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 biomedical and/or clinical research 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 3, 2019.

All applications must be submitted by 5:00 pm ET on the deadline day via the online application link.

Letter of Intent Deadline
June 3, 2019
Application Deadline
July 1, 2019
Notification
December 6, 2019
Award Term Begins
July 1, 2020

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	ARP members
must meet the following criteria:	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.
- ➤ Be able to commit at least 75 percent full-time professional effort to research, career development, and other scholarly activities. Candidates may not spend more than 25 percent effort in clinical and/or teaching activities. A minimum of 50 percent full-time professional effort must be committed to the Rheumatology Research Foundation project throughout the award term.
- > Receive acceptance by a mentor who will oversee the training and research experience.
- Former or current principal investigators 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.

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 and potential to develop into a productive research scientist.
- > The institutional commitment to protect applicant's time for research and continued education.

Prior experience and publications are not required, but will be considered as supportive qualifications of the applicant. 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

Awardees must devote at least 75 percent full-time professional effort to research, career development, and other scholarly activities with assurance that no more than 25 percent full-time professional effort will be spent on clinical and/or teaching activities. At least 50 percent professional effort must be devoted to the proposed project.

Awardees cannot have ever received funding as principal investigator by any of the award mechanisms outlined in the eligibility section at the time funding for this award begins. Should the awardee receive any of the awards mentioned above during the Foundation award period, they must notify the Foundation immediately.

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 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.

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: Federal employees may not receive funding while they are employed at a federal agency (e.g., NIH, CDC), 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 Investigator's Meeting: The Foundation sponsors an annual Investigator's 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 3, 2019.**

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

- ➤ Name of Applicant and Institution
- Listing of Mentors and Institutions
- Listing of Advisory Committee Members 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 also include any pending support. 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. The mentors' letters should describe their commitment and specific role on the training and research plan.

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 comentor). 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. Download NIH format Biographical Sketch template by clicking here.

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

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

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, explain how your project will 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.

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.

Primary Study Material and Method

Please select one or more of the checkbox options in the online application. This will be used to assign your application to the appropriate study section.

Research Category and Classification

Information provided in this section will help to ensure each application is assigned to the most appropriate study section.

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.

Research Proposal

Limit to 8 pages including figures and tables. This does not include references, which do not have a page limit.

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) and the advisory committee to review the research plan.** Documentation of this meeting must be included with the application.

*The SDA 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. More information on the composition and responsibilities of this committee is included on Page 15 of this document.

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. **Experimental design and methods:** 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.
- E. **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.
- 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.

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.

Awardees must commit at least 75 percent full-time professional effort to research, career development, and other scholarly activities. Candidates may not spend more than 25 percent effort in clinical and/or teaching activities. A minimum of 50 percent full-time professional effort must be committed to the Rheumatology Research Foundation project throughout the award term.

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

Download, complete and submit the SDA Advisory Committee Form.

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 with regard to project benchmarks and proposed research training plan, as well as assist in preparing timely and informative annual progress reports. **Prior to application submission, the applicant should meet with their mentor(s) and the advisory committee to review the research plan. Documentation of this meeting must be included with the application.**

Mentor(s) Letters of Support

A 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; if more than one mentor, statements should be merged to create one file for upload.

The mentors must provide letters of support detailing the following (as applicable):

- Details of their own previous experience as mentors
- Features of their training program and the institutional environment that will be relevant to the application
- > Financial and other resources available to support the applicant specific to their project
- Description of the frequency and how they will provide mentoring to the applicant
- Agreement to participate in the project and confirmation regarding availability of time to commit to the project Scientist Development Award

> Description of applicants qualifications and track record of productivity

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 <u>not</u> 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
SDA Advisory Committee form
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: 07/01/2020	THROUGH: 06/30/2021	
COSTO CITETY	AWARD TEAR. I	Salary	00/30/2021	Total
Applicant Name:	Fringe Rate:	Requested:	Fringe Benefits:	Costs:
			Salary Subtotal:	
OTHER EXPENSES (itemize by category)*				
- category/	Item (insert lines as			
Category:	necesssary):			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				
Investigator's Meeting				
(Required):				
JUSTIFICATION:				

Other Expenses	
Subtotal:	\$0.00
TAL DIRECT COSTS FOR BUDGET	
RIOD (NOT TO EXCEED \$50,000):	\$0.00
	Subtotal: AL DIRECT COSTS FOR BUDGET

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 Investigator's Meeting is required and travel costs should be included as a line item. These research funds may not be used for salary support for the awardee or mentors.

*Excel Template will be available for download at application link.

SDA DETAILED BUDGET (DIRECT

COSTS ONLY)	AWARD YEAR: 2	07/01/2021	06/30/2022	
Applicant Name:	Fringe Rate:	Salary Requested:	Fringe Benefits:	Total Costs:
			Salary Subtotal:	
OTHER EXPENSES (itemize by category)*				
Category:	Item (insert lines as necesssary):			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 Investigator's Meeting (Required):				
JUSTIFICATION:				
JUSTIFICATION:				
			Other Expenses Subtotal:	\$0.0
		TOTAL DIRECT	COSTS FOR BUDGET	

FROM:

THROUGH:

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 Investigator's Meeting is required and travel costs should be included as a line item. These research funds may not be used for salary support for the awardee or mentors.

PERIOD (NOT TO EXCEED \$50,000):

\$0.00

*Excel Template will be available for download at application 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.

Awardees must commit at least 75 percent full-time professional effort to research, career development, and other scholarly activities. Candidates may not spend more than 25 percent effort in clinical and/or teaching activities. A minimum of 50 percent fulltime professional effort must be committed to the Rheumatology Research Foundation project throughout the award term.

ACTIVITY	<u> </u>	DURING AWARD (%)	DESCRIPTION	
Research				
Foundation Fur (Min 50%)	nded Project _			
Other Research	Activities –			
Clinical Duties	_			
Teaching	_			
Administration	_			
Other (explain below)	_			
TOTAL*	 (Col	100% lumn must total 100%)		
Other Explanation:				
Definitions:				
Foundation Project	Time applicant w	vill spend on activities re	lated to the proposed project	
Other Research	Time applicant w	Time applicant will spend on other research projects		
Clinical	Clinical activities	Clinical activities including clinical teaching activities, such as ward rounds and clinics		
Teaching	Teaching activitie	ng activities in a non-clinical setting		
Administrative	Administrative d	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 to be yet another individual the awardee can turn to for advice on larger issues such as overall research direction and insight. The advisory committee should meet to review the applicant's research plan prior to submission, and meet subsequently throughout the period of the award.

Composition

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 division in which they belong and at least two members who are not part of the applicant's mentoring team. 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. Biosketches and letters of support are required for all mentors, but not members solely of the advisory committee.

Meetings

Prior to application submission, the applicant should meet with committee to review the research plan. Documentation of this meeting must be included with the application. If the applicant is selected for funding, the committee should convene for one hour at least twice a year during the funded project period. At each meeting, the awardee will be expected to give a **formal 20 minute presentation** of their work accomplished to date and plans for the future. This will be followed by 20 minutes of questions and comments by the committee for the awardee. This 40 minute period will then be followed by a 10 minute period where the awardee is absent and the committee can discuss any concerns with the awardee's progress to date. The committee will spend the final 10 minutes of the meeting presenting the evaluation of the group 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.

Annual Reports

Annual progress reports will be due each spring. It is expected that the advisory committee will play a large role in the completion of a succinct, informative and timely progress report, as well as an informative final report at the end of the award period. 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. Documentation of this meeting must be included with each progress report.

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 (submit with application)

Use the form below to confirm the committee has reviewed your entire application submission.

Documentation/minutes from this meeting must be included with the application, and should be merged to this signature page and uploaded as one PDF file.

Date of Initial Advisory Committee meeting and review of entire application submission (must be prior to application)

submission): Date: **Advisory Committee Sign Off** Each person should sign below to confirm they have met and reviewed the research plan prior to submission. **Applicant/Principal Investigator:** Print Name 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 _____

^{*}It is required that at least two members above are NOT part of the applicant's mentoring team.