

DRS. SIDNEY AND BECCA FLEISCHER RESEARCH SCHOLARSHIP

About the Fleischers: Dr. Sidney Fleischer earned his Ph.D. from the Indiana University College of Arts and Sciences in 1958 in the interdisciplinary Biochemistry program that was overseen by the Departments of Biology and Chemistry. Dr. Becca (Patras) Fleischer received a Master of Arts degree from the Indiana University College of Arts and Sciences in 1955 in Chemistry and earned a PhD in Biochemistry in 1958. Dr. Sidney Fleischer was a world renowned figure in the field of calcium-signaling biochemistry, most notably in the discovery and characterization of the ryanodine receptor, an intracellular calcium ion channel that plays key roles in the release of calcium from stores in the sarco/endoplasmic reticulum of muscle, neuronal, glial, and immune system cells. Dr Fleischer's lab played a major role in elucidating the role of the ryanodine receptor in calcium-mediated muscle contraction, which is critical for the physiology of both heart and skeletal muscles.

Dr. Sidney Fleischer's lab published more than 580 articles, abstracts and reviews. In addition, he was the editor or co-editor of 25 books, including 20 volumes of Methods in Enzymology. Dr. Becca Fleischer served as co-editor on 13 of those volumes.

The Fleischer Research Scholarship will help support outstanding undergraduate students' research endeavors. Awardees will receive \$5,000 and may use their funds in one of two ways:

- 1. Academic year support, or
- 2. Summer support so that they may continue to participate in research between the academic years.

Applicants must indicate on their application whether they are requesting academic year or summer support.

Each awardee will also be entitled to up to \$1,000 to use for travel associated with their research, expenses associated with presenting their research, or for the purchase of laboratory supplies directly related to their research.

The Fleischer Research Scholarship may be renewed up to two times. A renewal application is required for each.

Applications will be accepted from January 7, 2019 through March 8, 2019.

Eligibility:

- Applicants must be undergraduates in the College of Arts and Sciences majoring in, or intending to major in, one of the natural sciences, with preference given to those working in life or physical sciences.
- Applicants must have completed at least one semester of work in a research lab under the guidance of a faculty member in the College, with the intention of continuing in that lab for the following year.
- Applicants must maintain a minimum 3.0 GPA overall, with a 3.5 GPA in their science courses.

Application procedures:

- 1. Applicants must complete the attached application form and email it to collugrs@iu.edu.
- 2. The laboratory PI must separately submit a letter of nomination to <u>collugrs@iu.edu</u>. The nomination letter should include an assessment of applicant's progress in the lab so far, potential for future development and success, as well as curiosity and initiative.

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Instructions: Complete all sections of the application and email to <u>collugrs@iu.edu</u>. Your responses in each field are limited to 500 characters (approximately 100 words). A separate letter of nomination should be emailed by your laboratory PI to <u>collugrs@iu.edu</u>.

Section 1. Personal Information					
Date:	Student ID#:				
Name:					
Current Year at IU:			□ 2 nd		□ 3 rd
Tam anniving increnice one).			☐ Summer research s☐ Academic year research		
Section 2	. Your cours	ework			
List of clas		enrolled in this	s past year (include		
Your current overall GPA (include all IU classes completed):					
STEM course GPA (include only IU science & math courses):					
Have you declared a major?		□ yes □ no			
If yes, wha	at is/are your	major(s)?			
If no, wha	t major(s) are	e you considerir	ng?		
What draws you to this/these major(s)?					

Section 3. Your lab						
In whose lab are your working?						
Faculty name:						
Department:						
Who is your day-to-day mentor?						
Mentor name:						
Mentor's position (select one):	☐ Faculty ☐ Research Scientist ☐ Postdoc ☐ Graduate Student					
Section 4. Your current research						
Your responses in each field are limited to 500 characters (approximately 100 words). Why did you select this particular lab to work in?						
What is the overarching goal/theme of the	ne lab?					
What scientific questions are you or your	r group trying to address?					
What is your role in the research?						

What are your daily activities in the lab and how do they relate to 1) the experiment you are workin and 2) the lab's overall goal/theme?	g on
What skills have you acquired since beginning research?	
Do you plan to continue to work in this lab next academic year? Why or why not?	
What are your research goals for next year?	

Your responses in each field are limited to 500 characters (approximately 100 words). Why did you select this particular lab to work in? What was the overarching goal/theme of the lab?
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What was your role in the research?
What were your daily activities in the lab?

What skills did you acquire during this research experience?				
What were two things you enjoyed most about your research experience?				
What are two things you found challenging and/or did not like about research that you did not anticipate?				

Section 6. Your long-term plans

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Thinking long-term, how interested are you in the following career options? Rank your level of interest in each from 1 (not interested at all) to 5 (extremely interested)

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Medicine (M.D.)			
Basic Research (Ph.D.)			
Medical research (M.D. / Ph.D.)			
Biotechnology (M.A. / M.S. / Ph.D.)			
Other (explain):			
Where do you see yourself 5 years from now? 10 years from now?			