2023 ANNUAL REPORT
PRESENTED BY THE INSTITUTE FOR HEALTH INNOVATION

BETTER HEALTH FOR KENTUCKY TOGETHER
LETTER FROM THE EXECUTIVE DIRECTOR

I am proud to share our 2022-2023 Annual Report reflecting on our fifth year of the Institute for Health Innovation at Northern Kentucky University and everything we have done over the past twelve months. We had $13.5 million in active grants and contracts, which we used to:

- support the Initiative for HealthCare Entrepreneurship and Innovation (IHEI)
- help St. Elizabeth Healthcare to expand its school-based health telemedicine program to Pendleton, Owen, Carroll, Grant, and Gallatin County Schools and create a telehealth clinical training site on campus
- reduce the morbidity and mortality of substance misuse by enhancing rural residents' access to prevention, treatment, and recovery support
- increase the reach of our K-12 pipeline programs
- initiate a Bachelor’s of Science in Nursing program in Grant County to support rural students interested in a career in healthcare.

This year we supported 62 health-related startups and Series A companies in the region, helping them to raise over $40 million in capital for, file 19 patents, launch 13 new products, license 16 new technologies, and create 48 new jobs. We also dispersed over $348,000 in scholarships and $171,000 in paid internships for students in behavioral health, and hosted over 1,500 youth on campus to help expand the healthcare worker pipeline to NKU.

We continue to grow our team. In addition to Carolyn, Marissa, Shanna, Doug, Rico, Yvonne, Donnie, Tammy, Dallas, Jude, Molly, Shirley, Lauren, Gary, Xiaoni, Clay, Jia, and Imelda, we welcomed aboard Rhyanne, Kendall, Sherry, Jordan, and Jennifer.

I wish to thank all our many community partners and supporters. I know I speak for all of us at the IHI when I say that the tremendous support we have received from everyone around us does more than make our work possible; it makes it uplifting, rewarding, exciting, and meaningful. The IHI team simply could not do what is does without the community coming together to collaborate with us. We thank you. And I look forward to everything we will be doing next year!

Sincerely,

Valerie Gray Hardcastle
WHO WE ARE

DONORS

THE INSTITUTE’S PROGRAMS ARE MADE POSSIBLE BY THE GENEROUS SUPPORT OF THESE DONORS:

THE DURR FOUNDATION
EVA & OAKLEY FARRIS
CITY OF COVINGTON

THE GREATER CINCINNATI FOUNDATION
HERITAGE BANK

RAMI LEVENTHAL
ST. ELIZABETH HEALTHCARE
**WHAT WE DO**

**1. IMPROVING HEALTH INFRASTRUCTURE**
- Growing Rural Capacity
- Improving the Campus Support System
- Developing New Paraprofessional Providers

**2. SUPPORTING FUTURE HEALTH LEADERS**
- Providing Health Career Pathways for High School Students
- Introducing Elementary and Middle School Students to Health Careers
- Initiating Grant County BSN Program

**3. GROWING THE INNOVATION ECOSYSTEM**
- Expanding Faculty Innovation
- New Approaches in Medicaid
- Supporting Private Innovation
### ACTIVE GRANTS AND CONTRACTS

<table>
<thead>
<tr>
<th>Program</th>
<th>Grant Amount</th>
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<tbody>
<tr>
<td>EDA SPRINT Challenge Grant</td>
<td>$780,000</td>
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<tr>
<td>EDA University Center grant</td>
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<tr>
<td>HRSA-RCORP Implementation I and III</td>
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<tr>
<td>HRSA OIFSP</td>
<td>$2,400,000</td>
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<tr>
<td>HRSA OWEP</td>
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<tr>
<td>HRSA Community Health Worker Training Program</td>
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<tr>
<td>IIR-COSSAP</td>
<td>$750,000</td>
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<tr>
<td>JCOIN</td>
<td>$99,900</td>
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<tr>
<td>Kentucky 1115 Medicaid Waiver Demonstration Project Evaluation</td>
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<td>Kentucky Health Worker Collaborative</td>
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<td>Kentucky Quality Strategy Improvement contract</td>
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<tr>
<td>Summertime Kids (Greater Cincinnati Foundation)</td>
<td>$1,000</td>
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<tr>
<td>USDA Rural Business Development Enterprise Grant</td>
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<td>USDA Telehealth and Telemedicine</td>
<td>$210,210</td>
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<td>KYOSA Mini-Grant</td>
<td>$2,000</td>
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<tr>
<td>NKY ASAP</td>
<td>$6,100</td>
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### REVENUE AND EXPENSES FY 22

<table>
<thead>
<tr>
<th></th>
<th>Revenue</th>
<th>Expenses</th>
<th>Net Income</th>
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</thead>
<tbody>
<tr>
<td><strong>Total Revenue</strong></td>
<td>$14,831,286</td>
<td>$3,430,360</td>
<td><strong>$11,400,926</strong></td>
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<tr>
<td>Central Funding</td>
<td>$504,584</td>
<td></td>
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<tr>
<td>Grants &amp; Contracts</td>
<td>$13,512,764</td>
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<tr>
<td>Foundation &amp; Philanthropy</td>
<td>$480,723</td>
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<td></td>
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</tbody>
</table>
## FY23 Revenue

### Central Funding

- Grants & Contracts: 3.48%

### Foundation & Philanthropy

- Grants & Contracts: 93.20%
- Foundation: 3.32%

## FY23 Operating Expenses

### Programming

- Operating Expenses: 91.5%

### Administrative

- Operating Expenses: 6.50%

### Fundraising

- Operating Expenses: 2%
We continue to grow the healthcare infrastructure in the rural counties of Northern Kentucky. Our latest addition to the mix is developing telehealth capabilities in Carroll, Gallatin, Grant, Owen, and Pendleton Counties, through a partnership with St. Elizabeth Healthcare, NorthKey Community Care, Three Rivers District Health Department, the county school systems, and USDA. Supply chain issues slowed our progress in procuring the equipment, but we expect to be fully up and running in the fall! We will also leverage this new capability to create a new telehealth/telemedicine clinical placement site for nursing, counseling, and social work students in Campbell Hall.

We also started the Recovery Care Team, a new multidisciplinary group with representatives from the Department of Corrections, the Public Defender’s Office, Probation and Parole, NorthKey Community Care, and our regional grant-supported care coordinators that works together to reduce the unintended barriers that detainees often experience when returning to their communities.

**RURAL TELEHEALTH**

The IHI developed an online certification program for Kentucky Adult Peer Support Specialists. All students enrolled in this program receive full scholarships for tuition and fees. Since starting the program in 2019, we have certified 917 students from around the Commonwealth to serve as peer support for those struggling with Substance Use Disorder or mental health issues.

**PEER SUPPORT SPECIALIST CERTIFICATE**

The OIFSP provides scholarships, paid internships, and paid apprenticeships to students wishing to work with youth and families impacted by Substance Use Disorders as their career. The OIFSP is open to undergraduate and graduate students in Human Services and Addiction, Counseling, Social Work, and Psychology. Over 50 students have now been enrolled in this program.

**OPIOID-IMPACTED FAMILY SUPPORT PROGRAM (OIFSP)**

Our new Community Health Worker Training Program (CHW) grant supports Human Services and Addictions (HSR) majors at NKU. Students develop the skillsets they need to provide effective community outreach, build trust with communities, support connections to and retention in care and support services, along with other strategies to increase access to care and to assist individuals from underserved communities. This program provides scholarships, paid internships, and paid apprenticeships to students wishing to support underserved youth, families, and communities in our region. Eight students were admitted to the program in 2022-2023.
IMPROVING HEALTH INFRASTRUCTURE

THE CARE CLOSET @ NKU

The Care Closet @ NKU offers free clothing to assist NKU students in finding appropriate interview wear and everyday needs.

GEEK YOUR HEALTH

Geek Your Health is a series of health events themed around popular television shows, comics, films and video games. Participants are encouraged to “let their geek flag fly” by wearing fandom themed workout gear and talking about their favorite fandoms before, during and after classes. Everyone will receive a themed workbook to encourage self-reflection and personal tracking, as well as a chance to earn points for fun prizes.
SUPPORTING FUTURE HEALTH LEADERS

K-12 PROGRAMS NUMBERS

<table>
<thead>
<tr>
<th>Program</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEALTH SCIENCE BOOK CLUB</td>
<td>250</td>
</tr>
<tr>
<td>TEEN HEALTH SCIENCE CAFE</td>
<td>246</td>
</tr>
<tr>
<td>YOUTH HEALTH SCIENCE CAFE</td>
<td>59</td>
</tr>
<tr>
<td>FIELD TRIP</td>
<td>827</td>
</tr>
<tr>
<td>HEALTH SCIENCE SUMMER CAMP</td>
<td>40</td>
</tr>
<tr>
<td>GIRL SCOUT PROGRAM</td>
<td>92</td>
</tr>
</tbody>
</table>

NEW THIS YEAR

SUMMER CAMPS

A week of free day camps for middle and high school students. Students have the opportunity to meet with other kids their age throughout the Tri-state area and learn about different future health careers whilst being immersed in the NKU campus. Students spend their time in sessions with different presenters to learn about these careers and feel what it’s like to be a college student.

DISCOVERY KITS

Local elementary schools can receive a box containing STEM+H lesson plans and activities that meet educational guidelines in their school district. All the resources are free and are aimed at relevant areas within the health field including social determinants of health. The program is designed to address the absence of innovative health education for K-5 grade students and a lack of affordable resources for teachers. A Discovery Kit contains a lesson plan tailored to the appropriate grade level and tangible materials for the classroom to conduct an activity that relates to the content and reinforces the information presented.

I thought it was pretty cool looking through the microscope at the brain cells. It was cool to see the brains on a tray too!
- Jemma Kratzer, 11 years old, 5th grade, Girl Scout Junior
GROWING THE INNOVATION ECOSYSTEM

Our initiatives in healthcare innovation aim to support and attract companies, jobs, and talent in the health innovation sector to Northern Kentucky. They stimulate and help commercialize health innovation by aligning our top economic development, healthcare, university, and startup assets. Over the past 4.5 years, we have assisted over 95 regional startups in raising over $400 million in capital investments. SoCap Accelerate, our pre-Series A accelerator for health-related companies, successfully graduated their fifth and sixth cohorts.

COLLABORATIVE FOR ECONOMIC ENGAGEMENT

The Northern Kentucky University Collaborative for Economic Engagement is the key connector for entrepreneurs, private sector leaders, investors, educational programs, incubators, accelerators, governmental and economic development organizations, and non-profits. Key partners include Aviatra Accelerators, BizAccessHub, BlueNorth, City of Covington, Chase Center for Small Business and Non-Profits, ECDI, the IHI Health Care Entrepreneur-in-Residence, KeyHorse Capital, NKU Center for Innovation and Entrepreneurship, SoCap Accelerate, and Square1.

Housed at 112 Pike Street in Covington, it offers an interconnected set of programs and events to meet the specific challenges facing the northern Kentucky innovation ecosystem.

With funding from the USDA, we established the Collaborative Extension, housed in the NKU Grant County facility in Williamstown, to focus on supporting entrepreneurs and innovators in the rural counties of our region. Collaborative partners Aviatra Accelerators, Square1, and the BizAccessHub have started programs out of our new space.

MEDIA COVERAGE

Safewave Technology prepares to launch first product, founder eyes $1 billion exit
4 Apr 2023

Re-Assist among 40 global startups tapped for newest MIT ‘Solver’ class
30 Sept 2022
ENTREPRENEURSHIP & INNOVATION

RX SUMMIT
In 2023, Northern Kentucky University served as a Titanium Sponsor of the National Rx and Illicit Drug Summit. The Summit is the largest national collaboration of federal, state, and local professionals seeking to address prescription drug and opioid abuse, misuse, and diversion. More than 3,500 of the nation’s top researchers, advocates, policy-makers, medical professionals, and law enforcement agencies were in attendance representing all 50 states. NKU’s sponsorship highlighted the university’s commitment to addressing population health issues in two sessions: *Tripwires and Brick Walls: Innovative Solutions to Structural Barriers to Treatment and Recovery* and *Moral Reckoning Therapy in Schools: An Alternative to Punishment.*

FACULTY FELLOWS AWARDED $26,300 TO 10 FACULTY PROJECTS
Projects:
- Steve Bien-Aime, Emmanuelle Hewson & Torie Houston, *Journalists and College Athletes’ Mental Health*
- Ty Brumback, *Time-limited vs. Persistent Effects of the COVID-19 Pandemic on Young Adult Substance Use & Mental Health*
- Nicholas Caporusso, A web-based eye-tracking solution for affordable and remote assessment and monitoring of concussions
- Jennifer Hunter, *Social Health Needs Assessment and Community Resource Program at a Medically Underserved Clinical Site*
- Alex Kreit, *Drug Policy in Kentucky Issue Brief Series Proposal*
- Dana Ripley, *The Intersection of Trauma and Substance Use Recovery*
- Gabriel Sanders, *Developing HealthLink for NKU Faculty and Students*
- David Tataw, Nana Arthur-Mensah, Deborah Patten, Stanley McBride, and Sandra Spataro, *NKU Interdisciplinary Pandemic Leadership and Resilience Project*
- Yangyang Tao and Junxiu Zhou, *AI Eye-Track enabled video game for paralyzed patients*

“I am truly thankful for the intramural funding made available via the IHI Fellows Award. This award has afforded me the opportunity to further develop my research agenda, as well as share pertinent mental health information with Northern Kentucky University students and staff, as well as the community at large.”

- Rhyanne McDade, PhD, CHES, Faculty, College of Health and Human Services

NKU launches mental health program for students dealing with post-pandemic distress
18 Apr 2023

A LOOK AHEAD
Next fiscal year, we hope to launch a recovery house for rural Northern Kentucky, the telehealth clinical training site for NKU’s health care students, expand our innovation programming to support the forthcoming Life Sciences Lab in Covington, and expand our pathway programs to more counties in Kentucky.
Institute for Health Innovation

nku.edu/ihi

Stay Connected

@nkuihi

TOGETHER, WE CAN ACHIEVE BETTER HEALTH FOR KENTUCKY. TO GET INVOLVED OR MAKE A CONTRIBUTION, CALL 859-572-5980.