



LEAH

Leadership Education in Adolescent Health



The **Leadership Education in Adolescent Health (LEAH)** training program prepares health professionals from diverse backgrounds to be leaders in clinical care, teaching, research, public health policy, and organization of health services for **adolescents and young adults (AYA)**.

Through support from the Health Services and Resources Administration's (HRSA) Maternal and Child Health Bureau (MCHB), the LEAH program prepares health professionals from Medicine, Nursing, Nutrition, Psychology and Social Work for leadership roles in public health, health services, and academic sectors, while integrating biological, developmental, mental health, social, economic, and environmental considerations. These interdisciplinary programs include state-of-the-art, learner-centered training modalities and incorporate:

- ▲ Preparation focused on national priorities, strategies in prevention and care coordination, and social determinants of health.
- ▲ Public health training, including opportunities for trainees to interact and partner with state and local agencies and organizations overseeing **adolescent and young adult health (AYAH)** and well-being.
- ▲ Training in research and quality improvement methodologies.
- ▲ Development of interdisciplinary clinical, communication, and teaching skills.



LEAH Programs educate and mentor the next generation of leaders in AYAH.



Adolescent and Young Adult Health (AYAH)

In the United States, approximately 1/3 of the population are AYA between the ages of 10 and 29. Adolescence and young adulthood are unique developmental periods that present distinct challenges and opportunities for improving health. Moreover, health and social behaviors begun during adolescence and young adulthood are foundational for adult health and well-being. AYAH issues are further complicated as adolescents transition from pediatric care into adult care, often moving between multiple public and private health care systems. LEAH training programs prepare future leaders with skills and knowledge to address prevention, diagnosis, treatment, case management, and follow-up referral services within a public health framework. The programs provide technical assistance and continuing education to expand the use of evidence-based, patient-centered, family-involved, culturally competent, community-tailored practices with AYA.

LEAH Trainees

LEAH trainees are emerging leaders in their respective disciplines. The focus of the LEAH projects is the training of health professionals in medicine, nursing, nutrition, psychology, and social work. LEAH trainees have opportunities to make real and systemic impact on AYAH through interdisciplinary clinical care, teaching, research, and policy impact.

LEAH trainees benefit from both a world-class faculty, as well as from the involvement of adolescents and families in program activities. All LEAH programs actively involve adolescents and parents of adolescents from diverse ethnic backgrounds and cultures in an advisory capacity and in the planning, implementation and evaluation of program activities. A few of these examples include:

- ▲ The University of Minnesota (UMN) LEAH enhances trainees' clinical skills and facilitates the development of cultural and linguistic competence through [YouthCHAT](#), a youth actor teaching team.
- ▲ Boston LEAH has created popular websites including the [Center for Young Women's Health](#), [Young Men's Health](#), the [Center for Media and Child Health \(CMCH\)](#), and the [Strategic Training Initiative for the Prevention of Eating Disorders \(STRIPED\)](#). Youth Advisors provide input into the websites and LEAH programs and train all trainees how to interview adolescents.

"Through a wide range of learning opportunities such as seminars, trainings, and research, facilitated by professionals in the field, I gained a greater understanding and appreciation for each role in the multidisciplinary team. The LEAH program has allowed me to engage with clients and communities across multiple systems of care, as well as nurture my professional development as a social worker."

– Tiffany Lam, UCSF

LEAH training is designed to integrate biological, developmental, mental health, social, economic, and environmental issues within a public health framework.

LEAH Faculty

LEAH faculty are nationally recognized leaders in the field of AYAH, representing interdisciplinary expertise in clinical services, teaching, and research from academic disciplines, such as medicine, nursing, nutrition, psychology, public health, and social work. LEAH faculty lead a myriad of clinical, research, and policy lectures, graduate courses, and continuing education activities to advance the field of AYAH and support workforce development. The LEAHs have developed teaching curricula to underscore the importance of formal training in educational theory and techniques to facilitate teaching and learning.



Innovative Research and Quality Improvement

LEAH faculty conduct research, develop new programs, design evaluations, oversee quality improvement projects, partner with Title V and other agencies and organizations, and apply learning in real-world settings across a variety of topic areas and disciplines. Trainees have the unique opportunity to collaborate with faculty mentors in their research, quality improvement and evidence-based leadership projects.

“We are so fortunate to have a pipeline of LEAH fellow alumni that over time amplify our collective work to improve adolescent and young adult health! Dr. Hadland, Boston LEAH (2013-2015), visited the CHOP LEAH program in 2018 and provided a superb training on how to provide Medication Assisted Treatment (MAT) for opioid use disorder for our LEAH faculty and fellows.” - Carol A. Ford MD, CHOP LEAH Project Director

Innovative Research

- ▲ At the University of Pennsylvania and Children’s Hospital of Philadelphia (CHOP), Victoria A. Miller, PhD and Carol A. Ford, MD (CHOP LEAH Project Director) lead a research initiative to better understand pragmatic strategies for healthcare professionals to facilitate parent-teen communication in a way that improves adolescent health outcomes. Karol Silva, PhD (LEAH fellow) is collaborating in the design and randomized controlled trial of an intervention to increase parent-teen communication about adolescent strengths and improved parent-teen relationships. This LEAH faculty/fellow research team is also testing new methodologies for measuring parent-teen communication.
- ▲ Furthering work that she began as a LEAH fellow, Dr. Marissa Raymond-Flesch at the University of California, San Francisco (UCSF) is an investigator in the Salinas Teen Health Study, a longitudinal cohort study of 600 Latino adolescents in a rural community, which follows youth as they transition from early to middle adolescence. Dr. Raymond-

Felsch’s research focuses on the impact of mental health, including depression and trauma, on youths’ educational attainment as well as engagement in high-risk behaviors related to violence and reproductive health.

- ▲ Drs. Cari McCarty and Laura Richardson, LEAH faculty and LEAH Project Director at the University of Washington (UW), co-lead a research program focused on improving screening and preventive counseling delivery to youth in primary care via interactive technology. This work has been funded by the MCHB Extramural Research Grant program, Patient-Centered Outcomes Research Institute (PCORI), National Institute on Alcohol Abuse and Alcoholism (NIAAA), Agency for Healthcare Research and Quality (AHRQ), the Conrad Hilton Foundation, and King County Best Starts for Kids. More recently, they have been working on implementation of the tool across health settings, including in school-based clinics. Fellows have been involved throughout the project and have had opportunities to develop and test their own research hypotheses, such as conducting qualitative research to examine youth preferences and responses to the tool, developing complementary tools for transition support, and examining gender differences in provider screening and counseling behaviors.
- ▲ Dr. Marla Eisenberg at UMN focuses her research on social influences on health, behavior and well-being among adolescents and young adults, and





disseminates findings for real-world application. Dr. Eisenberg engages trainees in her work by teaching a research methodology seminar in the interdisciplinary fellowship programs and provides individual mentoring for fellows on their research projects. Every year she gives fellows the opportunity to choose from several datasets faculty mentors use to lead their own secondary data analysis project.

- ▲ Dr. Charles E. Irwin Jr., UCSF LEAH Project Director, is Editor-in-Chief of the Journal of Adolescent Health – a leading pediatric journal. Several faculty members of the LEAH programs serve on the editorial board. Dr. Irwin will step down after 15 years as Editor-in-Chief of the Journal of Adolescent Health and Dr. Carol Ford (CHOP LEAH Project Director) will become the Editor-in-Chief on July 1, 2019.

Quality Improvement:

- ▲ Dr. Elizabeth Woods, LEAH faculty with the Boston program, and her team developed the Community Asthma Initiative (CAI), to increase access to comprehensive asthma care, reduce racial/ethnic disparities and address social determinants of

health for children and adolescents in Boston’s low-income neighborhoods. CAI provides asthma education, case management, and environmental assessments through nurse-supervised community health workers’ home visits. The successful results have been disseminated in Pediatrics and a special edition of the Morbidity and Mortality Weekly Report (MMWR) on health disparities. CAI has also received support from the Centers for Disease Control and Prevention (CDC) REACH US, Centers for Medicare & Medicaid Services (CMS), HRSA’s Healthy Tomorrows Partnership for Children Program and others. Dr. Woods involves Fellows learning about the CAI model and replication and oversees their quality improvement (QI) projects.

- ▲ At the University of Alabama at Birmingham (UAB), Dr. Tina Simpson, MD, MPH (UAB LEAH Project Director) has been working with the Alabama Department of Public Health Title V program, the Alabama Chapter of the American Academy of Pediatrics, the Alabama Child Health Improvement Alliance and the University of South Alabama to develop a peer-learning quality improvement collaborative for pediatric practices around the adolescent preventive care visit.

“The clinical and advocacy work that I do around adolescent obesity fulfills many of my own interests and passions, as an adolescent medicine physician. It is a medical issue with major disparities that is greatly impacted by social determinants, and it therefore requires a holistic approach: research from the bench to the bedside to the community; clinical care of the individual patient, extending to the community; and advocacy for structural change that will bring healthful foods and beverages to the forefront of our patients’ worlds and make physical activity not only possible, but the norm, for all.

– Claudia Borzutzky, Medical Director and Core LEAH Faculty at Children’s Hospital of LA

Linking to National and Local Public Health Priorities

The unique multi-disciplinary nature of LEAH programs allows the programs to be nimble and responsive to emerging challenges facing our nation's youth and local public health crises. All the LEAH programs have initiatives to address topics, such as obesity, behavioral health, substance use, diversity and health equity. The following examples offer a glimpse at how LEAH programs are addressing some of the challenges facing adolescents and young adults.

Adolescent and Young Adult Obesity

- ▲ The UCSF LEAH program is exploring the impact of Eating Disorders among overweight young adults and the impacts of cardiometabolic risks. Dr. Jason Nagata, a LEAH Clinical Fellow (2016-19), was a new Investigator award finalist at the Society for Adolescent Health and Medicine (SAHM) Meeting, 2018.
- ▲ The LEAH program at the University of Washington (UW LEAH) offers an innovative interdisciplinary intensive program for youth and parents. The Adolescent Wellness Program is a comprehensive, interdisciplinary lifestyle intervention program informed by adolescent development, motivational interviewing (MI), and sound nutrition and fitness education concepts while using a strengths-based approach. Overall goals of the wellness program are to enhance peer/family communication, improve quality of life and mood co-morbidities, improve attitudes towards food and eating while decreasing the likelihood of disordered eating, as well as to stabilize or improve body mass index (BMI) and anthropometric outcomes. LEAH faculty and fellows participate in teaching participants interactive sessions on the topics listed above, as well as pragmatic skills including food budgeting and preparation. Faculty and fellows have also offered training sessions for providers across the region (Seattle Children's Grand Rounds and LEND MI training) and were featured at the All Alaska Pediatric Symposium in November 2014.

Behavioral Health and Substance Use

- ▲ The UW LEAH program offers a unique area of emphasis in the development and implementation of integrated behavioral health models. UW

LEAH fellows have the opportunity to receive hands-on experience in implementing integrated care models for behavioral health concerns, substance use, gender care, and eating disorders. The UW LEAH program coordinates a Drug-Free Communities coalition in Seattle and has been very engaged in making sure that the importance of prevention of use among youth is considered in all regulations and legislation related to substances. The coalition has also developed and disseminated a parent educational brochure on preventing marijuana use in teens. LEAH fellows have supported these efforts, as well as conducted research related to substance use prevention and the development of integrated models for youth in clinical settings.

- ▲ Boston LEAH faculty Dr. Sion Harris and LEAH and Developmental-Behavioral Pediatric (DBP) colleagues worked with the Massachusetts Department of Public Health, Bureau of Substance Addiction Services (MDPH) on "[SBIRT Guide for School Health Teams](#)" to reach school nurses throughout Massachusetts in implementation of SBIRT (Screening, Brief Intervention and Referral to Treatment for substance abuse) in schools, the first of such an initiative in the country.

"Thanks to the support I received as a fellow, I was able to author seven first-author, peer-reviewed publications. My principal project as a LEAH fellow focused on US states' alcohol policies and their relation to motor vehicle deaths among adolescents and young adults. This work led to my receiving the SAHM New Investigator Award in 2016, and was published in the journal Pediatrics. I recently received a K23 career development award from the National Institute of Drug Abuse to study systems of care for youth with opioid use disorder."

– Scott Hadland, MD, MPH, MS, Boston

Diversity and Health Equity

▲ Recognizing the importance of diversity, inclusion and health equity, the LEAH program at UAB created an initiative designed to increase exposure of high school students from racial/ethnic minority and economically disadvantaged backgrounds to careers in MCH fields. At the same time, this effort offered an opportunity to increase MCH trainee exposure to youth from racial/ethnic minority and economically disadvantaged backgrounds, by serving as mentors to the high school students. This project brought together all of the elements of successful LEAH initiatives. It included the development of a partnership with the Alabama MCH Network and a Birmingham city school. The initiative was trainee-led and involved trainees working in collaboration with faculty to develop a nine-month curriculum for an MCH mentoring program – MCH H.O.P.E.S (Health Opportunities & Partnerships for Educational Success). Because this project was largely trainee-driven, it provided exceptional leadership development opportunities for MCH trainees related to establishment of community partnerships, program development,

implementation, evaluation, and mentoring of future MCH trainees. This project was developed, largely, as part of a Diversity and Health Equity Collaborative, led by UAB, and funded by HRSA/MCHB.

▲ A recent article in the Journal of Adolescent Health summarized the findings of a LEAH fellows and faculty project about models of care for transgender youth. The team included Drs. Guss (Boston), Vance (UCSF), and Breland (UW). This collaboration and a subsequent survey included all the LEAHs and was fostered by the AYA Research Network, which is funded by HRSA/MCHB. The Boston LEAH program has provided national leadership in addressing disparities in sexual minorities through research, a welcoming environment, as well as the creation of the first Postdoctoral Fellowship in Sexual Orientation and Health Disparities and the Sexual Orientation and Gender Identity and Expression Research Working Group. Fellows also participate in the LEAH curriculum and have contributed to health equity, including through service on the Massachusetts Commission on Lesbian, Gay, Bisexual, Transgender, Queer, and Questioning (LGBTQ) Youth.

Partnerships and Collaborations

Experiences and behavioral patterns that occur in AYA can have lasting effects on their health and well-being as adults. Therefore, HRSA MCHB emphasizes partnerships and collaborations in AYAH that improve the health and safety of AYA and focus on increasing access to comprehensive, coordinated health care, including substance abuse prevention and treatment services, bullying prevention, nutrition and physical activity.

Partnerships and collaborations are the backbone of the LEAH program. Given the diverse settings and multi-disciplinary nature of the program, it is critical that trainees have the opportunity to work in partnerships with the community and state, across programs, and nationally.



National Partnerships and Collaborations

- ▲ The UCSF Division of Adolescent and Young Adult Medicine leads the Adolescent and Young Adult Health Research Network, funded by HRSA since 2014. This national network has built collaborations with the Center for the Developing Adolescent at University of California, Berkeley and all of the LEAH programs, Boston Children’s Hospital, Indiana University, Children’s Hospital of Philadelphia, University of Alabama, University of Minnesota, Children’s Hospital Los Angeles, University of Washington, and Johns Hopkins University. The Network has led symposia, funded pilot research projects and developed peer-reviewed manuscripts.
- ▲ The UCSF Division of Adolescent and Young Adult Medicine also leads the Adolescent and Young Adult Health National Resource Center (AYAH-NRC) and is led by Dr. Charles E. Irwin Jr., the UCSF LEAH Project Director. This Center, established in late 2014 with a grant from HRSA, continues the 20-plus years of health policy and collaboration with MCHB partners and LEAH programs to improve access and quality of healthcare for adolescents and young adults. Over the past four years, the Center has played a critical role in promoting the importance of preventive care in adolescents and young adults focusing on MCHB national performance measures. In addition to the LEAH Program collaborators, the Center works with the Association of Maternal and Child Health Programs (AMCHP), the State Adolescent Health Resource Center at the University of Minnesota and the National Improvement Partnership Network at the University of Vermont.

Title V Collaborations

- ▲ In 2017 and 2018, faculty, fellows and adolescent youth advisors from Boston LEAH provided training for all of the Massachusetts Department of Public Health-funded school-based nurse practitioners. The 4 courses focused on interviewing adolescents, addressing the health needs of LGBTQ youth, improving male health, and addressing challenges in reproductive healthcare.
- ▲ UMN LEAH has long-standing relationships with Title V entities in Minnesota, throughout the region, and across the country, owing in part to the work of the [State Adolescent Health Resource Center \(SAHRC\)](#) in tandem with the National Network of State Adolescent Health Coordinators, AMCHP and the Adolescent & Young Adult National Resource Center. In this partnership, UMN LEAH faculty conducted an intensive cross-state collaboration on National Performance Measure #10 (Adolescent Well Visit CoIIN [Collaborative Improvement and Innovation Network]) with 12 states: MS, TX, VT, NM, OH, MN, NH, NJ, WY, WA, IN, MD. SAHRC provided ongoing TA through monthly check-ins and problem solving on managing a state-wide partnership focused on marketing the well visit to parents, youth and providers; improving quality of care through clinical QI pilot efforts and expansion and clinician training; addressing policy and systems changes (e.g. adopting Bright Futures guidelines for Medicaid programs, addressing confidentiality challenges in clinic policies and billing/insurance processes).



State and Local Partnerships and Collaborations

- ▲ The Children’s Hospital of Philadelphia (CHOP) LEAH program collaborated with the Pennsylvania Department of Health to announce the release of “Guidelines for Safe Prescribing of Opioids in Pediatric and Adolescent Populations.” CHOP LEAH Project Director, Dr. Carol Ford, contributed comments on parent communication and the importance of parents in the lives of adolescents and young adults. She highlighted the importance of adolescent and young adult routine check-ups, screening for alcohol and drug use and abuse, and the importance of young people who are

using drugs to have easy access to high quality, science-based evaluation, management, and treatment. The guidelines resulted from an important collaboration between leadership of the Pennsylvania Department of Public Health, Pennsylvania American Academy of Pediatrics, and the Pennsylvania Medical Society; the major medical centers across the state; and physicians, nurses, and pharmacists.

- ▲ The Children’s Hospital Los Angeles (CHLA) LEAH program developed a statewide collaborative including local healthcare providers, educators, and advocates to support increased access to the state Minor Consent Medi-Cal program. This project arose based on concern around youth access to confidential substance use treatment services, post- and pre-exposure prophylaxis (PEP and PrEP), and mental health services. LEAH trainees conducted a site visit to a local Department of Public Social Services office to find out more about the application process for minors seeking sensitive services. LEAH trainees later traveled to Sacramento, the state capitol, to meet with the Department of Health Care Services and state legislature staff to identify access barriers and possible administrative or legislative solutions. LEAH trainees developed materials to help consumers access services

and increase awareness about the Minor Consent Medi-Cal program among providers and collaborated on the preparation of public record requests. This project has provided an opportunity for trainees to learn more about statewide advocacy and the legislative process.

Healthy Youth Development-Prevention Research Center

- ▲ The Division of General Pediatrics and Adolescent Health is home to the [University of Minnesota’s Healthy Youth Development*Prevention Research Center \(HYD*PRC\)](#). At the HYD*PRC, researchers are learning about the best practices for providing adolescents with the necessary skills and opportunities to live healthy and meaningful lives. UMN LEAH fellows can join UMN PRC research teams. For example, a LEAH medical fellow is part of a PRC research team exploring confidential adolescent sexual health services offered through primary care clinic settings. A LEAH social work fellow works with a PRC research team comparing the effectiveness of a middle school teacher coaching program and a classroom social-emotional learning program in promoting positive health and academic outcomes among middle school students.



LEAH Programs

[Boston Children’s Hospital Program](#)

[Children’s Hospital of Los Angeles](#)

[Children’s Hospital of Philadelphia](#)

[University of Minnesota](#)

[University of Alabama at Birmingham](#)

[University of California, San Francisco](#)

[University of Washington](#)



This publication was produced by the U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau under contract number GS10F0261K-HHSH250201500041G.

This publication lists non-federal resources in order to provide additional information to consumers. The views and content in these resources have not been formally approved by the U.S. Department of Health and Human Services (HHS) or the Health Resources and Services Administration (HRSA). Listing these resources is not an endorsement by HHS or HRSA.

This publication, related to the Leadership Education in Adolescent Health Program, is not copyrighted. Readers are free to duplicate and use all or part of the information contained in this publication, but may not charge a fee for using, duplicating, reproducing, reprinting, or redistributing without specific written authorization from HHS (pursuant to 42 U.S.C. § 1320b-10). As an exception, the photographs are copyrighted and may not be used without permission from iStockphoto LP.

Suggested Citation: U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau, *Leadership Education in Adolescent Health*. Rockville, Maryland: U.S. Department of Health and Human Services, 2019.

All photos courtesy of iStockphoto LP. The individual photographers are listed below according to the page number:

Cover Page

- FatCamera
- franckreporter
- monkeybusinessimages
- oneinchpunch
- PeopleImages

Page 2

- michaeljung
- monkeybusinessimages

Page 4

- FatCamera

Page 5

- asiseeit

Page 7

- Cecilie_Arcurs
- PeopleImages
- sturti

Page 8

- bowdenimages

Page 9

- monkeybusinessimages
- Steve Debenport