

Diversity and Inclusion Strategic Plan

In the process of solving water treatment challenges in a way that is innovative and sustainable over time, NEWT has not only the opportunity, but also the obligation to broaden participation to include those who are from underrepresented populations to be engaged as insiders in attacking this problem at all levels of

education and research. To that end, NEWT will help all individuals fully meet their potential in a diverse and inclusive environment that values uniqueness, enhances belongingness, and recognizes that diversity is key to creativity and resiliency. Ms. Theresa Chatman, Director of Diversity and Inclusion for Research Grants, was hired in a 0.25 FTE position in July of 2018 to lead NEWT's diversity and inclusion strategic planning and implementation goals and serves as Associate Diversity Director for Recruitment and Engagement for NEWT. Dr. Roland B. Smith, Jr., Associate Provost, Office of Diversity and Inclusion, serves as NEWT's Diversity Director and works closely with NEWT's Inclusion and Oversight Board (IOB). Our goal is to enrich and maintain a culture of inclusive excellence by acknowledging, educating, appreciating, and nurturing diversity, uniqueness and belongingness to minimize bias and maximize the effectiveness of the NEWT enterprise.

NEWT shall intensify efforts to create and foster diverse, high-performing research teams, utilizing data-driven approaches and optimizing policies, processes, and programs to drive inclusive diversity efforts and accomplish agencies' missions.

To share best practices and provide more collaborative opportunities, NEWT's diversity team will be exploring ways to form more diversity and inclusive alliances with other ERCs across the country, including the Center for Directed Multiscale Assembly of Cellular Metamaterials with Nanoscale Precision (CELL-MET), the Precise Advanced Technologies and Health Systems for Underserved Populations (PATHS-UP), the Center for Bio-mediated and Bio-inspired Geotechnics (CBBG), the Center for Innovative and Strategic Transformation for Alkane Resources (CISTAR), and others.

NEWT will use and expand relationships with researchers and organizations that focus on groups who are underrepresented in science, technology, engineering, and math (STEM) fields. Recruitment and retention efforts build on the successes of inclusive research-based models such as Alliances for Graduate Education (AGEP), the National GEM Consortium, the Leadership Alliance, and the Mellon Mays Undergraduate Fellowship (MMUF) Program. Key elements of these efforts include: (1) targeted recruitment and student-faculty pairing; (2) high-quality research experiences; (3) student-centered mentoring; (4) career exposure and guidance; and (5) a culture of inclusion in all areas of NEWT.

To build this culture of excellence in inclusion, NEWT created an IOB comprising constituents from all participating universities to ensure NEWT's compliance with the ERC cooperative agreement. Refer to **Table ISP.B** below for its members.

Table ISP.B. Members of the NEWT Inclusion Oversight Board

Institution	Members
Arizona State University	Dr. Eduardo Pagán, Associate Dean & Professor of History, (Vice Chair Year 2) Dr. Terry Alford, Graduate Program Chair & Professor of Materials Science & Engineering
Rice University	Dr. Roland B. Smith, Jr., (IOB Past Chair), Associate Provost, Office of Diversity and Inclusion, and Adjunct Professor of Sociology Ms. Theresa Chatman (IOB Chair, Vice Chair year 1), Director of Recruitment & Engagement, Director of Diversity and Inclusion for Research Grants
University of Texas El Paso	Ms. Sandy Vasquez, Assistant Vice President for Equal Opportunity & Compliance Services (Vice Chair Year 4)
Yale University	Dr. Sarah Miller, Assistant Director of Science and Engineering

Our strategic plan for promoting a culture of inclusion includes the learning and sharing of best practices with ERC diversity directors across the country and enlisting the assistance of the NEWT leadership and our Deans Council to emphasize the importance of inclusiveness within NEWT’s education programs, innovation ecosystems, and research thrusts. These activities will be cross-cutting among partner institutions. These activities and their evaluation methodologies will include NEWT’s high school, undergraduate, graduate, postdoc, and K-12 educator participants to ensure they feel they are a part of NEWT’s diverse community as well.

Objective 1: The NEWT Center will develop, promote, and sustain a culture of inclusion through a series of efforts that allow all NEWT participants to feel welcomed, be acknowledged, feel safe, and succeed.

Strategy 1.1: NEWT will develop and implement diversity and inclusion professional development content for all NEWT Center participants through online and in-person diversity trainings (e.g., [diversity and inclusion case studies](#)).

Strategy 1.2: NEWT will have mandatory diversity and inclusion trainings as a component of all orientations for new NEWT Center participants, including the REU, RET, and NEET program participants.

Strategy 1.3: NEWT leaders will utilize a wide range of communication strategies and networking tools that both encourage participation in and demonstrate their support for these diversity and inclusion initiatives, including periodic NEWT Center newsletters.

Strategy 1.4: NEWT will collaborate with AccessERC on the inclusion of people with disabilities within the diversity and inclusion trainings.

Strategy 1.5: NEWT will collaborate with ASU's SafeZone facilitators on the inclusion of members of the LGBTQ communities within the diversity and inclusion trainings.

Rationale: Of particular concern for all ERCs is the continued underrepresentation of people who identify themselves as African Americans, Hispanics, Native Americans, Pacific Islanders, and women, the challenge of recruiting outstanding individuals across multiple generations into science and engineering to prepare for anticipated retirements of current scientists, the continued difficulty in recruiting minorities and women to fill STEM designated positions, and the continued difficulty in recruiting minorities and women to eventually fill senior positions within all ERCs. One critical driver of engagement is a strong inclusive culture founded upon the emphasis of inclusive behaviors.

Anticipated outcome: The diversity, education, and evaluation teams worked together to create evaluative methods to measure the effectiveness of our diversity efforts. Included in more detail within our logic model is the layout of our evaluation plans, and our anticipated outcome is to see an increase in the number of NEWT members who participate in NEWT's diversity and inclusion programming.

Objective 2: The NEWT Center will recruit, support, and retain a diverse cadre of faculty and postdocs.

Strategy 2.1: We will procure feedback annually from NEWT faculty to determine personnel needs and hiring opportunities.

Strategy 2.2: NEWT leaders will provide resources and support to identify and address barriers that inhibit inclusive diversity efforts.

Strategy 2.3: We will collaborate with all NEWT partner institutions to identify and build upon current faculty and postdoc diversity recruitment efforts for help with identifying diverse candidates for faculty and postdoc positions.

Strategy 2.4: NEWT leaders will work with the Deans Council to create incentives to attract diverse faculty and postdocs to all partner NEWT institutions.

Strategy 2.5: In conjunction with the Deans Council, NEWT leaders will develop mechanisms for advance notification of faculty search postings and closings at all four NEWT institutions.

Rationale: According to Ricky and D'Andrea Thomas in *Leaders Leading the Way* (2017), the engagement of leaders in this way is the single most effective method to successfully accomplish inclusive diversity efforts. Leaders are critical to inclusive diversity efforts because they can direct the necessary attention and resources toward inclusive diversity programs and policies. Leaders can promote progress by communicating the importance of inclusive diversity by speaking, modeling, and accounting for it.

Anticipated outcome: The diversity, education, and evaluation teams worked together to create evaluative methods to measure the effectiveness of our diversity efforts. Included in more detail within our logic model is the layout of our evaluation plan, and our anticipated outcome is to see an increase in the number of URM and women faculty and postdocs within the NEWT enterprise.

Objective 3: The NEWT Center will recruit, support, and retain a diverse cadre of researchers (high school, undergraduate, and graduate).

Strategy 3.1: In collaboration with the education team, we will procure feedback annually from NEWT faculty to determine their researcher needs.

Strategy 3.2: NEWT leaders will collaborate to identify resources that can be committed towards diverse student candidates.

Strategy 3.3: NEWT will build relationships with new institutions that produce talented minority and female students to join the NEWT enterprise.

Strategy 3.4: NEWT will strengthen current relationships with institutions that produce minority and female students to join the NEWT enterprise.

Strategy 3.5: NEWT will identify current student diversity efforts to harness the broader network of NEWT constituents for help with identifying diverse candidates for research positions.

Strategy 3.6: We will promote NEWT activities and opportunities by participating in national conferences that attract a majority minority and female student population for recruitment purposes.

Rationale: Most universities in the country are pursuing the best and brightest minority graduate students. In addition to contributing to enhancing the STEM pipeline through K-12 outreach efforts, it is imperative that NEWT aggressively pursue these talented individuals as well, and various strategies will be used to assist with this endeavor.

Anticipated outcome: The diversity, education, and evaluation teams worked together to create evaluative methods to measure the effectiveness of our diversity efforts. Included in more detail within our logic model is the layout of our evaluation plans, and our anticipated outcome is to see an increase in the number of URM and female student researchers within the NEWT center.