechanisms of lupus and its complications, explorations of novel targets and pathways, and the use of novel technologies and interdisciplinary approaches?

- **Approach:** Are the conceptual framework, design, methods, and analyses adequately developed, well integrated, and appropriate to the aims of the project? Does the applicant acknowledge potential problem areas and consider alternative tactics?

- **Innovation:** Does the project employ novel concepts, approaches, or methods? Are the aims original and innovative? Does the project challenge existing paradigms or develop new methodologies or technologies?

- **Feasibility:** Can this project be accomplished within a two-year time frame?

- **Environment:** Does the scientific environment in which the work will be done contribute to the probability of success? Do the proposed experiments take
advantage of unique features of the scientific environment or employ beneficial collaborative arrangements?

Review Process
All eligible grant applications will be peer-reviewed by a panel of external reviewers, the results from which will be considered by the LRA Scientific Advisory Board (SAB) in the context of the LRA grant portfolio and LRA's strategic research priorities. The SAB will make funding recommendations to the LRA Board of Directors, which will, in turn, consider all previous recommendations and provide a lay perspective including patients' concerns and expectations, as well as deliberations on the business aspects of funding the recommended grants. The LRA Board of Directors will make all final funding decisions.

Review Feedback
For applicants invited to submit full proposals, a summary statement containing the reviewers’ critiques will be provided within three months of the review date. Applications not recommended to advance to the full proposal stage will receive abridged feedback. The LRA does not provide scores or application rankings to applicants.

LRA MENTORSHIP RESOURCES
Mentors and peer support play a critical role in the development of scientists. The LRA will offer a coaching program through which DLR PDA recipients will benefit from crucial mentoring resources and the support of other members of their cohort. The coaching program includes all DLR PDA recipients. DLR PDA recipients will meet once per year during the LRA annual scientific conference to discuss questions or issues related to publications, grant applications, laboratory, collaborations, etc. The LRA may also offer awardees exposure to relevant industry contacts and opportunities, as necessary.

AWARD TERMS AND CONDITIONS
The DLR PDA provides up to US$85,000 per year for up to two years. Indirect costs are not allowed; no deductions may be made for income tax, Social Security, etc. Funds may be used for salary and activities aimed at enhancing the training experience of the awardee, including participating in a grant writing program or other relevant training programs not already offered by the institution. The purchase of a personal computer (up to US$2,000) is allowed only during Year 1 of the award. Award funds cannot be used to pay for laboratory supplies or equipment.

The awardee must spend at least 75% of their time and effort to the project outlined in the application. Grant recipients must attend and present at Forum for Discovery, the LRA annual scientific conference, each year. Travel funds (up to US$2,000 per year) provided by the grant must be used to pay for all travel expenses related to attending Forum for Discovery meetings.

The LRA is committed to the publication and dissemination of all data/information and materials developed using the organization's resources. All recipients of LRA awards
must facilitate availability of data and materials by executing a Data Sharing Plan based on the 2023 NIH Data Management and Sharing Policy.

**INQUIRIES**
For all administrative and scientific questions, please contact the LRA at grants@lupusresearch.org.

**ProposalCentral:**
For assistance with the electronic grant application process, please contact ProposalCentral at pcsupport@altum.com or 800-875-2562, extension 227.