Mercy Health – Toledo Innovation
Annual Report 2023

MERCYHEALTH

Toledo Innovation

Mission - Build and promote a culture of innovation at Mercy Health and support entrepreneurial and economic development activities in the communities we serve

The Toledo Innovation team operates as part of the Mercy Health — Toledo Business Development and Advocacy group. The team's charge is two-fold; to identify, protect and commercialize Intellectual Property created by associates and clinicians in the eight-hospital Toledo market; and more generally to support the entrepreneurial ecosystem in the region. This work includes:

o   Evaluating new concepts for patentability and market potential
o   Working with industry partners on the commercialization of new technology
o   Assisting clinicians and associates with the introduction of new technology into Mercy Health
o   Supporting entrepreneurial activity in the largely underserved areas in our communities to generate economic activity
o   Building a culture of innovation at Mercy Health specifically and in the region broadly

The Toledo Innovation Team's work is guided by the Innovation Working Group, which consists of hospital leadership.
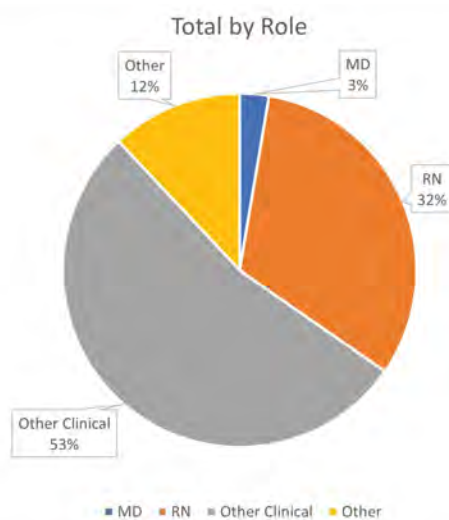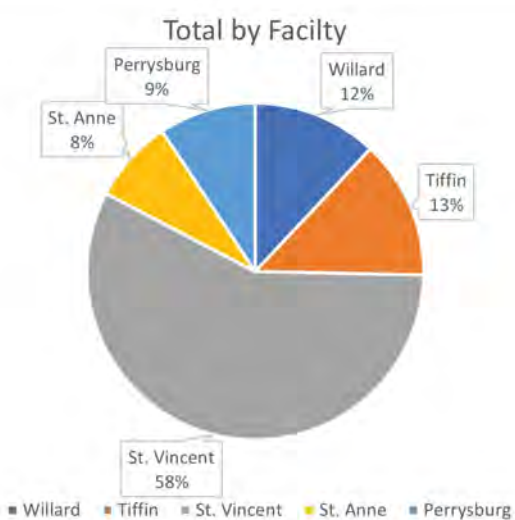
The Toledo Innovation team measures success by the number of new ideas submitted to the group for review/development, progress toward commercialization of those ideas, as well as the number and diversity of clients served, both within the Ministry and in the community.

2023 Idea Submission Activity

Innovation Challenges were conducted at five hospitals in the Toledo market. - Willard, Tiffin, St. Vincent, St. Anne, and Perrysburg. A challenge winner was selected at each facility who received 10,000 Called to Shine points as well as a project budget of $5,000 to support exploration and development of their idea. In addition, there was a random drawing among all submitters for Called to Shine points. The 2023 Challenges generated more submissions than the previous year.

All ideas were followed up with some level of review or directed to the proper internal operational department.

	Nurse	Physician	Other Clinical	Other	Total
Willard	5		1	3	**9**
Tiffin	3		5	2	**10**
St. Vincent	11	2	28	2	**43**
St. Anne	3		3		**6**
Perrysburg	2		3	2	**7**
TOTAL	**24**	**2**	**40**	**9**	**75**

Total by Facilty

Total by Role

2023 Active Ministry Patents

Inventor (1st)	Filing Date	Type	Title
Rogers, Burton	9/21/2022	US, Europe, Australia	Head and Neck Motion Testing and Exercise System
D'Errico, Anthony	11/8/2021	PCT	Endotracheal Tube
Carmody, Clay	6/30/2023	US	Weighted CT Imaging Device
Beauch, Lisa	4/5/2023	US Provisional	Joint Commission Compliance System
Fuson, Martin	3/15/2023	US Utility	US Probe Handle System
Nadaud, Nicholas	4/3/2023	PCT	Metatarsophalangeal Arthroplasty Prosthesis System and Method
Ranellone, Adam	12/22/2023	PCT	Suture Device
Aukerman, Glen	2/22/2023	TM	Noura Health TM

Definitions:

Provisional: Application filed with the United States Patent and Trademark Office (USPTO) that establishes early filing date – does not turn into issued patent unless a regular (utility) patent application is filed within one year, otherwise document automatically expires

Utility: Application filed with USPTO that is examined by a patent examiner, may be issued as a patent if all requirements of patentability are met
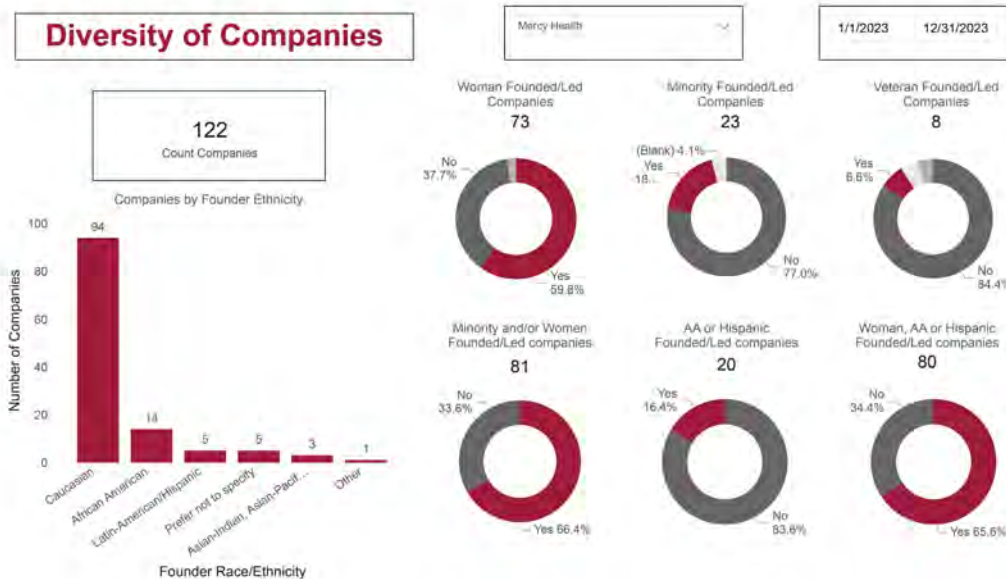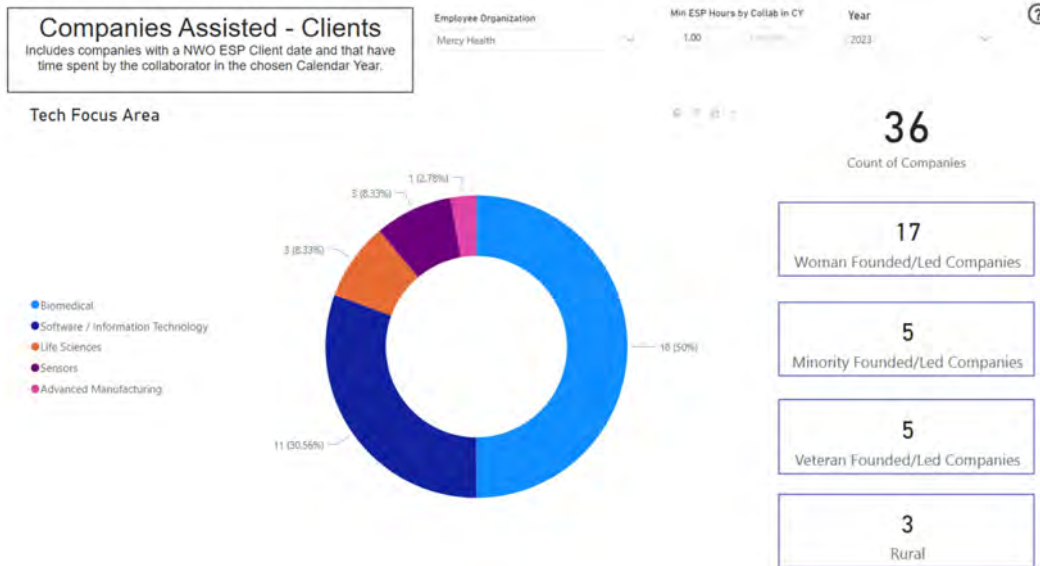
Patent CooperationTreaty (PCT): This international patent application that allows simultaneous patent protection in most international countries instead of filing several separate national or regional patent applications

Entrepreneurial Services Program (ESP)

The ESP program provides consulting services and funds to help commercialize new ideas and technologies in the State of Ohio. Funds spent by the program are used to help determine the intellectual property implications of the idea, its market viability and path to development.

2023 ESP Program Highlights

Technology Validation Funds (TVF) I and II

This fund supports de-risking ministry intellectual property with an addressable market of $70 million or greater (150K max) to prepare for license to an Ohio start-up company. Funds support prototype development, market research and other pre-licensing activities.
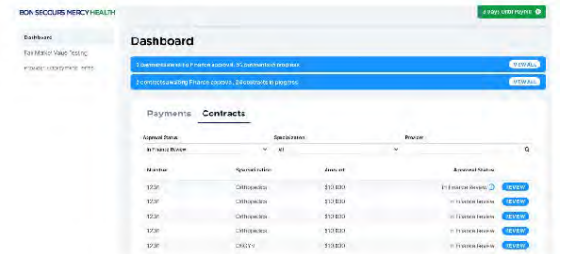
TVF I Projects

Joint Commission Compliance
- Software tool to allow mobile gathering of Joint Commission survey data
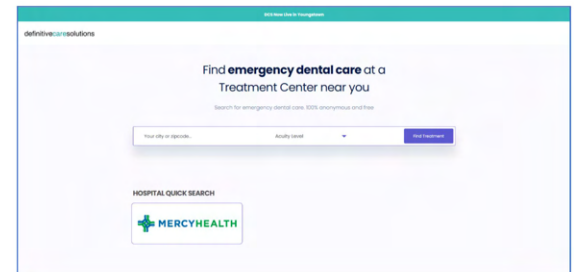- Project completed
- Discussing license with local early-stage company

Physician Compensation
- Software tool to manage physician payment process
- Project completed
- In license discussions with local early-stage company and the University of Michigan

Definitive Care Solutions
- Web portal to allow direct referral of Emergency Department patients with non-emergent conditions to specialized treatment
- Project completed
- Pilot completed at St. Elizabeth Hospital, contract with Ohio Department of Health to implement at other sites in Ohio; exploring commercial opportunities

TVF II Projects

Isokinetic Dynamometer for Neck Strength Measurement
- Device to measure neck strength in three planes
- Project complete and second-generation prototype developed
- Identifying commercialization path and next steps in development, exploring corporate and academic partnerships

Noura™

- Nutrigenomic App based on clinical work of Dr. Glen Aukerman
- MVP (minimum viable product) nearly complete - launch was expected 4th quarter 2023
- Executive team identified

TVF III Projects

Discharge Prediction
- Utilizing advanced software tools to better predict discharge and length of stay
- $150,000 funding approved
- Project not started

Autochem
- Device for point of care procedure equipment initial cleaning
- $150,000 funding approved
- Project not started

Emergency Severity Index (ESI) Scoring
- Emergency Severity Index is a standardized triage system used in hospital emergency departments to quickly assess the severity of a patient's condition upon arrival
- While a valuable tool, the ESI is inherently imperfect (and incorrect up to 20% of the time) - despite the existence of new and emerging technologies designed to more accurately assign the score (including lost revenue)
- We will utilize advanced software tools to better assign and manage the ESI throughout the process
- $150,000 in funding approved
- Project not started

U.S. Small Business Association (SBA) Community Navigator

Provides training and support to the community's historically underserved entrepreneurs, with a particular focus on the Cherry Legacy Neighborhood. This program serves both tech and non-tech-based clients.

2023 Program Highlights

- Twelve Getting Your Business Rolling classes were conducted at area libraries and online
- All who completed the program received a laptop computer
- Meeting needs of the community:
    - 299 Clients counseled
    - 243 Clients graduated
    - 249 BIPOC Owned - 83%
    - 247 Women Owned - 83%
    - 205 BIPOC Women - 69%
    - 27 Latinx Owned - 9%

The Toledo Innovation Team

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