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PROFESSIONAL OUTREACH STRATEGY

As of November 2014 I have already done 19 PolarTREC-related presentations before all types of audiences, including a number of events before fellow teachers. Based on these already successful events I have devised the following strategy geared specifically for educators.

Phase 1: School Engagement

March 2015 to April 2015

I currently work as STEM (Science, Technology, Engineering and Mathematics) educator with G Works, Inc. for the Puerto Rico Department of Education, supporting three schools in Juncos, Puerto Rico, under a grant from the 21st Century Community Learning Centers federal program.

As a STEM educator I have designed and delivered a newly-offered astronomy learning program geared to both primary and secondary-level students. Course is half lecture and half workshop (8 to 16 contact hours per student) with an average yearly audience of 300. Of particular interest here is the fact that I have already conducted a number of supplementary sessions geared specifically for teachers (4 to 8 contact hours per educator).

My plan for the supplementary sessions in Spring 2015 would be to share my PolarTREC experience with fellow teachers and school administrators. An estimated total of 20 teachers would benefit from these 4-to-8-hour sessions, which would be conducted at three secondary-level public schools in Juncos, Puerto Rico, namely: Alfonso Díaz-Lebrón Middle School, Pedro Rivera-Molina Elementary and Middle School, and José Collazo-Colón. I know I will be supported in this respect by my superiors, as a primary goal of G Works has always been to engage teachers and to provide them with educational opportunities in the STEM arena.

Phase 2: NGO Engagement

April 2015 to December 2015

As a former Vice President for the Puerto Rico Science Teachers Association (PRSTA) and a bona fide NSTA member, I am in a visible, influential position to share my PolarTREC experience with other STEM educators.

I have perceived a need to involve Puerto Rican educators with real, meaningful research projects in the STEM arena. I myself, as most STEM educators in the island—and because of

inherent limitations within the local educational system—had never, before my involvement with PolarTREC, had the chance to connect with researchers and do real science. Obviously this needs to change, and I see myself—together with PRSTA—as an agent of change in this respect.

There is a high likelihood for lectures to be offered through both organizations, either live during conventions or using webcast technology via NSTA Learning Center (<http://learningcenter.nsta.org/>).

Phase 4: Web-based presentations

May 2015 to December 2015

I have already in the past used G Works' Webex platform <http://gworks.webex.com/> to provide PolarTREC-IceCube related webinars and plan to do the same again at least once around May 2015 (which is yearly webinar season for G Works). Though nominally free and open to all interested parties, these 90-minute webinars are geared specifically for STEM educators.

The idea here would be to bring teachers not only the facts of polar science, but also the story of my South Pole expedition—a unique, personal experience with an authentic, original voice that will be both captivating and memorable. People—and teachers particularly—like listening to stories, and they remember them more vividly than just bare concepts. As I was recently told by a college professor, me sharing my South Pole experience with fellow teachers would bring a strong inspirational element that would lead them to become involved with professional development projects such as PolarTREC.

Furthermore, my involvement with the CienciaPR online community for Puerto Rican science educators and researchers—which from its beginnings has manifested a strong outreach mentality—will open many important venues to share my PolarTREC experience with teachers and informal educators.