

2023

Annual Report to the Massachusetts
Department of Mental Health

30 YEARS

**iSPARC Turns 30: The Real World Impact
of Our Research Over the Past 30 Years**

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Executive Summary

We are grateful to the Massachusetts Department of Mental Health (DMH) for its ongoing support of the Implementation Science and Practice Advances Research Center (iSPARC). iSPARC is a DMH Research Center of Excellence located within the Department of Psychiatry at UMass Chan Medical School. In FY23, iSPARC continued to leverage DMH's investment to rapidly translate research findings into their implementation within best practices for individuals with lived experience, their families, and the providers who serve them across the Commonwealth.

FY23 was a year of great growth for iSPARC. Our Center continued to adapt to the changing landscape of the COVID-19 pandemic and not only sustained our work but began to flourish again. We welcomed six new members to our faculty — Ayorkor Gaba, Megan Kelly, Taber Lightbourne, Radley “Chris” Sheldrick, Brian Stevenson, and Martha Zimmermann. Additionally, we successfully recruited Spencer Lawson, Senior Research Scientist, to the Law & Psychiatry Research Program. With each new addition to our Center, we were attentive to engaging colleagues who embody the mission and values of iSPARC and DMH.



Dr. Ayorkor Gaba



Dr. Megan Kelly



Dr. Taber Lightbourne



Dr. Chris Sheldrick



Dr. Brian Stevenson



Dr. Martha Zimmermann



Dr. Spencer Lawson

iSPARC's Mission

iSPARC and DMH strive to support and meet the mental health needs of individuals across the lifespan to live, work, and meaningfully participate in their communities. We are fiercely committed to these values:

- Applying person-centered, family-focused, and trauma-informed approaches to our research;
- Developing, evaluating, and implementing evidence-based practices to ensure highest quality of care; and
- Promoting cultural and linguistic equity of mental health services and resources.

To practice these values, we conduct research in partnership with the people whose lives are most affected—individuals with lived experience, their families, and the providers who serve them—recognizing that those with lived experience have expertise that is essential to conduct impactful research and investigators without lived experience cannot provide that expertise.

iSPARC Faculty & Staff

In FY23, iSPARC made significant strides to build on our already strong foundation:



Managed a research portfolio totaling **\$11,346,921** in grants and contract funding



Submitted **21** new grant and contract proposals



Were awarded **11** new grants and contracts



Published **79** peer-reviewed journal articles



Submitted **64** peer-reviewed journal articles

iSPARC is home to investigators from the UMass Chan Medical School Departments of Psychiatry, Emergency Medicine, and Population & Quantitative Health Sciences (PQHS). Our PQHS partners contribute expertise in implementation research and public health research conducted by and for communities that have long been underrepresented as beneficiaries of evidence-based and promising services.

iSPARC faculty are nationally and internationally recognized for their research in:

- Psychosocial intervention development
- Implementation science
- Public services and supports
- Clubhouse and vocational rehabilitation models

- Forensic/legal and human rights issues
- Child, parent, and family mental health
- Transition age youth/young adults
- Perinatal mental health
- Deaf mental health and addiction treatment
- Addictions interventions
- Trauma informed care
- Social reintegration approaches

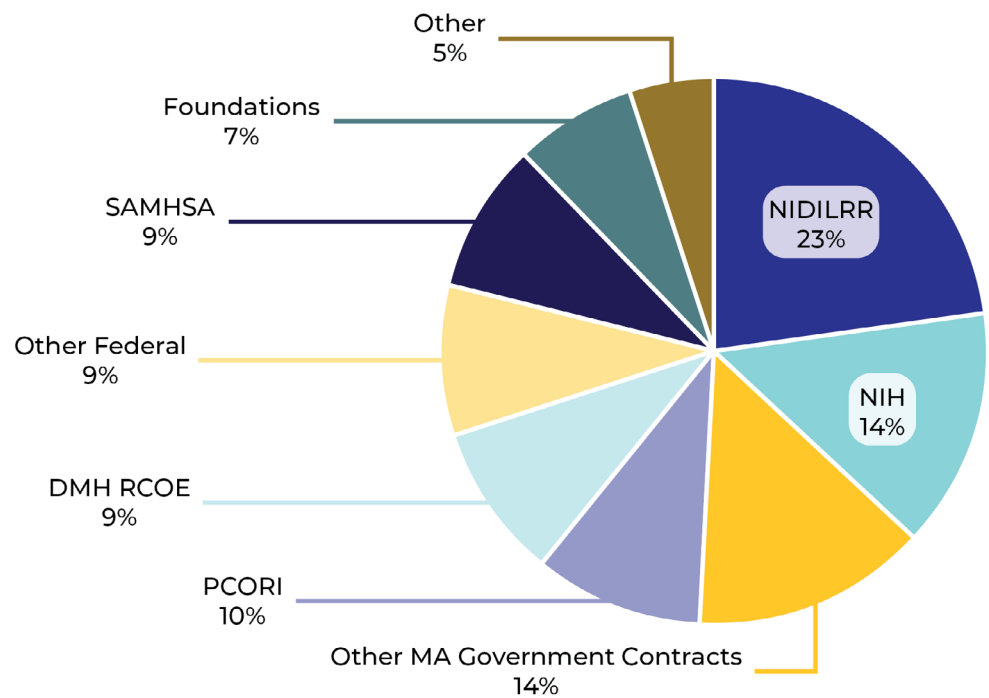
Internal to UMass Chan, we collaborate with investigators embedded in the Departments of Psychiatry, Population & Quantitative Health Sciences, Family Medicine & Community Health, Preventive & Behavioral Medicine, Obstetrics & Gynecology, Emergency Medicine, and Commonwealth Medicine. External to UMass Chan, we partner with investigators from other UMass campuses, Boston University, as well as national and international institutions to optimize our resources. These relationships enable us to build a bigger and stronger iSPARC to help meet the many challenges faced by DMH, those served by DMH, and the Commonwealth more broadly.

iSPARC Funding Sources FY 2023

The investment that DMH makes in its funding of iSPARC as a Research Center of Excellence provides an impressive return on this investment in the Commonwealth.

Every \$1 invested by DMH in FY23 yielded a return of \$10.37 to the Commonwealth to fund our portfolio of research, training, technical assistance, and service delivery.

Chart 1. Funding Sources




Top 5 Research Moments of FY23

We are very excited about the work we have done this fiscal year. The Top 5 we're most excited about are:

1. The American Psychiatric Association selected the *Psychiatric Services* journal article, "Established Outpatient Care and Follow-Up After Acute Psychiatric Service Use Among Youths and Young Adults", to highlight in a [press release](#) on October 12, 2022. The paper is based on a joint study between iSPARC and UMass Chan researchers Julie Hugunin, B.S. & Ph.D. candidate, **Maryann Davis, Ph.D.**, **Celine Larkin, Ph.D.**, Jonggyu Baek, Ph.D., Brian Skehan, M.D., Ph.D., and Kate L. Lapane, Ph.D. The article describes the study which involved patients, ages 12–27 with private insurance, who visited the emergency room or were hospitalized following an acute mental health event (such as major depressive disorder, bipolar disorder, schizophrenia, anxiety disorders or phobias, or substance use disorder). The researchers looked at records of more than 95,000 hospitalizations and more than 100,000 emergency room visits by youth and young adults between 2013 and 2018. Learn more [here](#) on our website and find study recommendations [here](#).
2. **Kimberly Yonkers** is the principal investigator of the **Development of a Text Intervention for Perinatal Depression** project funded by the NIMH. This study will develop and conduct a preliminary test of a text messaging intervention that will reduce the risk of a major depressive episode and worsening depressive symptoms in perinatal individuals. The system will screen pregnant individuals, send tailored text messages with links to enhanced content, and will include a peer chat function. This accessible text platform will leverage both the ease of use inherent in text messages and the power of enhanced content drawn evidence from based behavioral interventions (Interpersonal Therapy and Cognitive Behavioral Therapy).
3. In May 2022, **Ayorkor Gaba** was announced as a Scholar of the National Heart, Lung, and Blood Institute Program to Increase Diversity Among Individuals Engaged in Health-Related Research (PRIDE-CVD). In October 2022, she received an NHLBI PRIDE CVD Small Research Program grant to support the **Heart, Soul, & Recovery (HSR): Integrated Cardiovascular Risk Reduction, Mental Health and Substance Use Disorder Care for African American/Black Men with Criminal Legal System Involvement** project. This project will utilize a community-engaged approach to culturally tailor an existing efficacious co-occurring disorder intervention to dually address CVD risk factors and co-occurring disorders among Black men with criminal legal involvement.
4. **Rajani Sadasivam** and Thomas Houston, Professor of General Internal Medicine at Wake Forest University School of Medicine, are co-principal investigators of the NIH-funded project, **Using Rural Community Paramedicine to Engage Lower-Motivated Smokers: Spreading an Effective mHealth-Assisted Intervention to Motivate Cessation**. In this five-year project, the investigators will conduct a "hybrid

type 2” study (i.e., a study with both implementation and effectiveness outcomes) to test: 1) two implementation programs in rural counties and 2) two smoker interventions. At the county-level, the implementation trial uses a novel multi-strategy implementation program centered around rural community paramedicine. At the individual level, this trial will target individuals living in these harder-to-reach rural areas. Engaging these smokers is possible using a brief abstinence game challenge and mHealth tools.

5. **Marsha Ellison and Colleen McKay** were awarded **Promoting Access, Inclusion, and Success of Students with Emotional Disturbance in Career and Technical Education**, a three-year NIDILRR Field Initiated Project. This project includes the revision and pilot testing of [*Translating Evidence to Support Transitions in Career and Technical Education \(TEST-CTE\)*](#) , a guide for special educators on how to promote CTE for special education students with emotional disturbance. The goals of the project are to: 1) revise the existing TEST-CTE guide to assure a diversity, equity, and inclusion lens; and 2) conduct a randomized pilot of TEST-CTE. The team will produce a revised TEST-CTE guide that assures cultural relevance for minority students and test study processes and outcomes. With these products, TEST-CTE will be positioned for a subsequent efficacy trial, one that holds promise for improved employment of youth with emotional disturbance.