**Statement of Contribution to Diversity, Equity, and Inclusion**

**Ira Wolfson**

**For the first part of my life, I lived in the beautiful albeit sheltered and largely homogenous kibbutz of `Degania B’ in Israel. At the age of twelve, my parents decided to leave the kibbutz, and we relocated to a small town in Southern Galilee. One of the most significant advantages of this move was the high school I attended, the “Kadoori Agricultural School”, which served the surrounding population. This institution accommodated three religious’ groups: Jewish, Christian, and Muslim, with diverse cultural identities such as Circassian, Arabian, and Russian immigrants. By the end of our first year of high school, we were no longer strangers but had become friends.**

**As a teenager, I participated in an excellence program promoting love of the environment. In this capacity, I would provide guided tours with lectures across Israel’s nature reserves with groups of students. Out of respect for the “insider’s view,” I made it a point to include a local guide who could contribute their unique perspective on the history and culture-specific to the region. I came to believe that diversity was a blessing that has the potential to broaden horizons and promote mutual respect and understanding. In a conflict-stricken reality, I undertook intensive Arabic courses, hoping to bridge harsh language and cultural barriers.**

**Physics as a Driver for Change**

**As I progressed in my academic studies, I realized I could offer more talent to the field of science. Without taking this step, I would have not been presented with the same opportunities. During my graduate years, while studying towards my M.Sc. and Ph.D., I first participated in and later led the “Physics for a Future” program in Yeruham. At the time, Yeruham was still a struggling peripheral town. Only a third of the local population had obtained a high school diploma or a more advanced education, with the national high school completion rate being more than 70%. A contributing factor to the educational crisis was the physical isolation of Yeruham. Thus, with low levels of education and local factories shutting down, 33% of the population was located beneath the poverty line. Combining these factors, the average adolescent lacked opportunities for positive stimulation and was unlikely to break the poverty cycle. Physics for the Future aimed to tip these scales, providing a more favourable outcome.**

**The program targeted high school students who would not initially be driven to pursue such a demanding matriculation subject area. We wanted to provide them with the experience of success and promote self-efficacy. Thus, these students were to gain a sense of self-worth while formally being recognized and receiving valuable accreditation. In turn, these youths would gain social mobility, serve as role models and initiate a `cascade of success’. Yeruham placed a special emphasis on getting talented girls into physics and ensured to have female role models as part of the scientific staff.**

**I was the academic manager of the “Physics for a Future” program for two years, taking responsibility for the successful matriculation of over 80 students. With a high grade in physics, the door to a college degree in STEM would be open to them. I knew the stakes were high as all of these students were to be first-generation academic degree holders.**

**These students were going to be exposed to academia and international scientific collaborations, and it was my task to prepare them. For this reason, I led the entire class of 2018 on a scientific trip to CERN. To facilitate this process, I created a unique curriculum for a group of high school students to study particle physics at an introductory level. By just seeing the magnificent work of CERN I believed it would broaden their horizons and change their self-perception forever.**

**I am glad to report that the project was a huge success. An overwhelming majority of the students received their high school diplomas with incredibly high grades in physics. This allowed them to later pursue an academic degree, usually in STEM or STEM-adjacent fields.**

**For instance, these beautiful and exciting projects included work studying the formation of sand dunes by simulating sand desert conditions using an aquarium and vibration plate. A selection of my students won national prizes for their projects. Ultimately, Yeruham’s reputation was changing, thanks to these brilliant, hard-working, determined, and inspiring students.**

**Science Communication as a Mission**

**Throughout my period as a graduate student, I was and still am engaged in various aspects of science communication. I strongly believe in the equalizing force of education, specifically scientific literacy. It has been my experience that many of the scientists in Israel are members of a similar social-economical and ethnic background. However, I believe that no one group holds a mandate over the truth or the privilege of higher education. I firmly believe we should encourage this slowly changing state of affairs. My primary contribution to this is by supporting the culture of science literacy. In the past, I created a blog dedicated to explaining complex physics concepts in laypeople’s terms. Recently this endeavor has changed form and I am proud to say it resulted in my becoming a member of the `Mada Gadol BaKtana’ (Little Big Science) – a volunteer-based organization dedicated to promoting scientific literacy.**