

# NASA International Year of Astronomy Student Ambassador

## How to Spread NASA's Astronomical Discoveries

I'm a junior student of microbiology doing undergraduate research in the field of astrobiology. This field allows me to combine my formal education in microbiology with my personal interest in astronomy. Outside of the university I help high school students with their classes and participate in many youngsters church activities. I'm also a musician and play various instruments in a local tropical music band. I play the guitar and some tropical percussion instruments. I live and study in Arecibo, the third most populated city in Puerto Rico after Ponce and San Juan. The *Arecibo Observatory*, where the first extrasolar planets were detected around a pulsar, is not far from my university. I have some special ideas to spread the NASA's excitement to the people of my country in a similar style of science cafés. A science café is a proven international strategy to present scientific themes to people in non-traditional places. Some of these places are bars, pubs, restaurants, ect. In United States there are more than forty science cafés all over the nation, but none dedicated to astrobiology. Therefore, I propose to create the first *Astrobiology Café* here in Puerto Rico and elsewhere. Why astrobiology? Because it is a crowd-attracting multidisciplinary field where NASA is searching for answers to the big questions. The search for extrasolar planets also started here in my hometown with the radiotelescope. Why a café? Because the informal environment of a café appeals to many individuals and ages. Puerto Rico has a tradition of café's and also produces one of the best coffees in the world.

My plan to start the first *Astrobiology Café* is to give a monthly edutainment presentation of a least one-hour in various locations around Arecibo during the IYA 2009. The idea is to take one topic from the *NASA's Astrobiology Institute Roadmap* an invite one or more local scientist, professor or engineer to give a short (15 minutes) related presentation, also to some good coffee. I will take 15 minutes to present educational clips from the *NASA Astrobiology Institute* and other NASA sites with a voice-over Spanish narration. Then a 15 minute break for some coffee/snacks and informal QA will be taken. I will combine the science with my music in my presentations. The last part is a 15 minutes musical expression with lyrics created by me in tone with the topic. I want to video record each presentation for posting in the internet (youtube). Promotion for the *Astrobiology Café* will be in the website and mailing lists of *Puerto Rico's IYA2009*, the *Puerto Rico Space Grant Consortium*, the *University of Puerto Rico* and the *Puerto Rico's Department of Education*. A press release will be used to promote the activity to the local media including newspapers and radio. A flashy poster will advertise the activities in other locations including the café itself. Although the presentations in the traditional science café are done in a local café, I want to expand the *Astrobiology Café* to also include in-situ experiences. This means to have a snacks and coffee session under the stars at our university observatory, in the visitors area of the *Arecibo Observatory*, in a high school classroom, etc. Although the budget is limited, I'm confident my university can support me with some catering for the in-situ activities. A portable screen projector will be considered, but I have the audio equipment.

I will target audiences at all levels with the *Astrobiology Café*. First, I can directly impact over eighty youngsters of my church and the churches in my region between fourteen to twenty five years old. Second, I can directly impact the over sixty high school students for which I'm a part time math teacher. Presenting NASA's discoveries to these groups might motivate them to move to science and technology careers. This may be especially true because they are in the stage of taking careers decisions in their lives and they are planning to go to the university. Third, the over three thousand undergraduate students at my university which I will motivate to go to the *Astrobiology Cafés* with internet viral posts. Students will be more motivated to see the posted videos if they know that they are from a student of the same university. Fourth, the many habitual or just plain curious people that will go to the cafés from all ages. In conclusion, the *Astrobiology Cafés* will provide a new edutainment experience in the Arecibo region that I hope goes viral and spread through Puerto Rico.

Norberto González  
UPR Arecibo  
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