Year 1 - The Seeds of Change

Last year, to great reception, SRC announced its new Broadening Participation Pledge to “grow our student base, establish a balanced mix of bachelor’s, master’s, and Ph.D.-level initiatives, and create a more diverse and inclusive community.”

Today, I am writing to SRC’s Board of Directors and the 8 signed supporters of the Pledge, to illustrate the progress against our stated goals and to highlight our first big win, one that will positively impact our workforce starting in 2023.

First, we’ve updated our SRC Scholar population table [here] to show, in the aggregate, where we stand at the end of 2021:

- Our total scholar count is down (-16%) from 1507 in 2020 to 1263 in 2021. We attribute this to 3 factors: [1 = a positive] we celebrated a larger than average wave of graduations by the end of 2021, as many scholars’ studies were delayed by the pandemic, coupled with [2,3 = headwinds] inflationary pressures and rising costs at all education levels, year-over-year, against a flat SRC annual budget for research and workforce development.
  - We observed a noticeable rise (+11%) of SRC scholars who did not report as male or female, with 20% in 2020, moving higher to 31% in 2021. We are working to understand the nature of this change so that we are creating a supportive and inclusive environment for all.
  - All other categories remained unchanged when comparing 2021 to our baseline year, 2020.
  - In short, our R&D scholar community looked similar in composition from 2020 to 2021, with fewer SRC Scholars. This was driven by a large bubble of graduations coupled with the rising costs for new scholars at all education levels.

Our first key win in support of the Pledge was announced in January 2022 with a new NSF partnership. In a five-year agreement, NSF and SRC will jointly support awards through the NSF Research Experiences for Undergraduates (REU) program to establish REU sites, or cohorts, on semiconductor-related topics. The joint program will emphasize US citizens, women, and non-majority populations. Historically, it is one of the most effective programs at moving undergraduates into graduate studies. As illustrated in Figure 1, the $9.9M, 5-year plan calls for the participation of approximately 630 SRC Scholars across 24 semiconductor cohorts during the summers of 2023-2027.
Fig. 1: The $9.9M NSF-SRC REU Program, a part of the NST++ initiative, will see 3 classes of 8 cohorts each fight to move approximately 630 undergraduate students into graduate studies in semiconductor-related fields.

Throughout 2022, we will continue to integrate the Pledge into our planned solicitations, reviews, and selection mechanics, with sizeable opportunities related to the announced JUMP 2.0 innovation centers as well as annual solicitations in 6 of our 8 GRC research programs.

In addition to these ongoing efforts, there are other opportunities for SRC to grow and become more inclusive as governments across the world look to accelerate semiconductor R&D and its associated workforce development. Working with the SRC Board of Directors, SRC is closely following the U.S.’s CHIPS ACT legislation to understand and fight for government incentives that can amplify our current workforce development pipeline.

Should anyone have any questions about how to get involved in SRC, have ideas that help us make progress against our ambitious Broadening Participation Pledge goals, or wish to sign on to the Pledge, please contact us at pledge@src.org. We would love to connect and grow together.

Finally, all of us at SRC would like to thank the official signatories of this important Pledge and mission, including HR leaders at Micron, ARM, SK hynix, Siemens EDA, Analog Devices, Intel, SIA, and the National GEM Consortium. We appreciate your support in strengthening the important human side of global semiconductor technology and innovation.

Dr. Todd Younkin
President and CEO, SRC