OUR PROMISE TO ARKANSAS:

UNPRECEDENTED CHILD HEALTH. DEFINED & DELIVERED.



Addendum I:

Arkansas Children's Research Institute

3-Year Roadmap

Published June 2022



HOSPITALS · RESEARCH · FOUNDATION





PROGRESSING FROM ARKANSAS CHILDREN'S STRATEGIC PLAN'S

5 CORE STRATEGIES, RESEARCH AND INNOVATION TO THE

ACRI ROADMAP 2022-2025

A MESSAGE FROM PETER

n the course of the development of the Arkansas Children's Strategic Plan, we identified five core strategies for Research and Innovation. At the time of the plan's rollout, several key research leadership positions were vacant, leaving a gap in how those five core research strategies would be implemented.

Only once the leaders were in place was the focused ACRI planning process able to proceed. We were intentional in keeping the process inclusive across the entire organization and with our partners in the community. It was immediately clear that – in order to enhance the research identity of Arkansas Children's — substantial foundational work was needed to create the platform to launch a rapid trajectory of research activity to support the promise of unprecedented health for the our state and region.

This roadmap lays out three thematically oriented goals, each of which employ the core strategies outlined in the organization's strategic plan to achieve measurable impact and transform our research enterprise. Execution of these three goals and their associated tactics will establish our capability to rapidly and substantively address the challenges of child health. Development of these foundational capabilities will facilitate a scientifically ambitious strategic endeavor in the next planning cycle that will establish Arkansas Children's at the pinnacle of child health innovation.

Tita Marram

Peter Mourani, M.D.
President
Arkansas Children's Research Institute



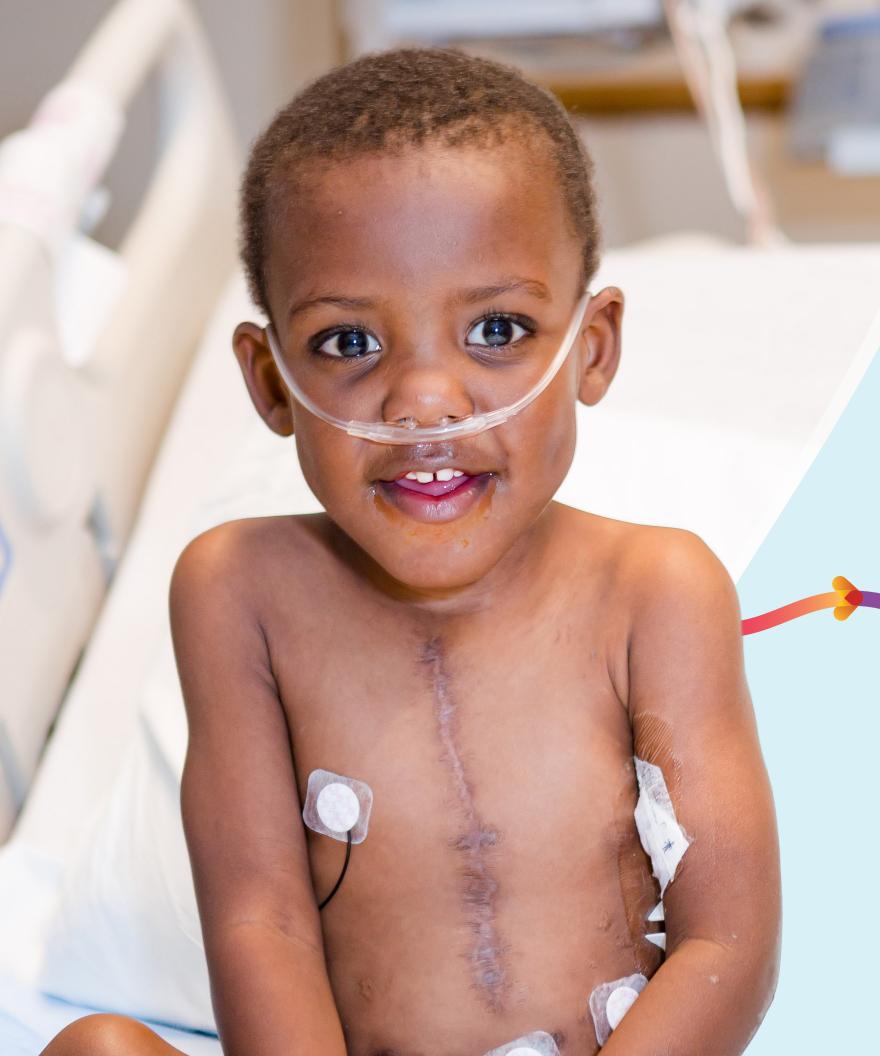
TABLE OF CONTENTS

INTRODUCTION

- 4 Vision, Mission & Values
- **6** Strategic Plan Framework

CHAMPION EXCELLENCE

- **10** Arkansas Children's Research Institute 3-Year Roadmap
- **11** Goal 1
- **14** Goal 2
- **19** Goal 3





HOSPITALS · RESEARCH · FOUNDATION

VISION

Our Promise:
Unprecedented Child Health.
Defined and Delivered.



We champion children
by making them better today
and healthier tomorrow.

VALUES

SAFETY

We are vigilant about creating an error-free environment for patients, families and team members.

TEAMWORK

We coordinate, communicate, cooperate and collaborate to ensure mutual respect and the highest level of service for our patients, families and team members with diverse backgrounds and perspectives.

COMPASSION

We demonstrate empathetic and equitable care and concern for patients, families and team members.

EXCELLENCE

We achieve the highest of standards and serve with distinction in order to be the best.

STRATEGIC PLAN FRAMEWORK

3 PILLARS WHAT WE WILL DO

ADVANCE PATIENT CARE

Strengthen the continuum of care and embrace our unique role to serve the whole child.

BUILD COMMUNITY

Act boldly to develop safer, healthier communities and implement tests-of-change to demonstrate scalability.

CHAMPION EXCELLENCE

Search beyond
Arkansas and
achieve models
of excellence to
elevate our work to
best in class.





Harness the power of technology and systems to extend reach, efficiency and engagement.



PARTNERSHIPS

Build mutually beneficial and well-defined relationships to galvanize networks.



ADVOCACY

Promote a child-first agenda that reprioritizes child health and advances public policy and community action.



Research & Innovation

Integrate research and innovation across the organization.

very day at Arkansas Children's, clinical leaders and healthcare professionals make critical decisions concerning the treatment of infants, children and adolescents. These decisions emanate from knowledge—organized information that is borne from research discoveries, evidence-based practices and innovation. Unfortunately, there are many diseases for which there are no cures, treatments that are less than optimal for numerous health conditions, and prevention strategies for

diseases and illnesses that simply don't work 100 percent of the time. Healthier tomorrows start with research and innovation integrated throughout the system. Additionally, an active research and innovation program attracts top physicians, scientists and technology staff members. National recognition as a creative force in pediatric healthcare will develop as new diagnostics, devices and therapeutics become evident in research and other work conducted across the Arkansas Children's enterprise.

STRATEGIES

To improve the health and well-being of children in Arkansas and beyond, the following core strategies will be implemented to revolutionize our culture of curiosity and creativity throughout Arkansas Children's today. These strategies will advance the knowledge that will guide the way we prevent and treat injury and illness tomorrow.

1. Expand Interdisciplinary Research & Scholarship

Ambitiously invest in strategic research-focus areas that further the dialogue on unprecedented child health, including child nutrition and obesity research; allergy, asthma, immunology and cancer research; population health research; and translational and surgical research. In addition to these focus areas, we will expand cross-cutting themes, including precision medicine, catastrophic diseases and emerging topics. Recruiting key leadership with a desire to promote and lead research in their sections will be a top priority. Open roles include Arkansas Children's research president, injury prevention lead researcher, catastrophic diseases researcher and Bates Center for Population Health director.

2. Grow Translational Spectrum Research Efforts

Translational research is the process of applying knowledge from basic biology and clinical trials to techniques and tools that address critical medical and health needs. We will focus on two tactics to grow our efforts across the translational spectrum.

Clinical Trials: Expand clinical trials in emergency departments and outpatient, inpatient and intensive care units. Ensure infrastructure to support industrysponsored, network-related and investigator-initiated clinical research. Align the incentives for physician participation in clinical research and incorporate physician salary effort in all clinical trial contracts. Provide a mechanism that allows time for physicians and staff to conduct trials.

Bates Center for Population Health: Establish a coordinated research effort through the Bates Center to measure the impact of Arkansas Children's and partners' efforts on improving child health and progress in meeting the triple aim.

Integrate the Research Aim Across the Organization Internal Partnerships with Clinicians: Inform and engage all clinicians in research efforts. Develop a translational laboratory where staff, equipment and expertise are available to support clinicians who have research ideas but lack the time to spend in the laboratory. Establish navigator positions to assist faculty in participating in clinical research. Establish faculty designees as research champions.

Engage and message to non-physician department

leaders (e.g., Pharmacy, Imaging, Respiratory Therapy, etc.) how research can enhance their services, care provided and potential gains. Support membership and engagement of every clinical specialty in a specialtyspecific national research network. Develop a Masters in Clinical Research program for clinical faculty and fellows on the Arkansas Children's campus.

Electronic Medical Record (EMR) Integration & Patient Experience: Expand capacity and implement EMR and analytic solutions to drive processes for engaging clinicians, patients and families in research opportunities and potentially improve patient experience. Provide an opportunity for every patient at Arkansas Children's to become a research participant.

4. Expand External Partnerships

Expand and engage external partners in multiinstitutional and multidisciplinary research to develop collaborative working relationships in support of academic programs.

Advance Cancer Research through Collaborative Partnership with UAMS and National Cancer Institute (NCI) Designation: UAMS and Arkansas Children's will benefit from a partnership in pursuit of NCI designation. Arkansas Children's will align with UAMS' long-range cancer research plan. This collaboration would include developing and implementing a cancer biorepository to capture tissue from patients, establishing co-appointments on institutional boards, and providing funds for strategic recruitment of basic and clinical pediatric cancer researchers.

Advance Child Health Research Partnerships with Nationally Leading Children's Hospitals: Engage Children's Hospital Association partners to understand how Arkansas Children's can be a partner in nationally significant child health research through the unique research opportunities present in the populations we serve. Connect the work of the Bates Center and the Pediatric Innovation Center with a national opportunity.

Arkansas Biosciences Institute (ABI) Partnership: Explore academic institution partnerships with ABI organizations—UAMS, the University of Arkansas, Arkansas State University and the University of Arkansas Agriculture division.



5. Establish a Pediatric Innovation Center

Through three phases of development, Arkansas Children's will create and build an innovation ecosystem in partnership with the state's leading innovation and accelerator teams.













PEDIATRIC INNOVATION CENTER

INTERNATIONALLY RECOGNIZED | NATIONALLY COMPETITIVE | WIDELY BENCHMARKED



Innovation Advisory Council: Oversee the work of these partnerships and drive recruitment.

Innovation and Commercialization Task Force: Train innovation captains, provide commercialization coaching and mentoring, and harvest ideas for commercialization.

Innovation Leadership Sprints: Identify specific clinical, operational and process challenges and brainstorm potential solutions in cross-departmental effort.

Proprietary Hackathon: Bring together internal and external resources in a focused weekend setting to generate solutions to specific clinical and operational challenges and create an environment and mechanism for potential start-up creation.

Research Collaboration: Collaborate with Arkansas Children's Research Institute to provide new pediatric technologies and opportunities for researchers and clinicians to create new intellectual property, be listed as inventors on patent applications and be credited in scientific publications.

Commercialization Retreat: Educate team members on how new innovations are commercialized.

Advanced Discovery & Roadmap Development: Identify internal assets so they can be appropriately engaged in various facets of the innovation programming and help identify how AC can differentiate itself as an international center of excellence around pediatric innovation.



Residential Healthcare Accelerator: Host selected international companies for a 12-week, on-campus accelerator to potentially acquire or invest in companies and/or technologies that demonstrate promise for the AC investment portfolio.

Pediatric Innovation Summit: Gather national thought leaders to stimulate innovation and dialogue.

Early-Stage Venture Fund: Invest a pool of funds into companies and technologies that have promise for the AC investment portfolio.

Place-Based Pediatric Innovation Center: Develop or build a physical facility that houses the Pediatric Innovation Center and all of its related activities.

8 • ARKANSAS CHILDREN'S: STRATEGIC PLAN - ADDENDUM I ARKANSAS CHILDREN'S: STRATEGIC PLAN - ADDENDUM I • 9







Develop nationally-recognized pediatric programs and advance child health by aligning selected high-potential quaternary care programs with cornerstone research programs to advance scientific discovery, equitably deliver innovative care and improve outcomes.

(Selected) High Potential Quaternary Care Programs

- Arkansas Children's Cancer and Blood Disorders Program
- Arkansas Children's David M. Clark Heart Center
- Arkansas Children's Neuroscience Center
- · Arkansas Children's Vascular Anomalies Center

Cornerstone Arkansas Children's Research Institute Programs

- Arkansas Children's Nutrition Center (ACNC)
- Arkansas Children's Center for Childhood Obesity Prevention (CCOP)
- Arkansas Children's Center for Translational Pediatric Research (CTPR)
- Arkansas Children's Brain Imaging Lab
- NIH IDeA States Pediatric Clinical Trials Network site (ACRI) and Data Coordinating and Operations Center (UAMS)

TACTIC 1:

Executive Committee Leadership

Form a Quaternary Care Research Executive Committee, which will guide the alignment of research in quaternary care programs and research centers. Key focus areas of the executive committee will be faculty recruitment, research participation and funding strategies.

Key Performance Indicators:

- 1. Host an annual research strategy retreat and quarterly meetings, starting in May 2022.
- 2. Establish committee roster, define objectives and timelines, and host first committee meeting by May 2022.
- 3. Define objectives and timelines for each quaternary care research program by September 2022.
- 4. Improve research-related scores and *U.S. News & World Report* rankings for select high potential programs. Rank in the top 50 nationally by 2024. Rank in the top 20 nationally by 2028.

TACTIC 2:

Quaternary Care Research Leadership

Recruit or develop quaternary care research leaders in each high-potential program, who will pair with established research center leaders in a dyad model. Dyad leaders will direct the execution of goals established by the Executive Committee. Dyad leaders will also be responsible for reporting on goals established by the Executive Committee.

- 1. Identify research leaders for each high-potential program and outline expectations and support provided by September 2022.
- Establish baseline metrics for each high-potential program regarding participation in multi-center
 research studies, local investigator-initiated studies, cross-disciplinary collaborative projects,
 publications, representation in the appropriate medical/research societies, and meetings and funding
 applications by December 2022.
- 3. Develop plan by January 2023 to increase capacity to perform translational and clinical research studies in context of clinical care. Increase active human subjects research protocols by 30% in years 2 and 3.

TACTIC 3:

Research Idea Development and Funding

Establish formalized structures that foster idea development and funding strategies for integrated clinical research.

- Implement a research-focused journal club between each high-potential program and each research center
 with the aim to develop collaborative research ideas and foster a research-oriented culture of ethical and
 equitable care delivery.
- Institute an intramural team science grants program to encourage translation of these research ideas into pilot studies generating the preliminary data necessary for subsequent collaborative external grant applications.
- Develop a high-potential program and research center symposium where fellows and faculty present collaborative research development ideas and research progress.

Key Performance Indicators:

- 1. Define quarterly meeting dates for each quaternary care program and research center. Host first journal club meeting by July 2022 and first research symposium by June 2023.
- 2. Create at least two funded team science grant awards by July 2023, with each quaternary program submitting at least one application. Award on a recurring basis.
- 3. Increase joint abstracts and publications from high potential programs by 25% by July 2024.
- 4. Increase annual ACRI external grant submissions from high-potential programs by 50% by July 2024.

TACTIC 4:

Research Visiting Professorship

Develop a research faculty visiting professor program for each high-potential program. In collaboration with the dyad partner and Executive Committee, each research leader will annually identify and host one or two visiting professors. These visiting professors will build synergy among high-potential programs and research centers as well as foster collaborations with other institutions and potentially advance a faculty recruitment strategy.

Key Performance Indicators:

 Establish bi-monthly visiting professor engagements, which include Pediatric Grand Rounds, a research symposium, fellow and junior faculty mentoring session and visitation with high-potential program and research center faculty members by July 2022.

TACTIC 5:

Fellowship Program as Clinician-Investigator Pipeline

Prioritize fellowship program recruitment and scholarly activities, and align with high-potential program research goals. Fellows will be expected to engage in research training and activities under the supervision of research faculty and generate peer-reviewed publications. The research leadership team will consider supporting and funding fourth year research fellowships and instructorships to further develop research skills of promising future junior faculty and advance faculty recruitment.

Key Performance Indicators:

- 1. Increase the proportion of fellows submitting funding applications by 20% by June 2024.
- 2. Increase the proportion of graduating fellows taking academic positions by 20% by June 2025.





Research Education for Clinical and Research Team Members

Develop an annual research boot camp for all clinical and research faculty and staff (M.D., Ph.D., APRN, Fellows/postdocs, specialty nurses, etc.) within high-potential programs and later expand to encompass faculty and staff organization-wide. Topics will have an overview of each of the research cores, including faculty profiles, updates on clinical activities and plans for growth (enabling researchers to better understand the research needs of quaternary programs), responsible conduct of research, understanding the IRB, how to access ethical and responsible conduct of research resources, intellectual property, etc. All training materials will be available asynchronously, and participation is expected of all team members.

Key Performance Indicators:

- 1. Host an inaugural research boot camp by September 2022.
- 2. Implement a pre- and post-assessment to measure change in perceptions of the role of research in healthcare delivery. Administer by September 2022. Publish and use data to inform subsequent boot camp agendas.
- 3. Increase the number of active research projects and team members involved by 15% each year, beginning in 2023.

TACTIC 7:

Research Workforce Development

Under the leadership of the Chief Academic and Clinical Officer and in collaboration with department and service chief leadership, develop a research faculty workforce plan aimed at recruiting clinician scientists in each high-potential program.

Key Performance Indicators:

- 1. Develop 5-year research workforce plan by January 2023.
- 2. Develop section-wide funded research FTE expectation of at least 20% of the total FTE of each high-potential program by July 2024.
- 3. Recruit or develop at least two clinician-scientists (afforded at least 50% research FTE) in each highpotential program by July 2024.

TACTIC 8:

Research Philanthropy for Quaternary Care Programs

Develop a focused research philanthropy strategy for each high-potential program that addresses research idea funding and endowed chair funding for research-intensive faculty.

- 1. Form a quaternary care research philanthropy strategy group to include AC Foundation and ACRI leadership, including an ACRI board representative, by July 2022.
- Develop a prioritized list of high-potential program research proposals, endowed chairs and desired timelines that the AC foundation can use to develop a research philanthropic operational plan by January 2023.
- 3. Develop yearly plans and metrics for utilization of special purpose research/specialty program funds, ensuring utilization at least 80% of available funds.



GOAL 2

Facilitate an environment of innovation and discovery through a top-tier research leadership and administrative team. The leadership and administrative team will enable research collaboration, create success with external funding, and ensure efficient access to core facilities and necessary infrastructure.

The administrative and leadership team will also increase participation in clinical trials networks (NIH, foundation, specialty-sponsored and industry-sponsored trials), lead multi-center research studies, and drive global research support across all research programs and investigators. Key services provided will include:

- Grants, agreements and innovation
- Proposal development and submission
- Pre- and post-award services
- Facilities management and planning
- · Cores management and sustainability
- Clinical research and clinical trials operations consortia and network participation
- Research informatics and data science capabilities
- Data coordinating and operations centers (DCOC) capabilities
- Research education and compliance
- Career development programs and strategic recruitments
- Research ethics consultation service
- Team science
- Diversity, equity and inclusion

TACTIC 1:

Research Support

Maintain a well-staffed and resourced administrative team in all key areas listed above. Develop a portfolio of administrative team members that investigators can efficiently contact for each need. Cross-train individuals so that no activity relies on a single person's expertise.

Key Performance Indicators:

- 1. By July 2022, develop an organizational chart identifying current roles and responsibilities and gaps in efficient models of service.
- 2. Define optimal numbers of pre- and post-awards grants managers required for efficient grants processing with a growth plan based on specific activity targets by September 2022. Achieve targets by July 2024.
- 3. Modify existing systems and tools to meet the service needs by December 2022.
- 4. By December 2023, create and implement an automated system for researchers to be notified of requests for applications (RFAs) and other funding opportunities.
- 5. Disseminate monthly financial statements to principal investigators beginning in January 2024 and conduct semi-annual reconciliations beginning in July 2023 and quarterly reconciliations by July 2024.
- 6. Cross-train all roles by July 2023.

TACTIC 2:

Talent Acquisition

Establish a ladder for career development and job advancement for all roles to enhance retention and maintain expertise. Standardize onboarding and training/cross-training of team members. Develop specific research expertise within the human resources team to streamline processes and facilitate building a strong and diverse research administrative team.

Key Performance Indicators:

- 1. Reduce position approval-to-hire time by 20%.
- 2. Increase the number and diversity of applicants and hires by 20%.
- 3. Maintain team member retention at 94%.





TACTIC 3:

Clinical Trials Support

Implement a Clinical Trials Management System (CTMS). Consider addition of an E-Binder and Research Pharmacy Management System (RPMS). Identify a project manager and team that will be dedicated to the CTMS/E-Binder/RPMS implementation effort along with administrative team representation.

Key Performance Indicators:

- 1. Form a CTMS/E-Binder/RPMS evaluation and implementation team by May 2022.
- 2. Secure resources and establish project timeline needed for implementation and integration of essential systems (e.g., Epic (Beacon), Workday, Project Tracker) by July 2022.
- 3. Develop a communications plan to support implementation of CTMS by October 2022.
- 4. Implement a new CTMS system by July 2023.

TACTIC 4:

Facility Expansion

Develop a facilities and financial plan to add dry and wet lab research space for expansion of research activities across the methodology spectrum.

Key Performance Indicators:

- 1. Develop short- and long-term Pediatric Clinical Research Unit (PCRU) expansion plans that respond to strategic, data-driven needs and incorporate into Arkansas Children's master facility plans by June 2022.
- 2. Increase F&A funding received per square foot of lab space by 20% by 2025.

TACTIC 5:

Clinical Research Operations

Configure an optimal clinical research operations team that is responsive to opportunity and ensures capacity to support short notice, high-priority clinical research studies throughout the organization. Organize the clinical research operations team for greatest efficiency and leveraging of role expertise by formally defining roles and forming team into pods. Defined roles will include research navigators, nurse and non-nurse coordinators, regulatory specialists (including NIH regulatory support and Food and Drug Administration [FDA] Investigational New Drug/Investigational Device Exemption [IND/IDE] facilitators) and research nurses. Research operations pods will be thematically organized, developed and directed by research managers and supervisors, and will consist of coordinators and regulatory specialists. The research nursing team will function as a core to support all operations pods.

- 1. By July 2022, define all research operations roles and develop job descriptions.
- By July 2022, develop productivity criteria for each role to assess current and future workforce needs; complete a clinical trials support needs audit that identifies research coordinator and clinical research investigator needs; and prioritize resource allocation.
- 3. By September 2022, develop and execute onboarding and training curriculum for each research operations role.
- 4. By September 2022, develop a business model for a clinical trials office.
- 5. By December 2022, develop a business model for support services.
- 6. Implement clinical research operations reorganization beginning in October 2022 and completed in July 2023.
- 7. Increase industry-sponsored revenue by 50% by 2025.
- 8. Improve project start-up time for human subjects research studies to 60 days.

TACTIC 6:

Research Informatics

Develop a research informatics office exclusively focused on informatics needs across the research continuum.

Key Performance Indicators:

- 1. By July 2022, develop a business model for a research informatics office, including defined roles, job descriptions, and productivity criteria for each role to assess current and future workforce needs.
- 2. Identify and recruit a research informatics leader by July 2023.
- By July 2023, develop research informatics computing infrastructure (i.e., high-performance computing
 machines, network storage for large amounts of data and commonly used research software) to support
 specific growth of research activities.
- 4. By December 2023, develop, pilot and test mechanisms that link EHR data between Arkansas Children's and UAMS to facilitate data collection across transitions of care and parent and child linkages, which will support life course research.
- 5. Increase research informatics requests by 100% by 2024.

TACTIC 7:

Data Coordinating and Operations Center Support

Develop infrastructure to effectively support multicenter data coordinating and operations centers (DCOCs) and position Arkansas Children's Research Institute to compete and secure federally-sponsored pediatric clinical trials networks.

Key Performance Indicators:

- Convene a data coordinating center strategic group by September 2022.
- 2. Perform needs assessment for future data coordinating centers by January 2023.
- 3. By July 2023, identify or recruit an additional faculty member to increase capacity for DCOC activities.
- 4. Develop a growth strategy for DCOC grant applications for specific clinical trial networks of interest by July 2023.
- 5. By July 2024, recruit additional two biostatistician faculty.
- 6. By July 2024, identify and resource the computing infrastructure required to support DCOC functions.
- 7. Apply for two additional data coordinating awards by 2025.

TACTIC 8:

Core Facilities

Perform a needs assessment for our existing research cores to identify gaps and maximize utility to investigators and ROI. Identify any potential needs for new cores.

Key Performance Indicators:

- 1. Identify cores for future investment by December 2022.
- 2. Develop a business model for each core by July 2023.

TACTIC 9:

Research Facilitation and Oversight

Strengthen research facilitation and oversight by establishing formal procedures and conducting semiannual assessments of investigators and programs receiving Arkansas Children's Research Institute support. Assessments will include the institute's president and chief operating officer, the vice chair for research, the appropriate department chair and accounting staff to review scientific and financial productivity and address barriers to success.

Key Performance Indicators:

- 1. Approve standard operating procedures and semi-annual research assessment approach by July 2022.
- 2. Educate and solicit feedback from research investigators on research facilitation and oversight approach by October 2022.
- 3. Provide an annual research progress report beginning in 2023 to the Arkansas Children's Research Institute Board of Directors, the Arkansas Children's system leadership team and all research investigators.
- 4. Increase the number of federally-funded investigators by 25% by 2024.
- 5. Decrease time to first external grant submission by new faculty by 15% by 2024.
- 6. Increase return on investment of internal funds (ratio of extramural funding obtained per internal dollar used for recruiting, pilot funding, etc.) by 50% by 2025.

TACTIC 10:

Faculty Research Development

Partner with UAMS' Translational Research Institute (TRI), Environmental influences on Child Health Outcomes (ECHO) Program, IDeA States Pediatric Clinical Trials Network (ISPCTN), and UAMS/Arkansas Children's Research Institute Centers of Biomedical Research Excellence (COBRE) programs to develop a portfolio of faculty research development opportunities, including mentored intramural grant programs (e.g., TRI, COBRE); research seminars; grant writing programs (especially K-readiness and K-to-R transition programs); and graduate programs (e.g. MS-CTR). Using the UAMS Department of Pediatrics mentoring program as a model, develop a robust research mentoring program that ensures career development of investigators. Mentoring activities will include grant and scientific writing, clinical trials conduct, grant fiscal management, building and managing research programs and labs, and intellectual property education.

- 1. Form a research mentoring strategy group and identify chairs by July 2022.
- 2. Submit application for Population Health COBRE by January 2023.
- 3. Outline a research mentoring program framework by January 2023.
- 4. Increase funded Ro1 NIH grant submissions by 10% by July 2023.
- 5. Develop, perform and report on an annual audit of research mentoring effectiveness by both mentors and mentees by July 2023.
- 6. Increase the number of faculty identified as clinician-investigators by 20% by July 2024.
- 7. Increase grant applications and publications for clinician-investigator faculty by 50% by July 2024.
- 8. Increase the number of faculty participants in training and development programs (ACRI/UAMS/TRI) by 50% by July 2024.
- 9. Increase NIH grants (as a percentage of grant base) by 10% by FY2024.
- 10. Increase annual peer-reviewed journal publications by 30% by 2025.



TACTIC 11:

Research Diversity Equity and Inclusion

Advance the recruitment and retention of underrepresented minority faculty members, employees and board members in coordination with the Arkansas Children's and UAMS offices of diversity, equity and inclusion. Utilize TRI resources and programs as well as other relevant partnerships to ensure recruitment and inclusion of underrepresented minorities in clinical research studies.

Key Performance Indicators:

- 1. Working with the TRI community engagement core, by January 2023, implement a strategy to increase research participation of unrepresented minorities by 20% by July 2024.
- Facilitate internships and shadowing programs in partnership with colleges and universities with high enrollment of underrepresented minorities to increase interest in healthcare-related research by June 2023.

TACTIC 12:

Internal Communications

Communicate effectively with internal stakeholders to promote a research-oriented culture of care, to inform team members and faculty of opportunities to augment research skills and participate in research-related activities, to guide team members and faculty to research-related resources, and to promote collaboration and highlight research accomplishments across all research programs.

Key Performance Indicators:

- Ensure proactive leadership communication, driven by the Arkansas Children's Research Institute
 President and COO at recurring leadership forums, including but not limited to, service chief meetings,
 system operations meetings and leadership forums.
- 2. Launch enhanced Arkansas Children's Research Institute newsletter by March 2022, providing relevant content and functionality to drive increased open rates by December 2022.
- Create a user-friendly and accessible intranet experience for Arkansas Children's and UAMS stakeholders
 alike. Populate routinely with rich and compelling research content to deepen research understanding and
 competency. Launch by January 2023. Increase website visits by 20% by January 2024.
- 4. Disseminate a weekly One Team News research highlight beginning in July 2022.
- 5. Proactively drive segmented communications based on internal stakeholder need.







Strengthen statewide and regional collaborations and community engagement to support life course, population health and community-engaged research.

TACTIC 1:

Marketing and Communications

Create a comprehensive marketing and communication plan to capture and disseminate pediatric and life course research successes and opportunities to a broad variety of stakeholders.

Key Performance Indicators:

- By July 2022, identify a research operations leader who will serve as a liaison to the Strategic Marketing and Communications division and will establish a committee to provide input regarding established communication priorities.
- Develop a specific research communication plan for potential partner research organizations, including all UA system universities, Arkansas Biosciences Institute member institutions, INBRE affiliated institutions and HBCU institutions by September 2022.
- 3. By January 2023, incorporate and highlight research accomplishments into the Arkansas Children's system annual reports with goals of increasing *U.S. News & World Report* reputation scores, aiding in recruitment of research faculty, attracting trainees interested in pursuing research careers and fostering inter-institutional collaborations.
- 4. By January 2023, develop a community and parent-focused bidirectional research communication plan to prioritize and guide ACRI activities and foster clinical trial participation among members in the community. These initiatives will integrate into the organization's existing patient communications framework.
- 5. By January 2023, create a process to advertise research participation opportunities to patients and families that enable them to contact research teams directly.
- 6. By January 2024, develop a "Permission to Contact" system within MyChart for research teams to contact families about new research opportunities in areas of expressed interest.
- 7. Develop a plan to improve ACRI investigator invitations to visiting professorships, invited research presentations, collaborative research publications, international research meetings, and invited funding proposals.
- 8. In collaboration with TRI, broadly disseminate pertinent research results relevant to promoting child health.
- 9. Increase participants in research studies by 50% by 2025.

TACTIC 2:

Life Course Research Development

In conjunction with TRI, establish a bi-annual life course research retreat and symposium aimed at sharing life course research results and sponsoring a "mini-grant" brainstorming competition for study concepts.

- 1. Achieve inaugural retreat attendance of 30-50 participants.
- 2. Track collaborations formed, publications and funding submissions resulting from the life course research retreat and symposium.
- 3. Submit at least two collaborative life course related external grants by July 2024
- 4. Utilize linked EHR data between ACH and UAMS for at least six projects by December 2024.

TACTIC 3:

Population Health and Community Engaged Research Development

Utilize resources and expertise from TRI, UAMS, CCOP and ACNC to expand application of these research methodologies to child health.

Key Performance Indicators:

- 1. Establish a pediatric and family practice-based research network to support research activities by December 2022.
- Utilize community engagement cores at TRI, UAMS, CCOP and ACNC to identify research priorities for our communities and achieve community input/engagement in 100% of our community-based research protocols by 2024.

TACTIC 4:

Research Community Connections

Join the Arkansas Research Alliance (ARA) Core Facilities Exchange to promote ACRI core facilities and foster collaborations with ARA partner institutions.

Key Performance Indicators:

- 1. Collaborate with ARA to track interest in and utilization of Arkansas Children's Research Institute core resources among external investigators.
- 2. Collaborate with ARA to track interest in and ultimate use of other institutions' resources by Arkansas Children's Research Institute investigators.
- 3. Submit an NIH R24 grant establishing a regional Bioenergetics Animal Core by 2025.

TACTIC 5:

Research Strategic Partnerships

Develop a shared strategy for 3-5 of the following partners that align shared interests and clearly identify objectives, reporting, metrics and annual assessments.

Priority partners include:

- UAMS
 - Winthrop P. Rockefeller Cancer Institute
 - Translational Research Institute
 - College of Public Health
 - College of Medicine
- Arkansas State University (ABI)
- University of Arkansas
- National Center for Toxicological Research (NCTR)
- University of Arkansas Division of Agriculture Research & Extension
- University of Arkansas Pine Bluff (HBCU)
- Philander Smith College (HBCU)

Key Performance Indicators:

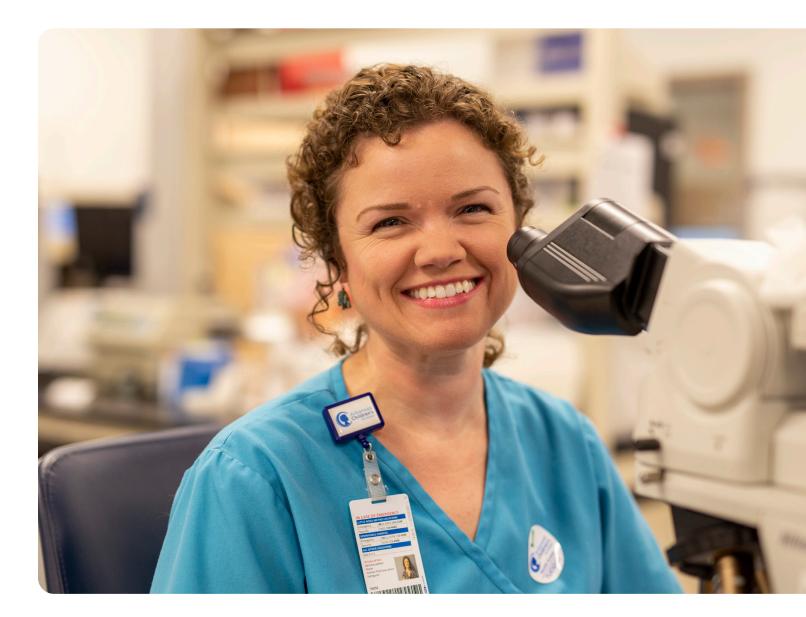
- 1. Develop a partnership plan for 3-5 of the above listed priority partners by July 2023.
- 2. Prioritize partnership engagements by July 2023.
- 3. Secure an NIH P or U award with partners by July 2025.

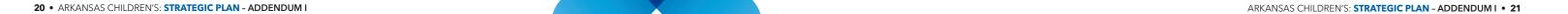
TACTIC 6:

Measurement of Collaborative Research Success

Develop a dashboard of Collaborative Research Success indicators to guide research integration and strategic direction. Measures should include the following:

- U.S. News & World Report reputation scores and research ranking.
- Number of collaborative publications (defined a partnership between an Arkansas Children's Research Institute investigator and a non-Arkansas Children's Research Institute investigator).
- Number of publications from new collaborations (defined a partnership between an Arkansas Children's Research Institute investigator and a non-Arkansas Children's Research Institute investigator who have not published together in last 5 years).
- Number of external funding applications with priority partners.
- Number of successful externally funded grants/innovation projects with priority partners.







HOSPITALS · RESEARCH · FOUNDATION

Arkans as Children's, Inc. is the only health care system in the state solely dedicated to caring for Arkansas' and the state solely dedicated to carring for Arkansas' and the state solely dedicatmore than 700,000 children. The private, non-profit organization includes two pediatric hospitals, a pediatric research institute and USDA nutrition center, a philanthropic foundation, a nursery alliance, statewide clinics, and many education and outreach programs – all focused on fulfilling a promise to define and deliver unprecedented child health. Arkansas Children's Hospital (ACH) is a 336-bed, Magnet-recognized facility in Little Rock operating the state's only Level I pediatric trauma center; the state's only burn center; the state's only Level IV neonatal intensive care unit; the state's only pediatric intensive care unit; the state's only pediatric surgery program with Level 1 verification from the American College of Surgeons (ACS); the state's only magnetoencephalography (MEG) system for neurosurgical planning and cutting-edge research; and the state's only nationally recognized pediatric transport program. Additionally, ACH is nationally ranked by U.S. News & World Report in four pediatric subspecialties (2021–2022): Cardiology & Heart Surgery, Nephrology, Pulmonology and Urology. Arkansas Children's Northwest (ACNW), the first and only pediatric hospital in the Northwest Arkansas region, is a level IV pediatric trauma center. ACNW operates a 24-bed inpatient unit; a surgical unit with five operating rooms; outpatient clinics offering over 20 subspecialties; diagnostic services; imaging capabilities; occupational therapy services; and Northwest Arkansas' only pediatric emergency department, equipped with 30 exam rooms. Generous philanthropic and volunteer engagement has sustained Arkansas Children's since it began as an orphanage in 1912, and today ensures the system can deliver on its promise of unprecedented child health.

To learn more, visit archildrens.org.