CAHSI

Computing Alliance of Hispanic-Serving Institutions

A National INCLUDES Alliance

CAHSI INCLUDES envisions a world in which Hispanics represent 20% or more of those who earn credentials in computing across our nation. To accelerate change, the Alliance uses a collective-impact framework to grow and sustain a networked community committed to recruit, retain, and advance Hispanics in computing.

OUR GOALS

- Challenge students' knowledge, skills, and abilities to position them to thrive in the workforce
- Support pedagogical and professional growth for those who can impact Hispanics.
- Expand meaningful partnerships to align with strategic regional and national efforts.
- Inform policy through evidence.

OUR PROMISE

With the significant research and experience of the partner institutions, the team is positioned to enhance curricula that address industry demands and grand challenges of the 21st century, aiming to prepare the next generation of innovative computer scientists. The unification of forces, together with experiences drawn from field-tested initiatives, has the potential to elevate the CAHSI INCLUDES Alliance as a recognized entity that contributes to and influences the national agenda on education. Continued inclusion of two-year colleges associated with established CAHSI institutions will expand collective impact. The network is positioned to contribute to complementary K-12 efforts and serve as a model for advancing students in higher education, including those from other underrepresented groups.

In 2016, 46% of Hispanic or Latino bachelor's degree recipients earned their degree from High-Hispanic-Enrollment institutions.

To accelerate inclusive change the CAHSI-INCLUDES Alliance adopted a collective impact framework model, in which networked institutions support collaborative change through five key conditions: **Common Agenda; Backbone Support; Continuous Communication; Mutually Reinforcing Activities; and Shared Measurement.**

Drivers for CAHSI Accomplishments

- informing and improving institutional, regional, and national strategic actions through data and evaluation;

- empowering students to be agents of change at their institutions and building students' sense of identity and belonging;

- involving partners who actively collaborate on our change agenda; and

- studying and disseminating knowledge about CAHSI's organizational structures and cultures that promote student success through collective efforts.

HOW WE OPERATE

BACKBONE

- Serves as a support organization and resource, in particular for the dissemination of signature practices.
- Builds capacity and aligns activities to meet a common agenda and plan for the future.

LEADS & CO-LEADS

- Develop and implement informed strategic actions based on regional needs;
- Engage stakeholders and partners.

CONNECTORS & COORDINATORS

- Share knowledge and resources with networked institutions;
- Provide on-the-ground support to Leads, Co-Leads, and students.

STUDENT ADVOCATES & SCHOLARS

- Promote awareness and engagement of CAHSI efforts;
- Serve as role models and change leaders.

DATA MANAGEMENT TEAM

- Analyzes data and publishes results of shared measures for monitoring progress toward CAHSI goals and improving efforts.

CAHSI SIGNATURE PRACTICES

- **Peer-Led Team Learning (PLTL)** is a retention model that deepens students' learning through team activities focused on specific topics; PLTL implementation has proven to have positive impact on Hispanic student course completion;
- **Affinity Research Group (ARG)** model deliberately develops students' research, team, professional, and communication skills; surveyed students report they are more likely to attend graduate school because of their ARG experience;
- **FemProf** is a program that facilitates undergraduate Hispanic women's aspiration towards future entrance into the professoriate;
- **FellowNet** is a model for preparing students for submission of competitive applications to fellowship programs;
- **CAHSI-Google Problem solving courses** are one- and two-credit hour courses that hone students' skills in team-based problem solving; these courses help students develop metacognitive skills.

OUR STRATEGIC EFFORTS

CAPACITY BUILDING

- Build research capacity of CAHSI institutions in CISE core research areas
- Build research & educational collaborations across CAHSI institutions
- Improve departmental climates in areas of inclusion, identity, and belonging

Curricular and pedagogical flexibility at CS departments across CAHSI institutions provide Hispanic students with academic support, leading to computing success.*

SUPPORT STRUCTURES

- Enhance students' knowledge, skills, & abilities in computing through activities such as problem-solving courses, workshops, hackathons.
- Increase the number of Hispanics who enter and complete graduate programs

CAHSI students receive social support from staff and peers through different sources, such as professional clubs, special programs, and targeted events that foster asset-based departmental cultures.*

RECRUITMENT

- Increase student engagement and excitement in computing
- Provide mentorship to students at all levels
- Support community college pathways

The association of two-year colleges with established CAHSI institutions expands collective impact. The network contributes to complementary K-12 efforts to serve as a model for propelling minoritized students into higher education.*
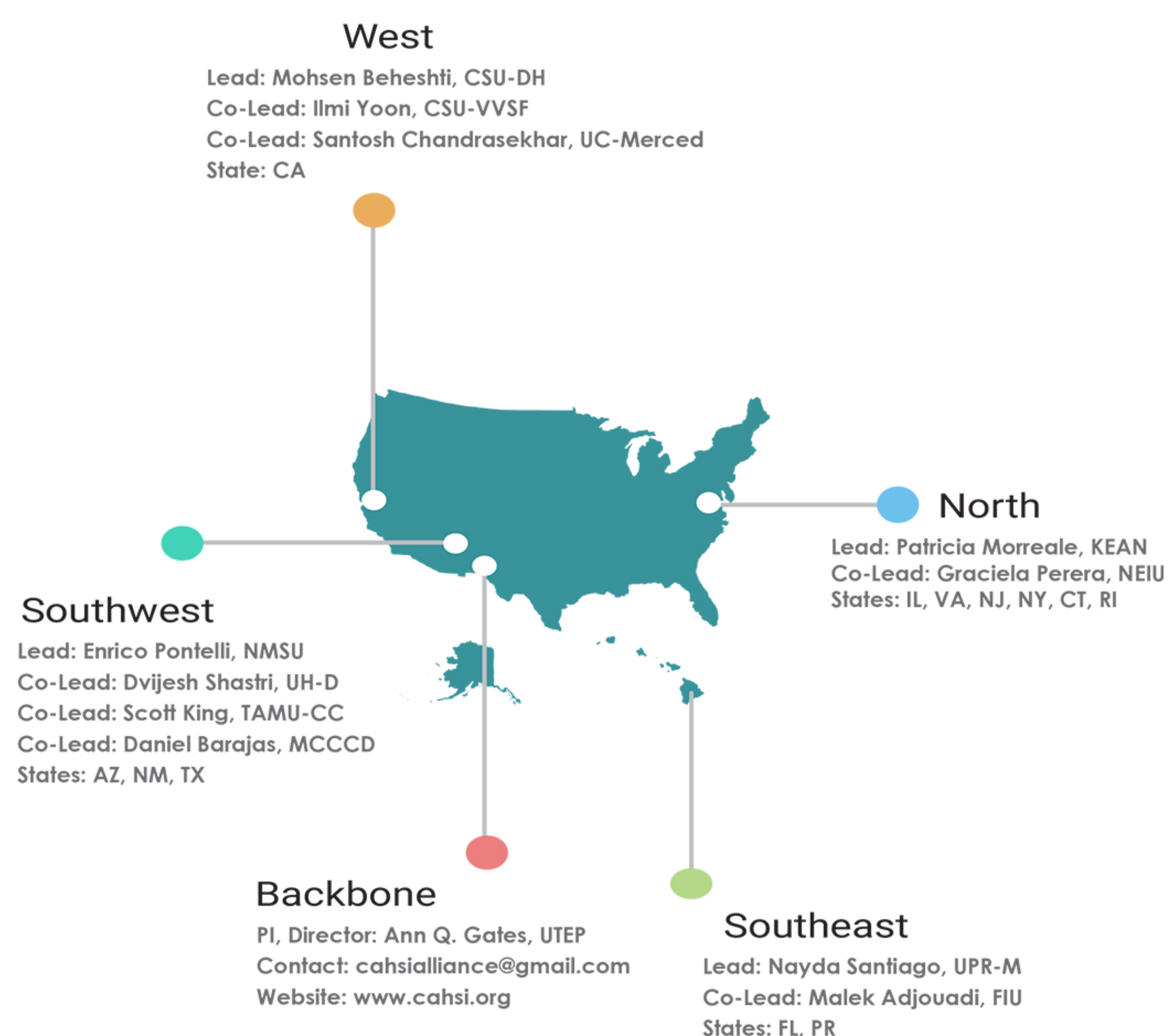
PROFESSIONAL DEVELOPMENT

- Build computing expertise and certification for K-12 teachers
- Provide workshops and support to faculty and staff for adoption of CAHSI signature practices and other high-impact practices
- Develop student leadership skills

Student career development programs, paid research and leadership opportunities, and financial support for attending conferences across CAHSI institutions enable Hispanic students to make connections with others within and outside their institutions. Such activities help students build social connections and soft skills.*

*Qualitative findings from a case study by CAHSI Researcher Dr. Anne-Marie Núñez, Professor at The Ohio State University.

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Learn more at cahsi.org