Scientist Development Award (SDA)

The mission of the Rheumatology Research Foundation is to advance research and training to improve the health of people with rheumatic diseases.

This award is designed for individuals in the **early stages of their career (typically Fellows**) or those without significant prior research experience who plan to embark on careers in rheumatic diseases. The purpose of this award is to provide support for a structured research training program for rheumatologists or health professionals in the field of rheumatology.

This **mentored career development** award provides support for salary as well as research and/or education costs for the early years of research training in an environment where trainees may interact with established rheumatology investigators. The goal of funding at this level is to provide an opportunity for young scientists to embark on focused research and research training that will allow them to be competitive for the next level of career development awards. Through this award, the Foundation provides a means for ensuring more qualified, highly trained investigators in the field of rheumatology.

Note: Junior investigators with a faculty appointment who are between the period of completed fellowship training and establishment as an independent investigator should consider applying for the *Investigator Award*.

Award Amount: Up to $125,000 for the first 2 years (up to $50,000 for year 1 and up to $75,000 for year 2), competitive renewal for year 3 up to $100,000

We require a non-binding letter of intent to be submitted no later than June 1, 2020.

All applications must be submitted by 5:00 pm ET on the deadline day through Zengine at:
https://webportalapp.com/sp/fy2022sda

Letter of Intent Deadline
June 1, 2020
Application Deadline
July 1, 2020
Notification
December 7, 2020
Award Term Begins
July 1, 2021

If you have any questions about your eligibility or submitting your application, please contact Award & Grants staff at 404-365-1373 or Foundation@rheumatology.org.

Guidelines

All award recipients must abide by Foundation Awards and Grants Policies at all times.

Applications must have relevance to the Foundation's mission to improve the health of people with rheumatic disease.

Eligibility

➢ Applicant must meet citizenship and other eligibility requirements as outlined in the Awards and Grants policies.

➢ Applicant must be an ACR or ARP member at the time of submission and for the duration of the award.

ACR members must meet the following criteria:	ARP members must meet the following criteria:
• Have earned a DO, MD, or MD/PhD degree and by the start of the award term have completed at least one year of training in an ACGME accredited rheumatology training program. • Individuals more than 4 years from the beginning of fellowship (or 5 years for pediatric rheumatologists) at the time of award start date may not apply. • MDs and DOs who are not licensed to perform clinical care may not apply.	• Have earned a PhD*, DSc, or equivalent doctoral degree. • Must be within 3 years of terminal degree at the time of award start date.

➢ *The Foundation does NOT currently support non-MD/DO scientists working on basic science projects.

➢ Applicant must be affiliated with an accredited graduate or medical school.

➢ Applicant must be able to commit a minimum of 75 percent full-time professional effort to research, academic career development, and other research related activities. Candidates may not spend more than 25 percent in clinical and/or teaching activities. It is expected that about 50 percent full-time professional effort will be spent on the Foundation funded project.

➢ Receive acceptance by a mentor who will oversee the training and research experience.

➢ Former or current recipients of research grants (at the K level or higher, including institutional K) and past awardees of this or equivalent Foundation grants are NOT eligible to apply.

➢ Applicants may not apply for the **Investigator Award** in the same funding cycle.

➢ Investigators interested in using data from the ACR's RISE registry as part of their proposed research project need to get their data use request approved before applying for funding. Please visit RISE for Research for more information on RISE data. RISE data requests should be submitted at least 2 months prior to the Foundation's application deadline.

Foundation Strategic Plan

The Foundation seeks to support the best basic, translational, clinical and epidemiologic research in rheumatic and musculoskeletal diseases. Applications directly addressing the current Strategic Plan are particularly encouraged.

Review Criteria

Applications are rated on the following criteria:

➢ Relevance of the proposal to the Foundation's mission to improve the health of people with rheumatic disease.

➢ The proposed research project's scientific merit and rigor.

➢ The applicant's submission of clear statistical and power analyses where appropriate.

➢ The appropriateness of the proposed project as a mechanism for developing the applicant into an independent rheumatology investigator.

➢ The environment in which training will be conducted, specifically the mentor, the unit, the available facilities, and the potential for inter- and extra-departmental interactions (If applicable).

➢ The applicant's background, training, prior productivity, and potential to develop into a productive research scientist.

➢ The institutional commitment to protect applicant's time for research and continued education.

Institutional commitment and plans for the advancement of the applicant toward becoming an independent investigator will be important in review of this award.

Award Terms and Funding

The institution must agree to protect at least 75 percent of the applicant's full-time professional effort for research, academic career development, and other research-related activities. No more than 25 percent full-time professional effort will be spent on clinical and/or teaching activities. Funds may not be used to compensate clinical or teaching efforts. It is expected that about 50 percent full-time professional effort will be spent on the Foundation Funded project.

Awardees cannot have ever received funding by any of the award mechanisms outlined in the eligibility section at the time funding for this award begins. The Awardee assumes an obligation to expend award funds for the purposes set forth in the original grant application and to affirm that there is no duplicate funding for these purposes. The Awardee must promptly notify the Foundation of the receipt of any additional award(s) which may potentially have scientific or budgetary overlap with their Foundation award. Overlap will be assessed by the Scientific Advisory Council. If concurrent funding is deemed allowable by the Council, the awardee may be required to re-budget their Foundation award.

Awards are funded for 2 years; however, there is a possibility for renewal in year 3. Renewal is contingent on submission of an annual progress report showing substantial accomplishment and progress toward benchmarks specified in the original application. In order to be considered for year 3 funding, awardees must also provide evidence of a submitted application or detailed plan and timeline for application for a career development award (e.g., NIH K series award, VA

Career Development Award, or Rheumatology Research Foundation Investigator Award or equivalent), or NIH R series award. **Renewal in year 3 is competitive and subject to approval by the Foundation's Scientific Advisory Council.** Award may be transferred to another institution pending approval by the Scientific Advisory Council; please see Awards & Grants Policies for more information.

The award will be paid directly to the sponsoring institution and will be disbursed in two equal installments in July and January of each award year. The award must be directly applied to the individual awardee's salary and/or research and educational costs only as outlined in the approved budget. Indirect costs are not allowed.

Financial support will be provided as outlined below.

	Salary	Research Costs	Award Total (maximum)
Year 1	Up to $50,000	Up to $25,000	$50,000
Year 2	Up to $50,000	Up to $25,000	$75,000
Year 3	Up to $75,000	Up to $25,000	$100,000

Salary: Salary will be based on levels set by the institution. Awardees may receive salary supplementation from other sources; however, the extent of this supplementation must be stated on the application and the applicant must notify the Foundation if other support is received during the award term.

Research Costs: Allowable research costs include the following types of expenses: (a) research supplies, equipment and technical personnel; (b) tuition and fees and books related to degree programs, such as a Masters of Public Health, Masters of Clinical Research or other didactic courses appropriate for career development; (c) travel to research meetings or training; and (d) statistical services including personnel and computer time.

Note: Employees of the NIH, FDA and CDC may not receive funding while they are employed at a federal agency, however these individuals may apply, and if successful, receive the award (i.e., in name only, no funds). In addition, should the awardee move to a non-government agency they may submit for an award transfer, subject to approval by the Scientific Advisory Council.

Annual Investigators Meeting: The Foundation sponsors an annual Investigators Meeting in June where all current investigators share progress updates on their funded projects. **Attendance is required for this event, and travel costs should be included as a line item in the grant budget.** Failure to attend the meeting may result in grant cancellation.

Letter of Intent

In order to help recruit the most appropriate peer reviewers and assist with study section assignments, applicants are required to submit a brief non-binding letter of intent to the Foundation by **June 1, 2020.**

The letter of intent is an online form and includes the following:

➢ Name of Applicant and Institution

➢ Listing of Mentors and Institutions

➢ Disease Area

➢ Goals of project stated in 2-3 sentences

➢ Indication of Human Studies or Animal Studies

➢ Research Category

➢ Primary Study Material and Method

LOI should be submitted online at this link.

Application Instructions

Before starting the online application, please read the Instructions for All Awards.

Applicant Information

You will be asked to confirm your eligibility and provide contact information in this section. In addition to the applicant information requested above, you will be asked to upload the following document:

Applicant Biosketch in NIH Format

Limit to 5 pages; should include any pending support and follow NIH guidelines. Download NIH format Biographical Sketch template by clicking here.

Mentor Information

You will be asked to identify your mentors and provide contact information in this section.

An applicant may have more than one mentor; however, at least one must be a rheumatologist or rheumatology professional and a fellow member of the ACR or ARP. Applicants should include a biosketch and letter of support from each mentor (detailed requirements for mentors' letters of support are included on page 8-9).

This requirement does not exclude having a primary research mentor outside a rheumatology division, but does require that the trainee's academic career development has input from rheumatology faculty (e.g. rheumatologist as a co-mentor). Mentors must have sufficient independent research support to cover the costs of the proposed research project in excess of the allowable costs of the SDA. The use of co-mentors to achieve the goals of the program is strongly encouraged.

Mentor(s) Biosketch in NIH Format

Limit to 5 pages per biosketch; should include any pending support and follow NIH guidelines. Download NIH format Biographical Sketch template by clicking here.

Project Information

The information in this section is general information about the grant submission.

A. **Project Title (limit to 200 characters, including spaces)**
   Make your title specific and detailed. It should clearly state the topic of your proposal.

B. **Abstract (limit to 300 words)**
   Succinctly describe the hypothesis to be tested, the specific aims or global objectives of the project and the expected results.

C. **Relevance to Foundation's Mission (2-3 sentences)**
   Briefly describe how your proposed project is relevant to the Foundation's mission to improve the health of people with rheumatic disease.

   Specifically, please explain how your project will build/lay the foundation for or directly address at least one of the following:

- Increase patient access to care
- Develop future treatments and cures
- Demonstrate or improve the value of rheumatology care
- Expand the impact of rheumatology

In this section, be succinct and use plain language that can be understood by a lay audience. This information is made public for all awarded grants and used by the Foundation for marketing efforts.

D. **Patient Impact (3-5 sentences):** In what ways will your Foundation funded award ultimately impact patients?

E. **Science Category**
Please select one of the drop box options in the online application. This will be used to assign your application to the appropriate study section.

F. **Primary Study Material and Method**
Please select <u>one or more</u> of the checkbox options in the online application. Information provided in this section will help to ensure each application is assigned to the most appropriate study section.

G. **Research Category and Classification**
Please select <u>one or more</u> of the checkbox options in the online application. Information provided in this section will help to ensure each application is assigned to the most appropriate study section.

H. **Keywords**
Choose three keywords that accurately describe the project. If the application focuses on a specific disease, please include it as a keyword.

Research Award Assurance
By checking this box, the applicant assures that the proposal is in compliance with institutional guidelines as provided by the sponsoring institution's clinical and research review boards. All research proposals including human subjects, laboratory animals and recombinant DNA techniques must show documented compliance with institutional guidelines. Copies of approval notices by the institutions IRB, IACUC and/or biosafety committees must be provided as appropriate once awarded.

Required Documents

Research Proposal

Limit to 8 pages including figures and tables. This does not include references, which do not have a page limit. Please see Instructions for all awards for details.

The applicant is solely responsible for writing the proposal. This section should be presented in such a way that it is clear that the applicant understands the project. **Prior to application submission, the applicant should meet with their mentor(s) to review the research plan. Meeting with the advisory committee (see page 15) prior to submitting the application is encouraged.**

The following questions should be addressed: What do you intend to do? Why is the work important? What has already been done? How are you going to do the work? What will potentially be learned? Describe in detail:

A. **Specific aims (limit one page):** State the overall research hypothesis, objectives, and specific aims for the proposed project.

B. **Background (limit three pages):** Briefly summarize the background to the proposal. Include only key references to prior work that constitutes the foundation of the proposal and any preliminary background work.

C. **Significance (limit half page):** Include a statement on the relevance of the proposed project to the prevention, control or cure of rheumatic diseases. Describe how the successful completion of the proposed project will add to a better understanding of rheumatic diseases. State the importance of the research described in this application by relating the specific aims to the broad, long-term objectives.

D. **Innovation (limit half page):** Include a statement explaining how the application challenges and seeks to shift current research or clinical practice paradigms. Describe any novel concepts, approaches or methodologies, instrumentation or interventions to be developed or used, and any advantage over existing methodologies, instrumentation, or interventions.

E. **Approach:** Summarize the essential features of the experimental design and methodology and interpretation of results. Include a specific plan for data and statistical analysis as well as a clearly defined power analysis where appropriate. Describe the potential pitfalls and alternative approaches where relevant. Preliminary data may also be included in this section.

F. **Future Direction:** Include a statement summarizing the potential impact and outcomes that this project may have on your career and the field of rheumatology. Please outline how successful completion of the aims outlined in this award will position you for future funding.

G. **Selected references (no page limit)**

Benchmarks of Success

Download, complete and submit the Benchmarks of Success template. See example of the template below.

Benchmarks of success should be included for the formal coursework and the research project as outlined in the research proposal. Examples include: timeline for research proposal, submission of abstract(s) and/or publication(s). **Timeline for other grant submission (e.g., NIH, VA, Foundation Investigator Award, or equivalent awards) is a required benchmark.**

Budget

Download, complete and submit the Budget Template (See example of the template below).

The budget should indicate the expected amount of salary from the award, including fringe if requested. Budgets must comply with the award terms as outlined in this document.

Distribution of Time

Download, complete and submit the Distribution of Time Template (See example of the template below).

Indicate the percentage of time to be spent on academic activities during the award period. List all research, clinical, teaching and/or administrative activities. Clinical work related to the proposed research may be considered part of the research activity, but typically this type of clinical activity would not generate revenue.

The institution must agree to protect at least 75 percent of the applicant's full-time professional effort for research, academic career development, and other research-related activities. No more than 25 percent full-time professional effort will be spent on clinical and/or teaching activities. It is expected that about 50 percent full-time professional effort will be spent on the Foundation Funded project.

Research Training Plan

Limit to 2 pages. **This item must be completed by the primary mentor.** Describe in detail the applicant's role in the proposed project and outline other activities that will be used to aid the applicant's development into an independent investigator. Describe any coursework or other plans for obtaining specific research methodology training.

SDA Advisory Committee

The SDA Advisory Committee form, which will be submitted with each annual progress report, is included below for reference. The Awardee should ensure that the SDA Advisory Committee is confirmed according to the composition requirements on Page 15 prior to application submission. If awarded, the applicant will be required to provide the names and institutions of the advisory committee along with award acceptance.

This component of the award is designed to aid the awardee by providing critical constructive review coupled with friendly advice and counsel, giving access to established researchers and other untapped resources. The SDA advisory committee will help the awardee stay on track regarding the project's benchmarks and proposed research training plan, as well as assist in reviewing annual progress reports prior to submission.

Mentor(s) Letters of Support

A signed letter of support is required from each mentor involved in the project. Limit to 2 pages for primary mentor and 1 page for each additional mentor.

The mentor(s) must provide letters of support including the following (as applicable):

A. **Mentor Experience:** Details of their own previous experience as mentors.

B. **Environment:** Features of their training program and the institutional environment that will be relevant to the application.

C. **Financial Resources:** Financial and other resources available to support the applicant specific to their project. Mentors must have sufficient independent research support to cover the costs of the proposed research project in excess of the allowable costs of the SDA.

D. **Mentoring Plan:** Description of the frequency and how they will provide mentoring to the applicant. Include details on mentors' specific role in the Research Training Plan.

E. **Confirmation of Participation:** Agreement to participate in the project and confirmation regarding availability of time to commit to the project.

F. **Applicant's Qualifications:** Description of applicants' qualifications and track record of productivity.

G. **Review of Application/Research Proposal:** Explicitly state that the mentor reviewed the full application prior to submission, especially the Research Proposal.

Letter of Institutional Support

The division chief, department chair, or equivalent institutional official must provide written assurance of the following:

➢ Quality and relevance of the environment for scientific and professional development of the applicant, commitment to the scientific development of the candidate and assurances that the department intends the candidate to be an integral part of its research program beyond the duration of the proposed award.

➢ Commitment to an appropriate balance of research and clinical duties, including a commitment of at least 75 percent effort to research and scholarly activities, including specific effort to the award as outlined in the application. If the applicant is currently a rheumatology fellow, include assurance that program requirements, as specified by the Residency Review Committee, will be fulfilled.

Additional Uploads

Limit to 20 pages. Additional documents which support the grant application may be uploaded. Letters of support from collaborators if applicable should be included here.

Note: The Foundation does not require official signature from an authorized institutional research office at the time of application. However, many institutions require an application to be reviewed prior to submission. Please check with your research office for your institution's requirements.

Checklist of Uploads
Use this for reference when finalizing application materials.
Please double check all documents prior to upload. You will be able to
view and print your application once it has been submitted, as well as
download the attachments for viewing.

- ☐ Applicant Biosketch (NIH Format)
- ☐ Mentor(s) Biosketch (NIH Format)
- ☐ Research Proposal
- ☐ Benchmarks
- ☐ Budget
- ☐ Distribution of Time
- ☐ Research Training Plan
- ☐ Mentors Letters of Support
- ☐ Letter of Institutional Support
- ☐ Additional Uploads (optional)

Benchmarks for Success
The benchmarks (expected status of the project at various points in time) included in your original application will be used to evaluate progress. The milestones should reflect the specific aims of the proposal and be presented within the context of measurable outcomes. **Timeline for other grant submission (e.g., NIH, VA, Foundation Investigator Award, or equivalent awards) is a required benchmark.**

BENCHMARKS *(Should be listed in order of priority)*	Metrics for Success *(Projected end points)*	Expected Completion Dates

SDA DETAILED BUDGET (DIRECT COSTS ONLY)	AWARD YEAR: 1	FROM: 7/1/2021	THROUGH: 6/30/2022	
Applicant Name:	Fringe Rate:	Salary Requested:	Fringe Benefits:	Total Costs:
			Salary Subtotal:	
OTHER EXPENSES *(itemize by category)**				
Category:	Item *(insert lines as*			Amount:
Research Supplies/Equipment/Technical Personnel:				
Tuition Fees/Books related to courses/Career Development:				
Travel to Research Meetings or Training:				
Statistical Services (personnel/computer time):				
Travel to the Annual Investigators Meeting (Required):				
JUSTIFICATION:				
			Other Expenses Subtotal:	$0.00
			TOTAL DIRECT COSTS FOR BUDGET PERIOD (NOT TO EXCEED $50,000):	$0.00

Applications must include an itemized budget indicating the expected amount of salary from this award, up to a maximum of $50,000 annually (including fringe). Up to $25,000 per applicant per year may be requested for research costs. Allowable costs include the following types of expenses: (a) research supplies, equipment and technical personnel; (b) tuition and fees and books related to didactic courses or career development; (c) travel to research meetings or training; and (d) statistical services including personnel and computer time. Attendance to the Annual Investigators Meeting is required and travel costs should be included as a line item. Research funds may not be used for salary support for the awardee or mentors.

Excel Template is available for download at this link.

SDA DETAILED BUDGET (DIRECT COSTS ONLY)	AWARD YEAR: 2	FROM: 7/1/2022	THROUGH: 6/30/2023	
Applicant Name:	Fringe Rate:	Salary Requested:	Fringe Benefits:	Total Costs:
			Salary Subtotal:	
OTHER EXPENSES *(itemize by category)**				
Category:	Item *(insert lines as*			Amount:
Research Supplies/Equipment/Technical Personnel:				
Tuition Fees/Books related to courses/Career Development:				
Travel to Research Meetings or Training:				
Statistical Services (personnel/computer time): A13				
Travel to the Annual Investigators Meeting (Required):				
JUSTIFICATION:				
			Other Expenses Subtotal:	$0.00
			TOTAL DIRECT COSTS FOR BUDGET PERIOD (NOT TO EXCEED $75,000):	$0.00

Applications must include an itemized budget indicating the expected amount of salary from this award, up to a maximum of $50,000 annually (including fringe). Up to $25,000 per applicant per year may be requested for research costs. Allowable costs include the following types of expenses: (a) research supplies, equipment and technical personnel; (b) tuition and fees and books related to didactic courses or career development; (c) travel to research meetings or training; and (d) statistical services including personnel and computer time. Attendance to the Annual Investigators Meeting is required and travel costs should be included as a line item. Research funds may not be used for salary support for the awardee or mentors.

*Excel Template is available for download at this link.

Distribution of Time/Effort

Give the percentage of time to be spent on academic activities during the award period. List all research, clinical, teaching and/or administrative activities. Clinical work related to the proposed research may be considered part of the research activity, but typically this type of clinical activity would not generate revenue.

The institution must agree to protect at least 75 percent of the applicant's full-time professional effort for research, academic career development, and other research-related activities. No more than 25 percent full-time professional effort will be spent on clinical and/or teaching activities. It is expected that about 50 percent full-time professional effort will be spent on the Foundation Funded project.

ACTIVITY	DURING AWARD (%)	DESCRIPTION
Research Total (min 75%)		
- **Foundation Funded Project**		
- **Other Research Activities**		
Clinical Duties		
Teaching		
Administration		
Other (Explain Below)*		
TOTAL (Must Equal 100%)	**100%**	
*Other Explanation:		

Definitions:

Foundation Project   Time applicant will spend on activities related to the proposed project

Other Research   Time applicant will spend on other research projects

Clinical   Clinical activities including clinical teaching activities, such as ward rounds and clinics

Teaching   Teaching activities in a non-clinical setting

Administrative   Administrative duties

Advisory Committee Requirements

Purpose
The advisory committee is designed to aid the awardee through critical constructive review coupled with friendly advice and counsel. The advisory committee Chair is envisioned as an individual in addition to the Mentor(s) to whom the awardee can turn for advice on larger issues such as overall research direction and career development. The advisory committee should meet annually throughout the period of the award.

Composition of Committee
The advisory committee should be a multidisciplinary committee composed of **3 to 4** total members of the university faculty who will function as advisors to the awardee. The committee must contain at least one member NOT affiliated with the awardee's division and at least two members who are not the awardee's mentor(s). The advisory committee should be constructed by the awardee and their primary mentor. The committee will be chaired by a member of the committee who is NOT the awardee's primary mentor and not the division or department head.

Meetings
The committee should convene for approximately one hour EVERY 6 MONTHS during the funded project period. At each meeting, the awardee will be expected to give a **formal 15-20-minute presentation** of their work accomplished to date and plans for the future. This will be followed by 15-20 minutes of questions and comments by the committee. This will then be followed by a ~10-minute period during which the awardee is absent and the committee can discuss any concerns with the awardee's progress to date, then a ~10-minute period during which the primary mentor is absent so that the committee can assess the advisee's relationship with the mentor. The committee will spend the final 10 minutes of the meeting presenting its evaluation and offering advice for successfully working towards the awardee's stated career goals and successful completion of the award. The awardee is encouraged to contact the committee as a whole or individually via e-mail, telephone or individual meetings throughout the award period with concerns or questions. Documentation of these meetings must be included with each annual progress report.

Annual Progress Reports
Annual progress reports will be due each spring. It is expected that the awardee and mentor(s) will prepare these reports. The advisory committee will review the reports prior to submission to the Foundation. The advisory committee will be required to provide sign-off on all reports, indicating they have carefully reviewed the reports and provided feedback to the awardee. Please also include the mentorship evaluation form with your yearly reports.

Goals
The result of this mentoring process should be a project that received great support and was kept on course. The Foundation should then receive two (three if a third year is granted) detailed and informative progress reports. The research years should have been devoted to accomplishing the original aims, goals and benchmarks stipulated in the original application (if not changed by the advisory committee). Below are some examples of products that may result from this process:

- ➢ Peer-reviewed publication (s) in which the awardee played a substantial role
- ➢ Presentations at scientific meetings based on the project
- ➢ A thesis or dissertation written in connection with the pursuit of an advanced degree
- ➢ Grant applications to other institutes, agencies, etc., that has been accepted or favorably reviewed

Advisory Committee Meeting Record

Use the form below to confirm the committee has **progress meetings EVERY 6 MONTHS. Documentation/minutes from this meeting must be included with the annual progress report and should be merged to this signature page and uploaded as one PDF file.**

Date of Advisory Committee meeting

Date: _____

Advisory Committee Signatures

Advisee/Principal Investigator:
Print Name _____

Signature _____

Advisory Committee Chair (cannot be primary mentor or division/department head):
Print Name _____

Signature _____

Primary Mentor:
Print Name _____

Signature _____

Additional Advisory Committee Member (from outside division):
Print Name _____

Signature _____

Additional Advisory Committee Member (Optional):
Print Name _____

Signature _____

Annually

☐ At this meeting, the committee reviewed the Annual Progress Report prior to its submission to the Foundation.

It is required that at least two members above are NOT the advisee's primary mentor(s)