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Dear Mr. and Mrs. MacDonald,

My name is David Urnes Johnson, and I am writing to express my gratitude for receiving support from the John R. MacDonald Memorial Fellowship. I am in my final year as a PhD student in mechanical engineering here at Stanford University and this support allows me to focus on writing my thesis and not worry about how to pay my bills. Thank you for enabling my success and allowing me to pursue my dreams.

My thesis is on carbon fuel cells, an energy conversion technology which has the potential to transform the energy landscape. Our carbon fuel cell scheme uses solid carbonaceous fuels such as coal and biomass directly in a solid oxide fuel cell and provides an efficient conversion of Earth-abundant fuels into electricity or hydrogen. In addition to providing an efficient energy conversion, this fuel cell technology automatically separates the resulting carbon dioxide (CO<sub>2</sub>) from the nitrogen in the air. Hence, it can easily be integrated with a CO<sub>2</sub> capture and storage system which will be a critical tool to limit our carbon emissions and its impact on the climate. I am grateful and appreciative of my opportunity to work on a project that inspires and motivates me, and which I think will really make a difference.

I always wanted to work on green technologies which have a positive impact on our environment and Stanford is a great place to do that. At Stanford, one finds large energy hubs such as the Global Climate Energy Project (GCEP). This was a major reason for why I came to Stanford. I am also fortunate that I get to work with my advisor Professor Reginald Mitchell who not only happens to work on fascinating and ground-breaking energy projects, but who also is a great person and a great mentor.

When I am not in laboratory running experiments or in my office running modeling simulations, I enjoy the extracurricular activities that Stanford has to offer, in particular soccer and rock climbing. I always participate in intramural (IM) soccer and when I have the chance, I like to spend my weekends climbing in Yosemite, Tahoe, or another of the scenic climbing destinations in California. The ability to combine a top-notch academic program with stunning nature experiences makes Stanford truly unique and something I am very thankful for.

Finally, I want to once again express my gratitude for your generosity and support from the John R. MacDonald Memorial Fellowship. Without the support from you and people like you, my life trajectory would not be the same. Thank you.

Sincerely,

*David U Johnson*

David Urnes Johnson

