

Dear PEGG,

I am writing to express my sincere gratitude for the honor of receiving the PEGG 2025 James E. Roberts award for my project, "Which Truss Bracing is Best for Buildings and Bridges". This was my first year participating in the LA County Science Fair, so receiving this honor was a wonderful surprise, and I am truly grateful. My project investigated which bracing type most greatly increased the weight bearing capacity of a structure and involved hand building six 6" balsa wood cubes each with a different bracing type. The cubes were then loaded with increasing weight until failure. I am most grateful to have been able to present my findings, learn from this experience, and be recognized with this award!

Moving forward, I am particularly interested in exploring deeper into the field of structural engineering in order to take my project to another level involving testing bracing types against both vertical loads and earthquakes, as well as comparing the cost and material efficiency of each bracing type in relation to the results they yield. I hope to continue this research and participate in more science fairs as I continue my academic journey into high school.

Thank you again for this honor and your support.

Sincerely,

Austin Ludwig

8th Grade, George Ellery Hale Charter Academy

April 5, 2025