



Monday, April 3, 2023

## ***Year 2 – Slow Yet Visible Improvement***

Two years ago, I announced SRC's 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.”

So, where does SRC stand, today? And where are we going in 2023?

To see where we stand in the aggregate at the end of 2022, we've updated our SRC Scholar population table, at [www.src.org/about/broadening-participation/](http://www.src.org/about/broadening-participation/):

- We continue to observe an alarming decrease in our total Scholar count from 1507 in 2020 to 1173 in 2022 (-22%). We attribute the decrease to two primary factors. First, we continue to see rising costs in semiconductor R&D and education that are winning out over SRC's flat annual budget (YoY). Second, after five successful years, two of our larger programs (JUMP 1.0 and nCORE) have reached their planned programmatic end — those Scholars are graduating and now entering the workforce. Thankfully, as reported in last year's Pledge update, [JUMP 2.0 with DARPA](#) and the accompanying [SRC-NSF REU](#) initiative, **both starting in 2023**, are significant and slightly larger investments that will backfill many of these losses and slowly increase the number of undergraduates participating in SRC's community. Unfortunately, these latest programs really only represent the long-standing “status quo,” and will not allow SRC to grow its student base by  $\geq 5x$  per the stated goal of this Pledge. In time, I believe the U.S. CHIPS ACT legislation, passed on August 9, 2022, will play an important role in our envisioned growth and help SRC play a key part in addressing the forthcoming [semiconductor workforce crisis](#).
- We continue to observe a significant rise in the SRC Scholars who did not report as male or female, with 20% in 2020 moving much higher to 47% in 2022 (+27%). We have given Scholars more flexibility in recording their personal profiles since introducing our Pledge, especially with regards to gender. We are pleased that Scholars are taking advantage of this increased freedom. However, measuring our progress and/or setbacks in this critical DEI category has become more challenging. While I do not believe the gender makeup of the SRC community has significantly changed since 2020, we will keep working to create a supportive and inclusive environment for all. As you will also note below, we have introduced preferred pronouns starting in 2023, and have early indications that our Scholars are willing and interested in both providing and using that information.



- When comparing 2022 to 2020 as our baseline year, all other categories remain unchanged (%). This includes the composition of our education pipeline (BS >> MS >> PhD), the ethnic makeup of our R&D community, and our level of support for both outstanding US and International SRC Scholars.

Where we have made the most progress over the last year is *internal to SRC* and to our business of selecting and managing our R&D and WFD programs. A few select highlights from 2022 include:

- We have incorporated SRC's Broadening Participation Pledge into all SRC program solicitations, including those used in 2022 for JUMP 2.0 and GRC awards that will commence in 2023. In fact, three of the seven awarded JUMP 2.0 technology Centers have female Directors (at [Cornell](#), [Columbia](#), and [UC/San Diego](#)). Plus, all seven of the selected JUMP 2.0 Centers have set individual Broadening Participation goals that we will help them execute throughout the 2023-2027 timeframe.
- TECHCON, SRC's Scholar Showcase and Career Fair (called "Career Connections") reached unprecedented levels of inclusivity, with undergraduate and graduate students from SRC's full technology portfolio attending the event. Notably, 53% of the presenting Scholars were women and from underrepresented minority groups (URM). The atmosphere was technical, welcoming, and balanced and the feedback we received from attending Scholars has been remarkable! See this short highlight video, [TECHCON-2022](#). We look forward to carrying forward this new tradition that balances both scientific excellence *and* inclusivity at TECHCON-2023.
- All SRC employees now receive regular and formal training on Diversity, Equity, and Inclusion (DEI), with 2022 having emphasis on "Incorporating Generational Differences in the Workplace." In 2023, we will be focusing on other sub-topics, including "Engaging in Difficult Conversations," "Microaggressions & Unconscious Bias," and "Becoming An Ally." If SRC is not able to lead by example, we will not create the kind of community that this Pledge envisions.
- Finally, when we onboard SRC Research Scholars, we request but do not require that they provide several pieces of sensitive personal information. In recent years, our Scholars have reported that the historical options available to select from did not correctly represent them. As a result, we have modified our categories, as shown in the table below, to be more representative of the Scholars filling out the forms and more inclusive. Starting in 2023, this will modify how the data is both securely and privately collected and used.



2022 and Earlier	Starting in 2023
<b>Ethnicity Categories</b> <ul style="list-style-type: none"> <li>American Indian</li> <li>Asian</li> <li>Black</li> <li>Caucasian</li> <li>Hispanic</li> <li>Middle Eastern</li> <li>Pacific Islander</li> <li>Other</li> </ul>	<b>New Ethnicity Categories</b> <ul style="list-style-type: none"> <li>Native American or Indigenous Peoples</li> <li>Asian</li> <li>Black</li> <li>White</li> <li>Latinx or Hispanic</li> <li>Middle Eastern</li> <li>Hawaiian or Pacific Islander</li> <li>Other</li> <li>Two or More</li> </ul>
<b>Gender</b> <ul style="list-style-type: none"> <li>Male, Female, Other, Not Reported</li> </ul>	<b>New Gender Option</b> <ul style="list-style-type: none"> <li>Male, Female, Other, Not Reported</li> <li>Preferred Pronouns</li> </ul>

We 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 helping us with your best known methods and feedback so that we can strengthen this important human side of our global semiconductor technology agenda.

Should you have questions about how to get involved in SRC, have ideas that help us make progress against these ambitious Broadening Participation Pledge goals, or wish to sign our Pledge, please contact us at [pledge@src.org](mailto:pledge@src.org). We would love to connect and grow with you.

Working with the SRC Board of Directors, SRC will continue to closely follow the U.S.'s CHIPS ACT legislation to understand and secure government incentives that can amplify our current workforce development pipeline and goals stated herein.

Dr. Todd Younkin  
President and CEO, SRC