



GLOBAL GRANT SCHOLARSHIP CANDIDATE APPLICATION

This application may be used by clubs and districts to select global grant scholarship candidates. Scholar candidates should complete all sections of the application and return it to the sponsoring Rotary club or district.

PERSONAL INFORMATION

First name: Christina

Family name: Nielsen

Citizenship: United States

Date of birth: 09-05-1997

Gender: ☐ Male ☒ Female

CONTACT INFORMATION

Email address: nielsenc@email.sc.edu

Street address or P.O. N31 W23545 Woodstream Ct.

Box: _____

City: Pewaukee

Postal code: 53072

Country: United States

Primary telephone: 262-853-8105

Secondary telephone: N/A

LANGUAGE SKILLS

List all the languages you speak, including your native language:

Language	Written Proficiency	Spoken Proficiency
English	Native	Native

Spanish	Superior	Superior
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EMERGENCY CONTACT INFORMATION

First name: Kalli

Family name: Nielsen

Relationship: Sister

Email address: kallinielsen@gmail.com

Street address or P.O. Box: 4231 Reservoir Blvd.

City: Minneapolis

Postal code: 55421

Country: United States

Primary telephone: 262-853-3132

Secondary telephone: N/A

PRIOR EDUCATION

List the two educational institutions you have most recently attended.

Most recently attended:

Name of institution: University of South Carolina

Degree received May 2020
and Year: _____

Place of Columbia, South Carolina
study: _____

Field of study: Public Health

GPA: 4.00

Previously attended:

Name of institution: Universidad de Alicante

Degree NA
received: _____

Place of Alicante, Spain
study: _____

Field of study: Spanish Language and Culture

GPA: 4.00

SUMMARY AND OBJECTIVES

In 2-3 short sentences, tell us your objectives for this scholarship (program of study/degree sought, [Rotary area of focus](#), etc.).

My objective is to obtain a Masters in Epidemiology from the *Facultad de Salud Publica de la Universidad de Antioquia* in Medellin, Colombia. This program would allow me to network and work within multicultural teams while gaining skills essential to diagnosing and addressing population health problems.

In 200 words or less, please summarize your qualifications to receive this scholarship. (volunteer/work/academic experience, philosophy and perspective, etc.)

In May 2020 I will graduate with a Bachelor of Science in Public Health and a double minor in Spanish and Neuroscience. In my classwork I have learned pedagogy of public health program planning and planned a mock public health program. While on USC's "Global Health Maymester" in Costa Rica, I took an introductory course in epidemiology. Next year, I will complete a Capstone project where I address a Public Health issue in Columbia, S.C. Outside of class I have volunteered as a translator and interpreter at The Good Samaritan Clinic, working with the Latino population in Columbia, SC. I have worked on a funded epidemiological independent study on mental health in the Latino population of South Carolina and I also went on a medical mission trip to Nicaragua where I gained valuable clinical and public health skills while working in the small village of Ticuantepe. While studying abroad in Alicante, Spain, I volunteered at a children's shelter with a local non-profit dedicated to social inclusion of marginalized populations. These experiences solidified my belief that vulnerable communities can change their health outcomes when empowered with skills, knowledge, and sustainable resources; additionally, I think we all can learn from different cultures.

AREAS OF FOCUS

What is your area of focus?

- ☐ Peace and Conflict Prevention/Resolution
- ☒ Disease Prevention and Treatment
- ☐ Water and Sanitation
- ☐ Maternal and Child Health
- ☐ Basic Education and Literacy
- ☐ Economic and Community Development

Which goals of your selected area of focus will your scholarship activities support? Refer to the [Areas of Focus Policy Statements](#) for more information.

My scholarship activities best align with the “Disease Prevention and Treatment” goals of “supporting graduate degree work in an area related to disease prevention and treatment” and “prevention and control of noncommunicable disease.” Specifically, the scholarship will support graduate level study in Epidemiology, the science behind health and disease of populations which provide evidence to design effective intervention strategies in public health. Through this program I will be involved in research which will help me develop professional and academic skills related to disease prevention. Research I will be doing as part of the coursework will be used to help develop and implement “community education and intervention programs” as part of the service project.

How will you meet these goals?

I will achieve these goals by attending Universidad de Antioquia (UdeA) in Medellin, Colombia and earning a Master’s in Epidemiology. The coursework includes a research component and public health classes throughout all semesters. The public health classes and seminars will provide me with knowledge on how to create intervention programs while the more technical epidemiology classes will give me the skills to define the etiology and extent of mental health conditions and evaluate the effectiveness of current clinical and public health initiatives. Through working with faculty who are both physicians and epidemiologists for the research, I will gain a unique perspective of how public health, specifically epidemiology is involved in direct patient care as well as disease treatment and prevention.

Alongside this research I will work with my mentor from UdeA and the local Rotary Club in Medellin, which is close to UdeA, to implement a community project connecting my research to intervention strategies and community education. These interventions will address the needs experienced by the community and described by the data of my research. The details of this project will be worked out after initial research. It will have a potential focus on mental health - specifically among persons displaced due to violence or in rural communities where living conditions lead to a variety of negative health outcomes for both physical and mental health. These areas of focus were discussed with Dr. Jaime Gallo, professor and clinical doctor from the Epidemiology department of the Faculty of Public Health at UdeA whom I met through my current research mentor Dr. Myriam Torres.

SCHOLARSHIP INFORMATION

Provide the following information about the academic program you plan to attend:

Name of institution: Universidad de Antioquia

City: Medellin, Colombia

Language of instruction: Spanish

Website: <http://www.udea.edu.co>

Academic program: Magister en Epidemiología

Academic program start date: 02-02-2021

Academic program end date: 03-10-2022

Planned departure date: 01-10-2021

Planned return date: 04-10-2022

List the classes you plan to take and provide any relevant links to information about the program. Explain how the program and courses align with Rotary's goals in the selected area of focus and your future career plans.

General Epidemiology Coursework:

Semester 1 (20 Credit Hours): Public Health, Research I, Descriptive Statistics, Epidemiology I, Research Seminar I

Semester 2 (18 Credit Hours): Public Health II, Research II, Demography, Epidemiology II, Multivariate Statistics, Research Seminar II

Semester 3 (13 Credit Hours): Research III, Research Seminar III, Public Health Seminar, Epidemiological Surveillance, Elective I

Semester 4 (10 Credit Hours): Research IV, Research Seminar IV, Public Health Seminar II, Elective II

Link to Universidad de Antioquia website: <https://tinyurl.com/y3lwa5bn>

Epidemiology is the science that underlies all disease prevention and treatment. The quantitative data provided by surveys, interviews, focus groups, and physical exams informs policy and proper disease treatment. The data can include at risk populations or geographic areas, biological and environmental factors that contribute to disease, and even measures effectiveness of treatments or prevention strategies. From John Snow's mapping of Cholera in England which lead to major advances in our understanding of water borne diseases which many countries still suffer from to current chronic disease epidemics, epidemiology is the major force behind improvements in the prevention and treatment.

While completing master's coursework listed above, I will refine and develop skills that allow me to contribute valuable data and information to the health community. This data will help inform health programs and policy that will lead to sustainable change both during my time in Colombia and after I become a physician in the United States. With the skillset of an epidemiologist I will be able to interpret the data and show its significance to lawmakers and other physicians who may not understand at first glance. Taking electives specific to mental

health will aid in a unique and international perspective. Also, as I continue with my education to become a physician, I will be able to apply all the lessons learned in the coursework abroad to understand the complexities of each level of disease prevention and treatment globally and in the US.

Performing epidemiological mental health research in rural communities of a developing country, I will be able to apply many of the lessons I learn to the rural and impoverished areas of the United States. These lessons and skills I will have gained in Colombia will allow me to contribute knowledge to the current opioid and suicide epidemic as there is an association seen across nations between mental and physical health, economic status, and drug use and abuse.

How does your previous and current educational, professional, and/or volunteer experience align with Rotary's goals in the selected area of focus (500 words or less)?

After my first Spanish class and a Spanish immersion camp in the 6th grade I discovered my passion for international learning. As a freshman in high school I joined my school's Interact Club where I learned the foundations of being a responsible global citizen. My passion for learning and serving others was extended beyond my local community to the global community. Throughout my four years in high school, I developed my language, leadership, and service skills which led me to join *Amigos del Buen Samaritano* and volunteer at The Good Samaritan Clinic translating and helping with clerical tasks. Even more inspired after this experience I saved all the money I made from tutoring for USC's Student Success Center to go on a medical mission trip to Nicaragua.

On a more academically geared venture I applied for and received the Magellan Apprentice grant to do independent research in both an area of interest, mental health, and a population of interest, Latinos/Hispanics. Working with my mentor, Dr. Myriam Torres, I dipped my toes into the world of epidemiological research and have learned many valuable lessons since then. I have learned the importance of looking at data to help define and determine the needs of a community and the importance of each type of study I ran across in my research in guiding and informing future research. Everything I have learned through the research experience has aided in my success in other classes and vice versa. Engaging with the community I have been researching, it has been easy to make real life connections to the numbers I am seeing on paper and better understand the possible health disparity seen in my research.

During my sophomore year I continued to volunteer at the Good Samaritan Clinic and in the Spring of 2018 while studying abroad in Alicante, Spain I volunteered with a local non-profit DASYC serving at a children's shelter. This experience confirmed my interest in working in a service-oriented career to help communities have the best health outcomes whether that be from good primary education or specific interventions. Junior year I focused on a different venture as my class times did not allow me to volunteer at the Good Samaritan Clinic. I served on the executive board of St. Jude Up 'til Dawn, a collegiate group that raises funds and awareness for St. Jude Children's Research Hospital. This has helped me grow significantly in many professional skills such as communication, event planning, networking, and community engagement techniques that will help me implement intervention programs in the future.

Continuing global learning, during the May after my Junior year I studied epidemiology in Costa Rica on a Global Health Maymester engaging in cultural and academic excursions to better understand the changing needs of all healthcare systems. Altogether, my past three years have prepared me academically, professionally, and personally to not only study epidemiology abroad but one day practice medicine abroad as well.

What are your professional and/or academic plans immediately after the scholarship period (500 words or less)?

Immediately after the scholarship period I will return to the United States and attend medical school at a university that incorporates public health, international medicine, and service into their program or extracurriculars. One such school is the George Washington School of Medicine and Health Sciences (GW SMHS) in Washington D.C. Located in the heart of the nation's capital city there are many extracurricular programs for medical school students that focus on the importance of public health, epidemiology and health policy. One such opportunity is the Scholarly Concentration Program which allows students to study an area of health care outside of the clinical curriculum including Health Policy and Global Health. I hope to learn more about health policy while staying connected to grassroots movements and organizations like the National Association on Mental Illness (NAMI).

GW SMHS also has a strong emphasis on international medicine and service offering a Global Health Scholarly Concentration in which students gain international and multicultural perspectives through rotations and medical missions abroad whose locations include several locations in Costa Rica and Spain. No matter what school I attend I hope to get involved in the community serving vulnerable populations. GW SMHS has the GW Healing Clinic in which medical students can volunteer by helping to provide comprehensive primary care and social services regardless of insurance or ability to pay. Whatever school I attend I will find opportunities to serve the community and apply the technical epidemiology skills I gained while studying in Colombia.

How do your long-term professional goals align with Rotary's goals in the selected area of focus (500 words or less)?

Long term, I hope to serve as a physician, healthcare/public health policy advocate and influencer, and global citizen whose actions and research improve disease treatment and prevention, emphasizing the connection between mental and physical health and the economy, all over the world. Studying epidemiology in Colombia gives me many of the tools I will need to be successful in achieving these goals and make the most of my medical school experience. As mentioned previously, epidemiology is the science behind all disease treatment and prevention identifying etiology, determining extent of a disease, and evaluating interventions. The data provided by epidemiological studies is what policy makers like to see to understand the impact their funding would make and what ultimately leads to improved health outcomes. Studying epidemiology and relating it to mental health in a developing country like Colombia would allow me to better understand the connection between economic and social conditions and their influence on mental and physical health. This can be applied in my practice as a

physician serving any community, but especially the Latino or low-income communities. I will be a more effective influencer of public health and healthcare policy as I will be able to observe individual cases in my practice while performing larger scale research or working with other epidemiologists to make the best supported case for policy change.

One example of something healthcare providers and policy makers need to team up on is the opioid crisis America is facing. Epidemiologists play an important role in defining what factors are leading to this epidemic beyond over prescription of opioids. These factors include things such as economic and social development in rural America which all contribute to mental and physical health. This is just one possible epidemic which I will be able to research and then help create policy and community level interventions to help prevent and treat. My studies in Colombia will provide me a unique and global perspective that will go beyond that of the average physician making me an asset for sustainable change in the United States and globally. It will also allow me to be a more informed global physician making anytime spent abroad on medical missions or rotations even more valuable.

BUDGET

Select the local currency for your budget and enter the current rate of exchange to 1 U.S. dollar.

Local currency: Colombian Peso (COP) Exchange rate to 1 USD: 3,302.65 COP

Detail your proposed expenses. Note that the total budget must be equal to the total financing of your scholarship grant amount. Attach any documents, such as price sheets, bids or estimates, to support the expenses listed.

#	Description	Category	Local cost	Cost in USD
1:	Tuition & fees	Tuition	25,507,246.38COP	\$8,800.00
2:	Local housing	Accommodations	49,539,750.00COP	\$15,000.00
3:	Books	Supplies	5,614,505.00COP	\$1,700.00
4:	Food	Supplies	27,742,260.00COP	\$8,400.00
5:	Airfare	Travel	9,907,950.00COP	\$2,700.00
6:	Consular/visa fees	Travel	221,277.55COP	\$67.00
7:	Local transportation	Travel	3,137,517.50COP	\$950.00
8:	Mental and Physical Health Project	Service Project	36,329,150.00COP	\$11,000
9:				
10:				
11:				
12:				
Total budget			177,999,656.38COP	\$48,617

FINANCING

The scholarship amount is US \$48,617. You are personally responsible for all expenses in excess of the scholarship amount. Please list and describe your sources and sufficiency of addition funds that will cover the balance of your budget:

In addition to this form, applicants must also submit a photo, transcripts, and two letters of recommendation to their sponsoring club by April 1, 2019.

For USC on-campus information about the application process contact:

Jen Bess
Office of Fellowships and Scholar Programs
bessj@mailbox.sc.edu
DeSaussure 328
803-777-0958

Campus Advisors and Local Rotarians:

Louis Dessau (dessaul@moore.sc.edu)	Moore School of Business/Rotary Club of Five Points
Patrick Hickey (patrick.hickey@sc.edu)	Capstone Scholars/Nursing
Jim Morris (jim.morris@moore.sc.edu)	SC Council on Economic Education/Rotary Club of Columbia
Fred Myhrer (myhrer@sc.edu)	Physics & Astronomy/ Rotary Club of Forest Acres
Chris Myers (chris.myers@sc.edu)	Development/ Rotary Club of Columbia Capital
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