2024 GEM Bio Financial Assistance Application

**- Justification for financial assistance: Please explain your reason(s) for applying for financial assistance and/or explain why attending the conference in person is prohibitive.**

As an international student from Argentina, attending the GEM Workshop is an incredible opportunity, but it also presents significant financial challenges. Argentina's current economic instability, characterized by high inflation rates and currency devaluation, has greatly limited my family's ability to financially support my education in the United States.

I have been working diligently to secure internships and research opportunities to help fund my studies, but these efforts fall short of covering the substantial costs associated with attending an international conference like GEM. The expenses, including international travel, accommodation, and registration fees, are considerably higher than what I can afford on my own, especially given the workshop's location in Vienna, Austria.

The GEM Workshop offers a unique platform for me to engage with the global scientific community, present my research, and gain valuable insights that are crucial for my academic and professional growth. However, without financial assistance, the cost of attendance is prohibitive, and I risk missing out on this transformative opportunity that closely aligns with my long-term goals.

Receiving financial support would be a game-changer, allowing me to fully immerse myself in the conference experience without the constant worry of financial strain. It would enable me to focus on maximizing the learning and networking opportunities the workshop provides, rather than being burdened by the financial repercussions.

**- Motivation statement: Please give specific examples of how attending the workshop will advance your professional career.**

Attending the GEM Workshop would be a transformative experience for me as a young researcher. My work on "Multi-Objective Generative AI for Designing Novel Brain-Targeting Small Molecules" represents my first substantial academic research experience, and it has ignited a strong interest in potentially pursuing a PhD in the future. This project has opened my eyes to the incredible potential of combining computational methods with biology to make a meaningful impact on people's lives.

By presenting my research at such a prestigious international conference, I hope to receive invaluable feedback and insights from experts in the field. Their input could significantly refine my approach and elevate the quality of my future research endeavors. Moreover, the workshop provides a unique opportunity to connect with other passionate individuals who share my enthusiasm for using computational tools to advance biological research and ultimately improve patient outcomes.

Many of the invited speakers and panelists have done, or are doing, things that I am extremely interested in, and that I want to do in the future. I am interested in meeting with Rohit Singh, and discussing how he found his computational biology skills useful for finance, and why he decided to start a company for predicting default rates. I want to talk to Neolia Ferruz, and learn how her lab is using generative models for designing proteins, which could potentially be very applicable to the use of diffusion models for de novo drug design. I would also like to connect with Gevorg Grigoryan, and hear the story of how he spun out his research into a successful startup. Finally, I want to meet with Alex Rives and understand how he started two companies that went public before he even got his PhD. I believe everyone at the conference has a different story to tell, with a different learning to be made, and I would like to tell mine.

The discussions, sessions, and networking opportunities at the conference will be incredibly valuable for a developing researcher like me. It is an ideal place to explore my growing interest in research and better understand whether a PhD aligns with my long-term goals. This experience could be a defining moment in my academic journey, providing me with the clarity and direction I need at this early but critical stage.

Above all, the GEM Workshop will allow me to immerse myself in a community of like-minded individuals who share my goals and aspirations. The connections and collaborations I establish there have the potential to shape my entire future in this field, and I am excited about the prospect of being part of such a vibrant and impactful community.

**- Diversity statement: Please give specific examples of how you will contribute to GEM’s commitment to DEI.**

I bring a unique perspective shaped by my cultural background and experiences navigating the challenges of pursuing an education in a field where Hispanic representation remains low. Growing up in Argentina, I witnessed firsthand the transformative power of technology and the importance of diversity in driving innovation that benefits society as a whole.

When I say I am from Argentina, many assume I must love soccer, asados, and alfajores, and instinctively greet everyone with a hug. Indeed, I do, but what many probably don't know is that since I was thirteen, I have known the exchange rate between pesos and dollars because in Argentina, your savings consistently lose value due to chronic inflation. Amid such instability, the best-laid plans can easily come undone, even if you work hard. This very situation, however, also makes us appreciate the urgency of addressing problems and makes us experts at thinking outside the box to find cheaper and more practical solutions so that everyone can benefit from them.

Attending the GEM workshop will allow me to contribute to the diversity of voices and ideas present at the conference. I am committed to actively participating in discussions, asking thought-provoking questions, and sharing insights from my own research journey. By bringing my perspective as a Latin American researcher to the table, I hope to enrich the conversations and promote a more inclusive dialogue that considers the global impact of generative ML in biology.

Furthermore, I have a strong track record of advocating for diversity and inclusion in STEM. As the President of the Harvard SEAS Chapter of the Society of Professional Hispanic Engineers (SHPE), I spearheaded initiatives to promote STEM among Hispanic students and connect them with role models in industry and academia. I am passionate about mentoring and inspiring the next generation of diverse leaders in STEM.

Attending the GEM workshop will provide me with a platform to continue these efforts. I plan to actively engage with underrepresented attendees, fostering a sense of community and belonging. I will share my experiences and strategies for overcoming barriers as a minority in STEM, with the aim of empowering others to pursue their dreams and make their mark in this field.

Moreover, I am committed to bringing the knowledge and insights gained from the workshop back to my own communities. I will leverage my leadership roles in SHPE and other diversity-focused organizations to disseminate the latest advancements in generative ML and biology to a broader audience. By serving as a bridge between the cutting-edge research presented at GEM and the diverse communities I am part of, I aim to inspire and enable more underrepresented individuals to pursue careers at the intersection of computation and biology.

I look forward to contributing this perspective as I advance my knowledge and develop innovative ideas with my new peers in graduate classes. I am eager to learn from their experiences and contribute to their research efforts, bringing the unique insights I have gained from growing up in Argentina and navigating the challenges of being a minority in STEM.