Table of Contents

Application Pages Overview	2
Entering Responses into Text Boxes	3
Legal Residence Information	4
Career Goals/Professional Aspirations	5
Research Projects and Skills	9
Mentor Recognition	17
Letter Writer Information (new for 2022)	18
Other Activities and Accomplishments	19
Recognitions	21
Current College/University	22
Coursework	25
Previous School Attended	27
Future Academic Plans	29
Certification and Release	
Upload Supporting Documents	31
Research Essay Instructions	33
Review/Print/Submit Application	35
Supporting Documents Backpack	37
Recommenders	

Application Pages Overview

APPLICATION PROCESS OVERVIEW

You may work on and move back and forth throughout the application as needed. You may have the computer review your materials for completeness/errors at any time.

Enter your recommenders Names and Email Addresses

Recommendations

Application Pages

- Legal Residence Information
- <u>Career Goals/Professional</u>
 <u>Aspirations</u>
- Research Projects and Skills
- Mentor Recognition Information
- Letter Writer Information
- <u>Other Activities and</u> <u>Accomplishments</u>
- <u>Recognitions</u>
- <u>Current College/University</u>
- <u>Coursework</u>
- Previous Schools attended
- Future Academic plans
- <u>Certification and Release</u>

Upload Supporting Documents

Review/Print/Submit Application

Save and Log Out

Entering Responses into Text Boxes

For best results, it is recommended you type your responses directly into the essay response boxes. When text is copied and pasted, it may include unseen coding to display special characters, such as smart (curly as opposed to straight) double or single quotes, em dash (long dash character instead of a double hyphen), ellipsis (three periods inserted as a single character instead of three typed periods), etc. When the application is saved, the browser converts any special characters to symbols. With each additional save, the symbols are doubled.

This is a known problem in Internet-based applications, and is a result of browsers rendering text from one application (i.e. a Microsoft Word document) to another (i.e., an online application). Due to the sheer volume of users, any reliable fix to this problem could slow or shut the system down during peak periods and is therefore not a feasible option.

If you choose the copy/paste method, here are some options we suggest to avoid experiencing difficulty with special characters:

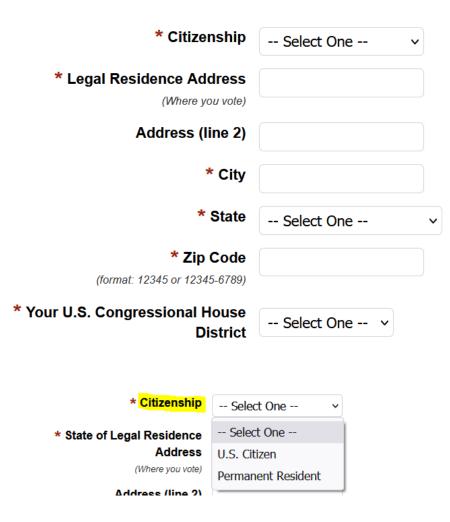
- 1. After pasting text, place your cursor in the essay box and hit the space key for the character counter to activate and determine the length of your essay.
- 2. Before you move out of the essay box after text has been pasted, manually replace all quotations, apostrophes, dashes, etc. Save. After you save, check for symbols that may appear and ensure they are removed or replaced by typing in the intended character.
- 3. If you are working in Microsoft Word, you can edit your text before cutting and pasting. First, go to **Tools/AutoCorrect Options/AutoFormat As You Type** and deselect all options. Then use the **Find and Replace** feature under **Edit** to replace quotations, apostrophes, dashes, etc., with new quotations, apostrophes, dashes, etc.
- 4. You can also copy and paste your text into an external text editor, such as Notepad or SimpleText to replace the unwanted symbols before pasting the text into the application. Use the text editor's search and replace feature to replace all quotations, apostrophes, dashes, etc., with new quotations, apostrophes, dashes, etc. Then copy the text from the external editor into the essay box on your application.

Legal Residence Information

Please enter your congressional district and legal residence information.

The Goldwater Scholarship Foundation collects information on your legal residence – where you vote - to enable the Foundation to accurately report your award to your Congressional Senate and House members. Go to <u>www.house.gov</u> to find your congressional district and House member. You will find a search box in the upper right-hand-corner of the House of Representative's web site. Enter your ZIP code to identify your U.S. Representative and Congressional District.

All non-voting delegations such as American Samoa, District of Columbia, Guam, Puerto Rico and the US. Virgin Islands should select "At Large" in the Congressional House District drop down menu below.



Career Goals/Professional Aspirations

Due to formatting issues, do not use equations, symbols, or special characters when entering responses into text boxes in the Career Goals/Professional Aspiration section. **Instructions for using the text boxes**. (This will open a new window.) Please review before entering responses for the first time.

Should you be named a Scholar, your short career goals statement will be publicly displayed as you entered it into your online application. Please proof this statement carefully to ensure there are no misspelled words or grammatical errors.

* What is the highest degree	you plan to obtain?	Select One V
* What is the highest degree you plan to obtain?	Select One V	ì
* In one or two sentences, describe your ca aspirations (see example below). This stater publications if you are selected as a scholar Conduct research in biomedical science and teach at the univ including spaces.) Note: The pipe character () may not be used in	B.A. B.S.	:\$ 71 1
 Characters used * What are your career goals and profession which area(s) of mathematics, science, or end 	M.D./Ph.D. D.O. D.O./Ph.D DVM	- - c
considering pursuing in your research care current academic program and your overall	DVM/Ph.D.	n ji

If select M.D./Ph.D., text box pops up to provide explanation

* What is the highest degree you plan to obtain?

M.D./Ph.D. v

* If you are planning on attaining a M.D., M.D./Ph.D., D.O., D.O./Ph.D, D.V.M, or D.V.M./Ph.D. degree, explain why is a medical (M.D., D.O.) or veterinary degree (D.V.M.) is necessary for you to achieve your research goals? (2000 character limit including spaces)

Note: The pipe character (|) may not be used in your response.

* In one or two sentences, describe your career goals and professional aspirations (see example below). This statement will be used in

publications if you are selected as a scholar. (Example: Ph.D. in Molecular Biology.

Conduct research in biomedical science and teach at the university level.) (200 character limit including spaces.)

Note: The pipe character (|) may not be used in your response.

0 characters used

* What are your career goals and professional aspirations? Indicate which area(s) of mathematics, science, or engineering you are considering pursuing in your research career and specify how your current academic program and your overall educational plans will assist you in achieving your career goals and professional aspirations. This is an

expansion of the brief description of the career goals and professional aspirations you provided above. (3000 character limit including spaces)

Note: The pipe character (|) may not be used in your response.

0 characters used

* Describe an activity or experience that has been important in helping shape or reinforce your desire to pursue a research career in science, mathematics or engineering. (1500 character limit including spaces)

Note: The pipe character (|) may not be used in your response.

0 characters used

* In what way did COVID-19 or other hardships over the past couple of years affect your research career plans and did those events alter your ability to pursue those plans? If you have had to make changes, in what way(s) did you adapt to the situation? If COVID-19 did not influence your plans, simply state that there was no impact. Please note that your application will not be looked at less favorably in any way if you have not been significantly impacted. (1500 character limit including spaces)

Note: The pipe character (|) may not be used in your response.

0 characters used

(Optional question, answering the question below will depend on your personal experience.)

Goldwater Scholars will be representative of the diverse economic, ethnic and occupational backgrounds of families in the United States. Describe any social and/or economic impacts you have encountered that influenced your education - either positively or negatively - and how you have dealt with them. (1500 character limit including spaces)

Note: The pipe character (|) may not be used in your response.

0 characters used

Research Projects and Skills

In chronological order, from earliest to most recent, list up to five research projects you consider to be your most significant work associated with your interests in the sciences, mathematics, or engineering. Briefly describe the project, being certain to include a description of your involvement in and contributions to the work.

As they do not generally rise to the level of work expected, you should not report class projects and projects done in high school. An exception would be work associated with a high school or class project that developed into a long-term project, particularly those that involve a continuing collaboration with a faculty mentor.

Outputs of projects - papers and presentations - are of particular interest to those reviewing your materials. These help a reviewer calibrate the significance of the work. Please be certain to provide this information using the citation guidance/examples provided below.

For each project, list up to three individuals who provided you with significant mentoring on the project.

Finally, in addition to the research projects you list in this section, you will also be required to submit a Research Essay. You can find additional information on the Research Essay <u>here</u>.

IMPORTANT NOTE: Do not enter information about Research Projects until you determine all the projects you want to report and then arrange those in chronological order from earliest to the most recent. Once entered, you can change the order of projects but it requires deleting projects until you get to the point in the list where you want to add a project, adding the missing project, and then re-entering all of the projects you deleted. Clearly, you want to avoid having to do this if possible.

CITATION EXAMPLES

Please use the following citation format (layout and punctuation) for published works - Author(s) last name and initials. Date. Article title. Journal title, Volume (issue): page numbers.

Example: Doe M, Smith JD, and Decher JJ. 2017. Energy Dependence of Fusion Evaporation-Residue Cross Sections. Phys. Rev. C. 42(11): 1-10.

Please use the following citation style (layout and format) for papers presented at meetings - Author(s) last name and initials. Title of Paper. Paper/poster session presented at: Name of Conference; Date of Conference (Year, Month, day); Place of Conference (City, Country).

Example: Doe M, Smith JD, and Ray SM. Energy dependence of fusion evaporation-residue cross sections. Poster session presented at: 76th Annual Conference of the American Physical Society; 2016 June 3-5; Houston, TX.

These citation examples were taken from <u>http://www.scientificstyleandformat.org/Tools/SSF-Citation-Quick-Guide.html</u>

Research Project #1	
Starting Month	Select One V (month)
Starting Year (format: yyyy)	
Ongoing	Select One 🗸
Average Hours/Week (Academic Year)	
Average Hours/Week (Summer)	
Name of Project Mentor (list up to three mentors for this project)	
Position of Project Mentor	(ex: Assoc. Prof of
Affiliation of Project Mentor Name of Project Mentor	Chemistry, Postdoctoral Research Assoc., Grant Principal Investigator) (ex: name of school, national lab, corporate lab, etc.)
Position of Project Mentor	
Affiliation of Project Mentor	
Institution where this research was performed	
Description of research, including your in to the project. A separate narrative box h describe the research skills you acquired	as been provided for you to
Note: The pipe character () may not be use 0 characters used	ed in your response.

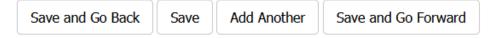
(1000 character limit including spaces)

Research Skills (Briefly describe any research skill(s) you developed while working on this project that will be important going forward in your research career.)

Note: The pipe character (|) may not be used in your response.

0 characters used	
(300 character limit including spaces)	////
Do you have	O Yes
Papers/Publications associated	
with this research project?	○ No
Do you have Presentations	
associated with this research	Select One 🗸
project?	
If answer 'Yes'	
Do you have	• Yes
Papers/Publications associated	○ No
with this research project?	
If yes, how many publications	
are associated with this work?	Select One
Do you have Presentations	
associated with this research	Yes Y
project?	
If yes, how many presentations	
are associated with this work?	Select One

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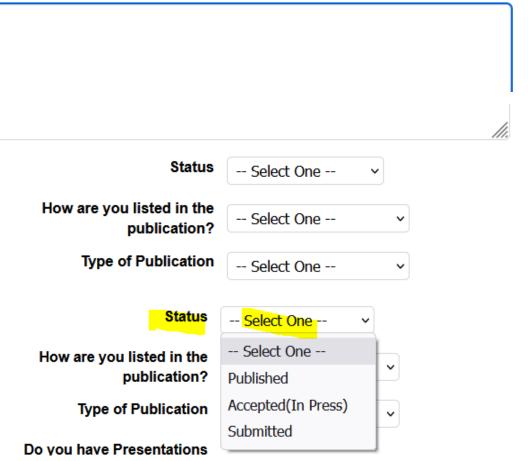
If 'Yes' to Publications -

If yes, how many publications are associated with this work?	- <mark> Select One</mark> ~	
Do you have Presentations	Select One	
associated with this research	1	
project?	2	
	3	
Save often For secur		
If yes, how many publication are associated with this wor	1 ~	

Citation

Note: The pipe character (|) may not be used in your response.



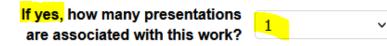


How are you listed in the publication?	- <mark>- Select One -</mark> - V	Note: 'In an
Type of Publication	Select One	acknowledgement' is no longer a choice for
	First author	2022
Do you have Presentations	Author (but not the first author)	L
Type of Publication	Select One Select One	
Do you have Presentations associated with this research	National Professional Society Journal	
project?	National Undergraduate Research Journal	
Save often. For secu	Campus Publication	
	Other	

If 'Yes' to Presentations -

Do you have Presentations		
associated with this research project?	- <mark>- Select One </mark> ~	
project:	Select One	
Save often. For secu	Yes	me out.
	No	

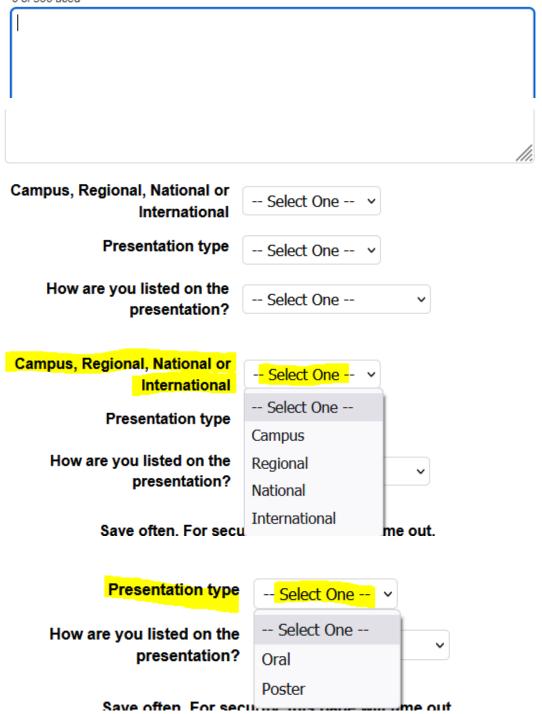
Do you have Presentations associated with this research project?	Yes	~	
If yes, how many presentations are associated with this work?	Select One	•	
Save often. For secu	00.000 0.00	p	ne out.
Save and Go Back Save	2 3	1	e and Go Forward

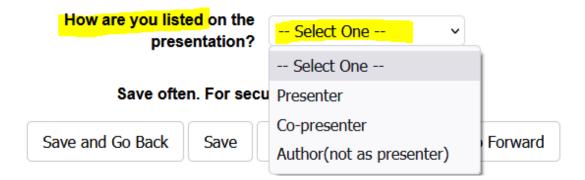


Citation

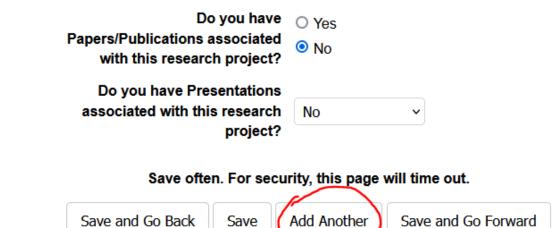
Note: The pipe character (|) may not be used in your response.

0 of 300 used





If answer 'No'



If have more than one research project, click on *Add Another* to add more

Mentor Recognition

If selected for a Goldwater Scholarship, you may list up to three mentors on the Goldwater web site. Provide the names of up to three mentors who you would like to recognize.

Should you be named Scholar, the names and titles of your mentors will appear as you entered them into the online application. They will also appear in the order that you listed them.

As names and titles will be displayed as you have entered them, please ensure all names and titles are spelled correctly. Enter the names in the order you would like to have them displayed.

Mentor Name	
Title	
(ex. Dr., Professor, Mr., Ms.)	
Mentor Name	
Title	
Mentor Name	
Title	

Letter Writer Information (new for 2022)

Provide the information asked for below for each of your three letter writers. To report an additional letter writer, click the "Add Another" button below.

* Name of Letter Writer	
* Letter Writer's Institution	
* Title of Letter Writer	
(e.g. , Associate professor of Physics)	
* Relation of the Letter Writer to the	
student	
(e.g., taught my statistics class, mentored project 1,	
etc.)	

Save often. For security, this page will time out.

Save and Go Back	Save	Add Another	Save and Go Forward
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Other Activities and Accomplishments

In order of importance to you, list up to five activities and/or accomplishments you were involved in while in college. These activities (e.g., clubs, student government, music or art activities, community activities, sports activities, etc.) may have been affiliated with your college or university or they may have been associated with other organizations. To report additional activities, click the "Add Another" button below. You may report up to five activities.

Activity/Accomplishment		
Organization (if applicable)		
Scope of Activity/Accomplishment	Select One v	

Role/Involvement (250 characters or less)

Note: The pipe character (|) may not be used in your response.

0 of 250 used

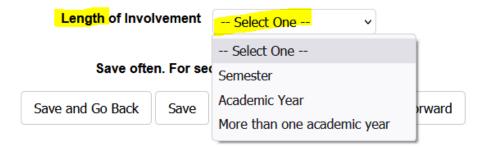
1	
	///
Leadership Position	
(e.g., President, VP, Secretary, Treasurer,	
Member, Counselor, etc.)	

Length of Involvement

-- Select One --

~

Scope of Activity/Accomplishment	<mark>Select One</mark>	•
Role/Involvement (250 characters or	Select One	
	International	
Note: The pipe character () may 0 of 250 used	National	ponse
	College/University	
	Community	
	Other	



Recognitions

In order of importance to you, list your recognitions (Awards, Honors and Scholarships). To report additional recognitions, click the "Add Another" button below. You may report up to five recognitions.

Recog	nition					
	Туре	Select	One -	- ~		
Award Description (250 chara	cters or les	s)				
Note: The pipe character () 0 of 250 used	may no	t be used i	n you	r response	l.	
						,
	d Year at: yyyy)					///.
Save often. Fo	or secur	ity, this pa	age w	ill time ou	ıt.	
Save and Go Back Sa	ve	Add Anoth	er	Save and	Go Forward]
		\smile				
For more click <i>Add Another</i> (can	add up to	o five total)				
Туре	- <mark>- Select</mark>	One v				
Award Description (250 characters or les	Select	One	Ì			
Note: The pipe character () may no	Intornati	onal	nse.			
0 of 250 used		Jniversity				
	Commun	-				

Other

Current College/University

Provide information about the College or University you are attending. Please also take note of the Transcript submission requirements of the program here.

Definition of a sophomore/junior:

A "sophomore" for the purposes of a Goldwater nomination is defined as an undergraduate who has a minimum of three but not more than four semesters of full-time undergraduate study beginning September 2022. A sophomore who is awarded a Goldwater Scholarship can expect to receive a maximum of two years (4 semesters) of support.

A "junior" for the purposes of a Goldwater nomination is defined as an undergraduate who has a minimum of one but not more than two semesters of full-time undergraduate study beginning September 2022. A junior who is awarded a Goldwater Scholarship can expect to receive a maximum of one year (2 semesters) of support.

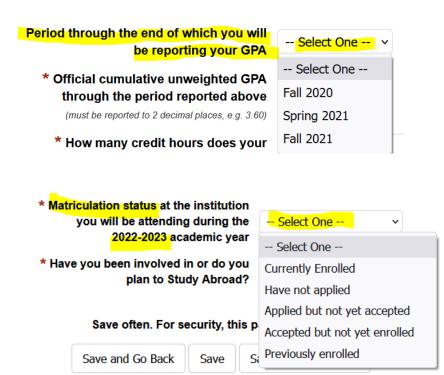
Field of Study:

The Goldwater Foundation is primarily interested in the field you intend to pursue your research career. Our reviewers will carefully review your courses to determine whether they are preparing you for a research career in your chosen field. Less important is the name of your college major as it does not always provide sufficient information or overview of the courses you have taken. As such, the Goldwater application does not ask for the name of your major.

GPA Calculation:

Because of COVID-19, students applying for a 2022 Goldwater scholarship may, without penalty, compute and report their GPA at the end of the Fall 2020, Spring 2021, or Fall 2021 academic term (or their equivalent if on another academic calendar). Provide transcripts through the period for which you compute your GPA. If reporting the fall 2021 academic term, the Foundation understands that transcripts may not be available for the fall term.

* Institut	tion typ	e:	O 2-year in:	stitution		
			O 4-year in:	stitution		
* I am currently	enrolle	ed	Select O	ne 🗸		
* Are you a transfer student (i.e. transfer from another a						
institution to the institution nominating you for a G scho		er	Select O	ne 🔻		
* Field	of stud	dy	Select O	ne	~	
Period through the end of which be reporting y	-		Select O	ne 🗸		
* Official cumulative unweigh through the period report						
(must be reported to 2 decimal place	es, e.g. 3.6	60)				
* I am <mark>currently enrol</mark>			<mark>ct One</mark>			
* Are you a transfer student (i.e., Did y transfer from another acade	you	· Sele ull-tin	ct One			
institution to the institution that nominating you for a Goldwa	ntis _{Pa}	art-tir				
* Field of study	<mark>Select</mark>	One	~			
Period through the end of which you will	Select	One -				
be reporting your GPA	Chemistr		Information So	cionco and F	nginoorin	
* Official cumulative unweighted GPA through the period reported above	Engineer			LIENCE ANU E	ngineenn	y(CISE)
(must be reported to 2 decimal places, e.g. 3.60)	Geoscien	nces				
* How many credit hours does your school require for graduation?	Life Scier					
(If your institution uses credits vs credit hours, see your	Materials Mathema					
Registrar's office to make the credit to credit hour conversion.)	Medicine		00101003			
* How many credit hours will you achieve	Physics a		stronomy			
as of January 1, 2022?	Psycholo	gy				
♣ 11			Ì			



If answer 'Yes' to Study Abroad, more boxes pop up to provide additional information -

lo

* Please describe how your Study Abroad experience is relevant to your career aspirations

Note: The pipe character (|) may not be used in your response.

0 of 1000 used

Coursework

In the appropriate fields below, enter information about the courses in your major in which you are currently enrolled, the courses in your major in which you will enroll, and the math, science, or engineering courses that are outside your major in which you will enroll in the future.

You may have more FUTURE "In Major" and "Outside Major" courses than available slots. If this is the case, please list the six most advanced courses in each of these categories and the ones that you believe are the most important to your research career goals.

List courses by title, not by the catalog number used by your institution. If a Double Major, list courses from both majors, as appropriate.

For each course, identify the course as an undergraduate or graduate level course by selecting the appropriate level.

Current Course 1	
Course Level	<mark>Select One</mark> V
Current Course 2	Select One
Course Level	Undergraduate Graduate
Current Course 3	
Course Level	Select One 🗸
Current Course 4	
Course Level	Select One 🗸
Current Course 5	
Course Level	Select One 🗸
Current Course 6	
Course Level	Select One 🗸

Future Course 1 (Future Course In Major)	
Course Level	<mark>- Select On</mark> e 🗸
Future Course 2	Select One
Course Level	Undergraduate Graduate
Future Course 3	
Course Level	Select One 🗸
Future Course 4	
Course Level	Select One 🗸
Future Course 5	
Course Level	Select One 🗸
Future Course 6	
Course Level	Select One 🗸

Course outside of Major 1	
(Future Course Outside Major)	
Course Level	<mark>Select One</mark> 🗸
Course outside of Major 2	Select One
	Undergraduate
Course Level	Graduate
Course outside of Major 3	
Course Level	Select One v
Course outside of Major 4	
Course Level	Select One 🗸
Course outside of Major 5	
Course Level	Select One 🗸
Course outside of Major 6	
Course Level	Select One 🗸

Previous School Attended

Please provide information about any schools which you have previously attended. To report additional schools, click the "Add Another" button below. You may report up to 3 previously attended schools.

Click SEARCH to select a previous school	SEARCH
School Name	
City	
State	
Institution type:	O 2-year institution
	O 4-year institution
Dates attended	
(e.g., Aug 2014 to May 2017)	
Unweighted GPA on a 4.00 scale	
(Must be reported to two decimal places, eg. 3.60)	
Will you be providing a transcript from	O Yes
this school to your Goldwater Campus Representative?	○ No

If answer 'No' to providing a transcript, a text box pops up to provide an explanation -

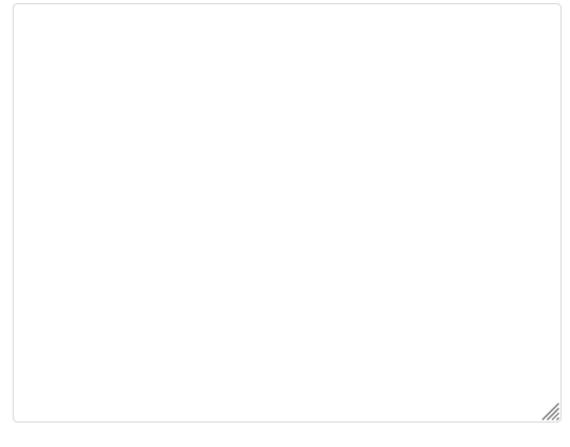
Will you be providing a transcript from	O Yes
this school to your Goldwater Campus	No
Representative?	

Please explain why you will not be providing a transcript. A reason for not

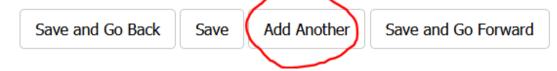
providing a transcript for a particular school, for example, is that the grades for classes taken at the school are now reported on your current institution's transcript. (1000 character limit including spaces)

Note: The pipe character (|) may not be used in your response.

0 of 1000 used



Save often. For security, this page will time out.



'Add Another' as necessary (can list up to three total)

Future Academic Plans

* Is the institution you will be attending for the 2022-2023 academic year the same as your current academic institution?

If the institution is not the same for 2022-2023 academic year, boxes pop up to provide the name of the school for 2022-2023 -

* Is the institution you will be attending for the 2022-2023 academic year the same as your current academic institution?	O Yes ● No
* The school I will be attending in 2022-2023 is: (Click SEARCH to select a school)	SEARCH
* Official school name	
* City	
* State	

Certification and Release

Certification and Release

I affirm that I am applying for a Barry Goldwater scholarship. Permission is hereby given to officials of my institution to release transcripts of my academic record and other requested information for consideration by the Barry Goldwater Scholarship Foundation. I understand that this application will be available only to qualified people who need to see it in the course of their duties.

I affirm that I plan to pursue a research career in mathematics, the natural sciences, or engineering as defined and discussed in this application.

I affirm that the information contained herein is true and accurate to the best of my knowledge.

Should I be awarded a scholarship, I agree that my name, current institution, career goals, faculty members' names, and state of legal residence may be publicly announced by the Foundation.

I also agree that my contact information (mailing address, email address, and telephone number) may be provided to federal and state government representatives and to those scientific, mathematics, or engineering societies that are relevant to my professional career interests.

By entering my name below, I officially indicate my agreement and give my consent to the above terms and conditions of the Barry Goldwater Scholarship Foundation.

* Applicant's Signature

Upload Supporting Documents

Uploaded by the applicant

Before submitting your application, be sure to upload the following documents at the bottom of this page:

- 1. Research Essay (Click here for details)
- 2. Permanent Resident Card (if applicable)

These materials must be uploaded before you hit the *Lock and Submit* button to submit your application. Make sure the box is checked in the Attach column to 'attach' the document to your application. Your campus representative will determine the deadline on your campus by which all of your materials must be locked and submitted. Be certain to check with your Campus Representative on this date.

Open and review your uploaded files to be sure they are legible and complete before submitting your application. Please be sure that your file names do not include spaces, apostrophes, or other punctuation or special characters. Hyphens are acceptable. File names should accurately describe the document, for example: 2022-USC-transcript-JDoe.pdf or 2022-1040-JDoe.pdf.

After uploading your documents, review your application data and documents, then lock and submit your application.

This site will accept only PDF, JPG, or PNG files for uploads. It is preferred that your Research Essay and copy of Permanent Residence Card be PDF files.

Removing a supporting document from your application:

If you **have not subumitted** your application, you can remove any uploaded document by clicking on the trash can by the document you would like to remove.

If you **have submitted** your application, you must first contact your Goldwater Campus Representative so they can un-submit your application before you can remove a file.

Supporting Documentation for Total Application			
File Type / Description	Description	File Name	Attach
Select One 🗸		Browse No file selected.	Upload
Go Back		Continue an	d Review Application

Supporting Documentation for Your Application

e Type / Description	Description	File Name	Attach
Select One ~		Browse No file selected.	Upload
Select One			
say		Continue ar	nd Review Application
sidence Card			
	Supporting Do	ocumentation for Your Application	
File successfully saved.			
File Type / Description	Description	File Name	Attach
Select One 🗸		Browse No file selected.	Upload
Essay	2022 Essay	2022 essay I zuhlsdorf test.pdf	
			↑ (make s
			↑ (make s box is che
need to delete vou	r essav to upload	a revised version, click on the trash ca	box is che
		a revised version, click on the trash ca	box is che an to remove it.
ineed to delete you File Type / Description Select One >	r essay to upload Description	a revised version, click on the trash ca File Name Browse No file selected.	box is che an to remove it. Attach
File Type / Description		File Name Browse No file selected.	box is che an to remove it.
File Type / Description	Description	File Name	box is che an to remove it. Attach Upload
File Type / Description Select One Essay	Description	File Name Browse No file selected.	box is che an to remove it. Attach Upload
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Supporting Documentation for Your Application

Research Essay Instructions

From Student Overview page > Program Information > Research Essay Overview:

DEVELOPING THE RESEARCH ESSAY

Formatting Guidelines:

Research Essays should be single-spaced and use 12-point Arial font, with 1-inch margins on all sides. Page length, including bibliographic information, must not exceed 3 pages. The essay must include your name and the name of your academic institution in the header at the top of each page. Format your Research Essay in either one or two columns on a page. As appropriate, utilize graphs, tables, and figures in the essay to explain or clarify results. Figures, table captions and bibliographic citations may use 10-point Arial font. Research essays that use mathematical expressions may use LaTeX or other document preparation software to enable proper formatting. Save your Research Essay as a PDF file. Although the upload site accepts JPG and PNG file formats, PDF files are preferred.

COVID-19 Considerations:

The Foundation is acutely aware that COVID-19 has delayed, canceled, or severely restricted many traditional research experiences. In the past, research essays were often based on these experiences. Rather than viewing the situation brought about by COVID-19 as a setback, the Foundation sees this as an opportunity that enables students to understand that research does not just exist within a traditional research laboratory but encompasses all the steps that create and disseminate new knowledge.

Faculty and students are encouraged to think broadly and look for collaborative work that might include in-depth literature reviews, analysis of existing data sets, computation studies, among others. Additionally, the research essay might propose a new experiment that tackles an important and interesting question in your field of interest to you. We also anticipate that there will be students who use this opportunity to pursue independent research e.g., a student who is developing a data-driven website that tracks global COVID cases to study the impact of travel restrictions or the student who is investigating the efficacy of novel cleaning methods for N95 masks. Regardless of type, all of the above essay types can and should include a description of the work's motivation, experimental design, data analysis and outcomes, as well as bibliographic information.

Whether the work is based on prior research or is a proposal, it is important that your essay clearly describes 1) your contribution or expected contribution to the work, 2) the skills you brought to the work from prior research or course experiences, and 3) the skills you have or expect to obtain from participation in the project. As such, your research essay needs to be more than just a technical paper. The additional information that is sought aids Goldwater Scholarship reviewers to evaluate your potential for becoming a research scientist, engineer, or mathematician. Where appropriate, you are encouraged to use the word "I" as opposed to the word "we" in your essay to help elucidate your specific role in the work.

The Essay:

The Research Essay provides the Foundation with particularly important insights into your motivation, background, experience, skills, and interest in pursuing a research career. This does not mean that you should simply state that you have these characteristics but that you demonstrate them through your work.

While the disciplinary reviewers who will be reviewing your essay and application will be broadly familiar with work in your discipline, it is unlikely the reviewers will be experts in your particular sub-field. Furthermore, if your application needs to undergo a secondary review, the review may be done by an individual from another discipline. Write your research essay and other materials for individuals who are broadly trained in the sciences, engineering and mathematics, not for subject matter experts.

Do not repurpose a "slightly expanded" abstract as your Research Essay. While your Research Essay might come from an abstract you have written earlier, the Research Essay needs to be much more. In addition to describing a research question, methodology, analysis and results, the Research Essay should clearly describe how you were involved in the work and what specific contributions you made to the work. Future directions for the work or a new research initiative built on skills learned should be included.

Use space judiciously. Balance the various elements of your essay so that no one section dominates the essay. Reviewers find a short opening paragraph that provides a "broader picture" that explains the importance of your research and your motivation for doing the work to be helpful. Again, when describing the project, be certain to talk about your specific contributions to the work and the skills you acquired.

It is also helpful for you to demonstrate that you "think like a scientist." If you are describing a research project that you conducted, consider discussing additional work that you might do or, if you have completed the entire project, describe a new project that might be undertaken. In the latter case, explain how the skills you learned while working on your project will set the stage for a successful new work.

Regardless of research essay type, include a bibliography that uses up-to-date, refereed journal articles. Use diagrams and figures, as appropriate, but not at the expense of a quality narrative.

Finally, while you must write the Research Essay, you can work with your faculty and research mentor(s) to ensure your Research Essay is scientifically accurate, uses appropriate scientific format, and provides an appropriate balance among the various elements that make up the Essay. Always anticipate the need to write multiple drafts, reviewed by your faculty mentor and, when possible, by a non-expert in the field. Write, rewrite, and then rewrite again you research essay. Your readers have a limited time to read the essay so you want to make certain your essay makes your points clearly and succinctly.

Confidentiality of the Work:

Information disclosed in your research essay is held in confidence. All Foundation reviewers sign a Confidentiality and Conflict of Interest Agreement.

Submitting Your Research Essay:

You are responsible for up-loading your Research Essay to the Goldwater online site. Application Site 2 – Upload Supporting Documents provides instructions on how to upload your Research Essay and other documents.

Review/Print/Submit Application

Please review the application information you have entered below. If any section has incomplete or incorrect information, **click the** *Edit Your Information* link in that section. Fields that are incorrect or incomplete will be listed at the top. When all application data is complete and acceptable, the *Lock and Submit Application* button will display at the bottom of this page. If you don't see the Lock and Submit Application button, review all sections for missing information.

After you have carefully reviewed your application to verify all information is complete and correct, **click the** *Lock and Submit Application* **button**. **Please note:** After you lock and submit your application, you will not be able to make any changes to your application. To print a copy for your records, click the Send to Printer link at the bottom of this page.

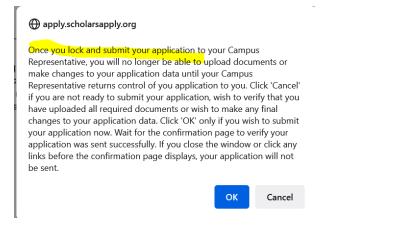
Certification

I certify I understand all requirements for submitting an application for a Barry Goldwater Scholarship. My application data has been reviewed and is complete and accurate to the best of my knowledge. By clicking the *Lock and Submit Application* button below, I understand no further changes can be made to the data. Data will be reviewed by qualified people who need to see it in the course of their duties for the purposes of this program.

Send to Printer

Lock and Submit Application

When click on *Send to Printer* – you can print application or choose PDF (in printer dropdown box) to save as a PDF document (or both – you just have to do this **BEFORE you Lock and Submit Application**)



Your application has been submitted!

You have successfully submitted your application data for a Barry Goldwater Scholarship. We recommend you print a copy of this page as confirmation of your submission.

Please check your email for a message regarding successful submission. Also note that future correspondence regarding the program will be via mail or email. Be sure to check your junk mail for this message if it did not arrive in your inbox.

Questions? Contact us:

Email: goldwater@scholarshipamerica.org Call: 1-507-931-8335

Your Application

View application (<u>UNSUBMIT APP</u>)

Status last updated: 08/04/2021

View your pre-application

Pre-application approved: 08/02/2021

The above screenshot shows the Student Overview AFTER application has been submitted

Note: the above screenshot shows UNSUBMIT APP only because I am a super student (it does not say this on a student application)

If you need to make edits to your application, **your CR can UNSUBMIT your application**. The screenshot below shows the view from the Student Overview after your CR has unsubmitted your application.

Your application has been un-submitted and may be edited again.

Your Application
Continue application

View your pre-application

Pre-application approved: 08/02/2021

Progran

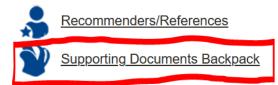
Research Transcript Steps in A Instructior FAQs

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Supporting Documents Backpack

Student Overview

Application Resources



Instructions for using this page:

- 1. Select the type of document you are uploading from the drop down list.
- 2. Enter a short description of the document (ex. Research Essay-John Smith)
- 3. Click the "Choose File" button to locate the document on your computer.
- 4. Click the "Upload" button to add the document to your Backpack storage.
- 5. Go to the Upload Supporting Documents page within the application and make sure the box is checked in the Attach column to 'attach' the document to your application.

Your uploaded documents appear below and can be viewed by clicking on the file name.

Removing a supporting document from your application:

If you have not submitted your application, you can remove any uploaded document by clicking on the trash can by the document you would like to remove.

Select One	-			ict your Goldwater Campus Representati	ve so they	y can un-
Essay	on befo	ore you can remove a	a file.			
Residence Card	ion	Description		File Name		
Select One	~			Browse No file selected.		Upload

File successfully saved.

Instructions for using this page:

- 1. Select the type of document you are uploading from the drop down list.
- 2. Enter a short description of the document (ex. Research Essay-John Smith)
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Removing a supporting document from your application:

If you have not submitted your application, you can remove any uploaded document by clicking on the trash can by the document you would like to remove.

If you have submitted your application, you must first contact your Goldwater Campus Representative so they can unsubmit your application before you can remove a file.

File Type / Description	Description	File Name	
Select One 🗸		Browse No file selected.	Upload
Essay	2022 Essay	2022_essay_l_zuhlsdorf_test.pdf	۵

Recommenders

Student Overview

Application Resources



After you submit your pre-application, here is what the Recommenders section looks like (you cannot make a change, **your Campus Representative must do so**).

ommenders		
Registration ID 879627	Return to Student Overview	<u>N</u> Log O
Your session will automat	ically time out at 2:28:54pm Central Time if nc or choosing a new page) will reset	action is taken. Any action (saving information this timer.
Recommenders		
Name *	Email *	Action Date
	kenny@sixgear.com	
Kenny Chesney		
Randy Rogers	randy@rogerslabs.com	
	randy@rogerslabs.com wade@bowenlabs.com	
Randy Rogers Wade Bowen		ed.

Making a change to the list of recommenders: Student applicants cannot make changes to the list of recommenders. Changes to the list must be made by the Campus Representative. For guidance on how to remove and replace a recommender, please see FAQ questions "How is a letter writer replaced?"