

## **Innovations Licensing & Portfolio Company Highlights**

Anixa Biosciences, Inc. announced a European patent on ovarian cancer vaccine technology. The company also <u>presented positive new data from a Phase 1 study</u> of their breast cancer vaccine in patients treated for triple negative breast cancer.

<u>Avaneer Health, Inc.</u> launched a decentralized network and platform to transform healthcare administration.

<u>Cleveland Diagnostics, Inc.</u>, a Cleveland Clinic Innovations portfolio company, expanded their headquarters to a state-of-the-art research lab in 2023. The growth of their new space allows them to advance further innovating cancer diagnostics. The company also announced an agreement with Quest Diagnostics to expand patient access to IsoPSA® prostate cancer testing.

**Enspire DBS Therapy, Inc.**, a Cleveland Clinic Innovations portfolio company, supported study published in Nature Medicine and featured on CNN.

MediView XR, Inc. secured \$15M strategic funding round from Mayo Clinic, Cleveland Clinic, GE HealthCare, JobsOhio Capital Growth Fund, Inside View Investments, LLC, and KKVS Syndicate, with additional commitment to the next funding round. The company also received 510(k) clearance from the U.S. Food and Drug Administration (FDA) for its XR90 augmented reality-based surgical visualization and navigation platform. This is the first 510(k) clearance for an AR device with live imaging combined with 3D XR visualization with pre and intra-operative indications, which sets the stage for further advancements in augmented reality in the healthcare space.

Realeve, LLC, received a multimillion-dollar grant to support a study at Cleveland Clinic aimed at revolutionizing post-stroke recovery. Using Cleveland Clinic licensed IP, the Realeve medical team is led by Peter Bonutti, MD, a renowned orthopedic surgeon, inventor, author, and professor with more than 500 patents, and Frank Papay, MD, Chair, Dermatology and Plastic Surgery.

<u>Xealth</u>, a Cleveland Clinic portfolio company and a leader in enabling digital health at scale, announced that Children's Wisconsin is using Xealth's digital health platform systemwide to integrate patient education and custom content into care team workflows.

Zehna Therapeutics, LLC and its founder, Stan Hazen, MD, PhD, were featured in Drug Discovery News. The article highlights new therapies Dr. Hazen's team is developing to inhibit gut microbial enzymes in the TMAO pathway to prevent cardiovascular and metabolic disease.





## **Innovations Thought Leaders Share Their Insights**

#### Redefining Early-Stage Investments (RESI) Conference

**JD Friedland**, MBA, Managing Director of Cleveland Clinic Ventures, participated on a Corporate Venture Capital panel at the RESI Conference.

# Healthcare Information and Management Systems Society (HIMSS) Global Health Conference

During the HIMSS Global Health Conference in Chicago, JD Friedland joined a panel to discuss the challenges of siloed data and systems, the role of digital infrastructure in healthcare, and outlined real-life examples of how digital infrastructure is making an impact to health organizations.

Also during HIMSS, Todd Schwarzinger, MBA, Partner, Cleveland Clinic Ventures, joined a panel session to discuss sustainably transforming our healthcare systems while improving patient outcomes and overall population health.

#### **IBD Innovate Conference**

Julie Woda, PhD, Senior Director, Innovations Technology Development attended the IBD Innovate Conference in New York City with Mobius Care, Inc. Hosted by the Crohn's & Colitis Foundation, the conference aims to build awareness and connections across the IBD product development system. Thaddeus Stappenbeck's, MD, PhD, PAI-1 inhibitor work was highlighted by the Vice President of Translational Research and IBD Ventures, Andres Hurtado-Lorenzo, during his talk about the Crohn's and Colitis IBD therapeutics Incubator.

#### Ohio HealthTech Summit

Todd Schwarzinger, joined the panel discussion on Supporting Ohio's Digital Health Startups.

#### **Rally Innovation Conference**

Jerry Wilmink, PhD, MBA, Director, Business Development and Licensing, joined the panel "Generative AI in Healthcare and Drug Discovery." During the session, Dr. Wilmink shared use cases for where Generative AI is being used in healthcare, and how Cleveland Clinic Innovations assesses and commercializes new innovations in Generative AI. Following the discussion, Dr. Wilmink accepted a 2023 National Top Tech Company Award on behalf of Innovations.

#### **Project MedTech Midwest Showcase**

JD Friedland joined a panel discussion, "Hospital Innovation: Heavy Weight Champions". Speaking alongside David Sylvan, President at University Hospitals Ventures, and Abram Gordon, Vice President of Innovation Ventures at Cincinnati Children's, the panelists shared their thoughts on innovations in the healthcare space.





# InnoHealth 2023: Convening Ohio's Brightest Minds in Life Sciences Innovation

JD Friedland joined the "Venture Capital in Life Sciences" panel of Ohio Venture ecosystem partners. Presented by JobsOhio in partnership with Ohio Life Sciences, the day brought together all nine innovation district research institutions along with the Ohio life science industry, venture community, and select out of town invitees.

#### **Digital Tx East**

JD Friedland and Linda Li, CFA, Partner, Cleveland Clinic Ventures, Digital Health, presented their insights with attendees from the digital therapeutics community. JD participated in the panel discussion "Breaking Down the Wall of Provider & Patient Adoption of DTx: What's Still Stopping Us?". Linda participated in the inventor panel "Shark Tank Pitches – DTx Start-Up Companies Pitch to A Panel of Investors".

**HLTH** – The Healthcare Industry Ecosystem Event Over the past five years, HLTH has become the preeminent event in the healthcare industry. JD Friedland participated on the "Put Your Money Where the Impact Is".

#### **Med-Tech World Summit**

JD Friedland participated on the "Health System Investment Arms: How They Work" panel during the conference.

#### Johnson & Johnson MedTech Value-Based Innovation

Sonja O'Malley, MBA, PMP, Senior Director, Innovations, Technology Development, presented "Revolutionizing Healthcare: Technology, Innovation, and New Business Models are Reducing Costs and Improving Care" during Johnson & Johnson MedTech's Value-Based Innovation Event in Santiago, Chile. Sonja spoke on the technological challenges facing the healthcare industry while trying to create a future where medical intervention is increasingly intelligent, less invasive, and more personalized to enhance quality of care for patients.

#### Ohio Life Sciences Network & Connect

Linda Li participated in the panel "Commercialization Strategies & Opportunities" featuring speakers from OLS, University Hospitals, MetroHealth, McDonald Hopkins, and Team NEO. The event was a great platform for local startups, service providers, and investors to connect and share innovation ideas and viable commercialization pathways.



#### **Becker's Speaks with Todd Schwarzinger**

In the article "How Cleveland Clinic takes clinician ideas from the bedside to the boardroom" Todd discusses Cleveland Clinic Innovations and the state of the healthcare investment market so far in 2023.

#### **Exploring Digital Health Funding Strategies at Cleveland Clinic, UPMC**

Health system venture fund leaders joined *TechTarget* to discuss their investment strategy, how it changed during the pandemic, and their plans for the post-PHE era. JD Friedland was interviewed and spoke on the role the team plays on the commercialization of intellectual property emerging from Cleveland Clinic.

# <u>Investors Share Perspectives on 2023 Deals and Offer a Look at Emerging</u> **Areas for Interest**

JD Friedland shares perspectives on medical device investments with MedCity News in the runup to the HLTH conference.

#### The Accelerator with Michael Conniff

Bernardo Perez Villa, MD, MSc, Senior Engagement Partner, Florida, joined The Accelerator with Michael Conniff to discuss revolutionizing stroke recovery with deep brain stimulation and the groundbreaking research conducted by Cleveland Clinic recently published in Nature Medicine.





## **Additional Updates from Innovations and Our Inventors**

#### First "Celebrate Innovation" Event Hosted in May

Cleveland Clinic Innovations recognized its 2022 inventors during the first "Celebrate Innovation" Inventors Reception. Dr. Serpil Erzurum provided opening remarks, followed by words from featured inventor, Eric Yudelevich, MD.

#### Research Conducted by Margot Damaser, PhD, Published in American **Urological Association's Journal of Urology**

The UroMonitor is the first non-invasive wireless monitor to provide data to clinicians, aimed at improving quality of life while also providing accurate data needed to diagnose and treat lower urinary tract symptoms. Dr. Damaser's research will be used by Bright Uro through an exclusive licensing agreement from Cleveland Clinic for technology developed in collaboration with the U.S. Department of Veterans Affairs, Case Western Reserve University, and Parker Hannifin Corporation, which Bright Uro will use in its investigational Glean Urodynamics System.

Additionally, Dr. Damaser was selected as a Senior Member of the National Academy of Inventors (NAI). An internationally recognized expert in pelvic floor disorders and incontinence, she provides a unique perspective to prospective innovators as an active and successful inventor, professor, researcher, and scientist.

#### Food and Drug Administration (FDA) Announced a \$6.95 million, Five-Year **Grant to Create a New Consortium to Help Increase the Number of Pediatric Medical Devices Across the Nation**

The Midwest Pediatric Device Consortium will be led by investigators from Nationwide Children's Hospital, The Ohio State University, Cleveland Clinic Children's and Cincinnati Children's. Cleveland Clinic Children's inclusion in the consortium was made possible by the perseverance and efforts of Animesh (Aashoo) Tandon, MD.

#### Woman No Longer Needs Heart Transplant After Virtual Second Opinion

Michelle Pridmore share's her incredible patient-impact story made possible from the collaboration of The Clinic by Cleveland Clinic, a Cleveland Clinic Innovations start-up and a joint venture with Amwell and Cleveland Clinic.

#### Cleveland Clinic Inventor, Thaddeus Stappenbeck, MD, PhD, Receives **Sherman Prize for Contributions to IBD Research**

Through his microscope Dr. Stappenbeck makes groundbreaking discoveries in the underlying causes of IBD to unlock new treatment strategies.

#### High-tech "Intelligent Mouthguard" System Selected for Global Adoption by World Rugby

Technology invented by Cleveland Clinic researchers records every impact to the head and accurately reports data that can identify athletes who may require a concussion assessment. The technology counts more than 60 published and pending patents worldwide.







### **Innovations**

#### <u>Cleveland Clinic featured in Becker's "34 Hospital and Health System</u> Innovation Programs to Know" for 2023

Becker's honors 34 hospitals and health systems with forward-thinking innovation programs.

# <u>Cleveland Clinic Innovations Incubator Client, Diasome Pharmaceuticals, Inc., Announces First Closing of Series C Financing Round</u>

Financing supports our ongoing clinical research and advancement of transformative treatments for people living with diabetes and other metabolic disorders.

#### **The Innovation Journey with Dov Moran**

Geoff Vince, PhD, Executive Director of Cleveland Clinic Innovations, sits down with Dov Moran, inventor of the USB flash drive.

# Geoff Vince, PhD, featured in Becker's Healthcare "35 Hospital and Health System Chief Innovation Officers to Know"

For the second straight year, Dr. Vince has been recognized by *Becker's Hospital Review* as one of the top 35 chief innovation officers to know.

# <u>Theken Companies, LLC Acquires VisionAir Solutions, LLC from Cleveland</u> Clinic

VisionAir Solutions creates patient-specific airway stents with its 3D-design platform.

#### **Innovations Makes Connections at HLTH 2023**

Cleveland Clinic Innovations team members from Ventures, Engagement, and Business Development & Licensing attended last year's HLTH conference.

#### **Cleveland Clinic Innovations Welcomes the 2023-2025 Innovation Fellows**

The Proof-of-Concept Office is pleased to announce the new class of Innovation Fellows. This two-year program provides Cleveland Clinic employees with an opportunity to gain classroom and hands-on experience in technology development and commercialization one day per week.

### Enspire DBS Therapy, Inc. Announces \$17.6 Million Series B Financing

Financing advances the development of Deep Brain Stimulation (DBS) plus rehabilitation for stroke patients.

MediView XR, Inc. "X-ray vision" was featured in Radiology Today as an example of immersive technologies that are changing medical practice and education. Surgeons using the AR-based platform can "see" the anatomy below the skin via a 3D, holographic image created from a patient's prior CT or MRI scans.





#### **Abcon Therapeutics, Inc.**

Abcon's application for assistance in conducting critical preclinical IND-enabling toxicology studies, as well as preclinical and clinical-grade manufacturing of the company's antibody-drug conjugate, was accepted into the National Institute of Health's National Cancer Institute, Division of Cancer Treatment and Diagnosis, Experimental Therapeutics (NExT) Program.

#### Cardionomic, Inc.

Cardionomic continued to see strong enrollment in its active pilot studies in the US and Europe. Interim data from the study shared in February 2023 indicated that patients have been experiencing a material improvement in cardiac function after the procedure.

# Mobius Care, Inc. and Enspire DBS Therapy, Inc. Awarded \$150,000 Each by the Ohio Third Frontier Commission

The award provides grants to Ohio companies aiming to license institution-owned technologies to accelerate commercialization through activities like market research and prototyping to help companies raise funds needed to get the licensed technology to market faster.

