Initial Report Last Modified: 01/31/2018

1. Recommender's Name:

Text Response
Natalie Nelson

Statistic	Value
Total Responses	1

2. Recommender's Email Address:

Text Response
nnelson4@ncsu.edu

Statistic	Value
Total Responses	1

3. Applicant's name for which you are providing a recommendation:

Text Response
Lise Montefiore

Statistic	Value
Total Responses	1

4. How long have you known the applicant and under what circumstances have you become familiar with the applicant's academic abilities?

Text Response
I am Lise's PhD advisor. I first met Lise in August 2017 when she contacted me to inquire about research opportunities in my lab group. Lise had just started her PhD program in the Biological and Agricultural Engineering (BAE) Program at North Carolina State University with the support of a Provost Graduate Research Fellowship, a competitive award offered to exceptional first-year graduate students. During our early conversations, I was struck by Lise's sincere curiosity, shrewd questions, and quick-wittedness. After our early conversations in Fall 2017, Lise decided to join my group as a PhD student (to my delight!). We meet at least once per week to discuss her research progress, and she is also the TA for my "Applied Statistics for Environmental and Agricultural Data Analysis" undergraduate course. All of this is to say, I know Lise quite well and am very familiar with her academic abilities.

Statistic	Value
Total Responses	1

5. Please assess the applicant's ability to contribute to the Data Science for the Public Good Fellowship Program.

Text Response
I sincerely believe Lise is perfectly suited to positively contribute to this program. Lise has diligently and independently been teaching herself R since last Fall (she previously had no experience with R), and has used R to wrangle very large datasets (i.e., multi-model climate projections, land use scenarios, field observations, and socioeconomic data that span the entire Southeast US). Although she has made wonderful progress in learning R, she still has much to learn, particularly when it comes to going beyond data synthesis to apply analytics to extract useful information from data. Thus, when I say I believe Lise is perfectly positioned for this program, I mean to say that she has just enough knowledge of data science and background in statistical computation to make quick progress, but also has room for growth such that she would be challenged and excited by the DSPG curriculum. Additionally, Lise has very strong quantitative skills and the credentials to prove it. She has taken many math and statistics courses through her Water Resources Engineering BS and MS, and is presently taking courses that leverage math and stats (e.g., remote sensing and a critical transitions course that is essentially a time series analysis class). Importantly, although Lise is a classically-trained engineer, she is interested in developing strategies and solutions to address societal problems that far exceed the traditional scope of issues typical of engineering. As a result, Lise longs for more training in the social sciences, and is sincerely interested in interdisciplinary research. I was recently preparing a proposal with a colleague who is a qualitative researcher and outreach specialist, and Lise immediately offered to help with the proposal and participate in our ideation process; she wanted to gain more experience in interdisciplinary collaboration. This desire, coupled with her quantitative strengths and progress in computation, will make her an enthusiastic and productive participant in the DSPG. Lastly, Lise is an excellent and hard-working colleague and mentor. She is presently advising two of my undergraduate research assistants who are evaluating data collected from a survey of undergraduates who were asked about their perceptions of the importance of climate education. She works extremely well with these students, and is adept at understanding how to adapt her mentoring style to most effectively motivate each student (I'll be honest - she often gives me advice in this area!). Thus, you can count on Lise to be a great team player, an engaging colleague, and a mentor to other students in the program (e.g., postbac and MS students).

Statistic	Value
Total Responses	1

6. How would you describe the applicant's motivation and initiative in pursuing his/her academic and career goals?

Text Response
Lise is a highly motivated student. I would argue that one of the greatest testaments to her commitment to her academic and career goals is that she could have easily secured a lucrative job in the private sector. Lise has held internship positions with engineering firms that are reserved for only the best and brightest. It is widely known within the field of engineering that students who successfully apply for these internships have tremendous job prospects upon graduation. Unquestionably, Lise could have chosen to stay in the private sector, which would have likely resulted in her working fewer hours (relative to her current schedule) and receiving more pay. Instead, she chose to pursue a PhD because of her desire to further develop her analytic skills and capacity to work on projects that create positive change in the world. It is not uncommon for Lise to work a full day in the office, and then return to the office after dinner to continue with her studies and research. She understands the value of hard work. Furthermore, Lise often volunteers to help with work that I am leading because she wants to further her professional development. As an example, Lise has taken great initiative in helping me with my undergraduate Applied Stats course. She has created a lab exercise on her own volition, and repeatedly offered to create homework assignments or take on extra grading. You will not have to worry about Lise lacking drive.

Statistic	Value
Total Responses	1