CBC | CHICAGO BIOMEDICAL CONSORTIUM

presents

Where vision meets investment

Chicago BioCapital Summit

November 7, 2024
Fulton Labs, Chicago, IL

The CBC gratefully acknowledges support from:

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A message from CBC Executive Director, Michelle Hoffmann, PhD



Hello,

Welcome to the 2nd Annual Chicago BioCapital Summit! On behalf of the Chicago Biomedical Consortium (CBC), our partners, sponsors, and member institutions, I sincerely thank you for joining us as we explore new frontiers in biomedical innovation and investment in the Midwest.

We aim to build a "One Illinois" model that unites local research institutions to catalyze biomedical breakthroughs on a scale that no single institution could achieve alone. Since 2006, with funding from the Searle Funds at the Chicago Community Trust, the CBC has been advancing groundbreaking science across three Chicago research institutions – the University of Chicago, Northwestern University, and the University of Illinois Chicago. In 2016, we expanded our focus to include translational science. More recently, in 2021, our mission has broadened to supporting economic development and building the Chicago biotech ecosystem. With 2024's launch of the CBC Hub for Innovative Technology and Entrepreneurship in the Sciences (CBC-HITES), a new proof-of-concept biopharma center funded by the National Institutes of Health (NIH), the Searle Funds, and the Walder Foundation, the CBC now spans nine Illinois research institutions.

To develop world-class research into leading life science companies, the CBC scouts, vets, funds, and nurtures scientific discoveries. We do this by embedding our industry-grade expertise into academia and working alongside the PI and trainees. Depending on the needs of each project, we offer market landscapes, competitive analysis, clinical trial feasibility assessment, product-market fit evaluations, go/no-go experiments, indication selection, industry connections, project management, and access to a Venture Capital network – all necessary to move translational research to commercialization. These resources are all available at no charge to researchers at member universities.

By developing science into Illinois-based biomedical companies, the CBC is a force for economic development. The Chicago BioCapital Summit showcases the Midwest's significant, value-creating academic innovation to outside investors and industry. The Summit's Hall of Inventions showcases 100 companies and scientist-entrepreneurs from our nine member universities, as well as the University of Michigan, the University of Wisconsin, Ohio State University, and the University of Iowa.

Today, we invite you to engage with Midwestern innovation to advance health and improve lives. Thank you for being part of this critical conversation. I look forward to the exciting exchanges and fruitful collaborations that will emerge from today's event. Enjoy!

Michelle Hoffmann

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Agenda

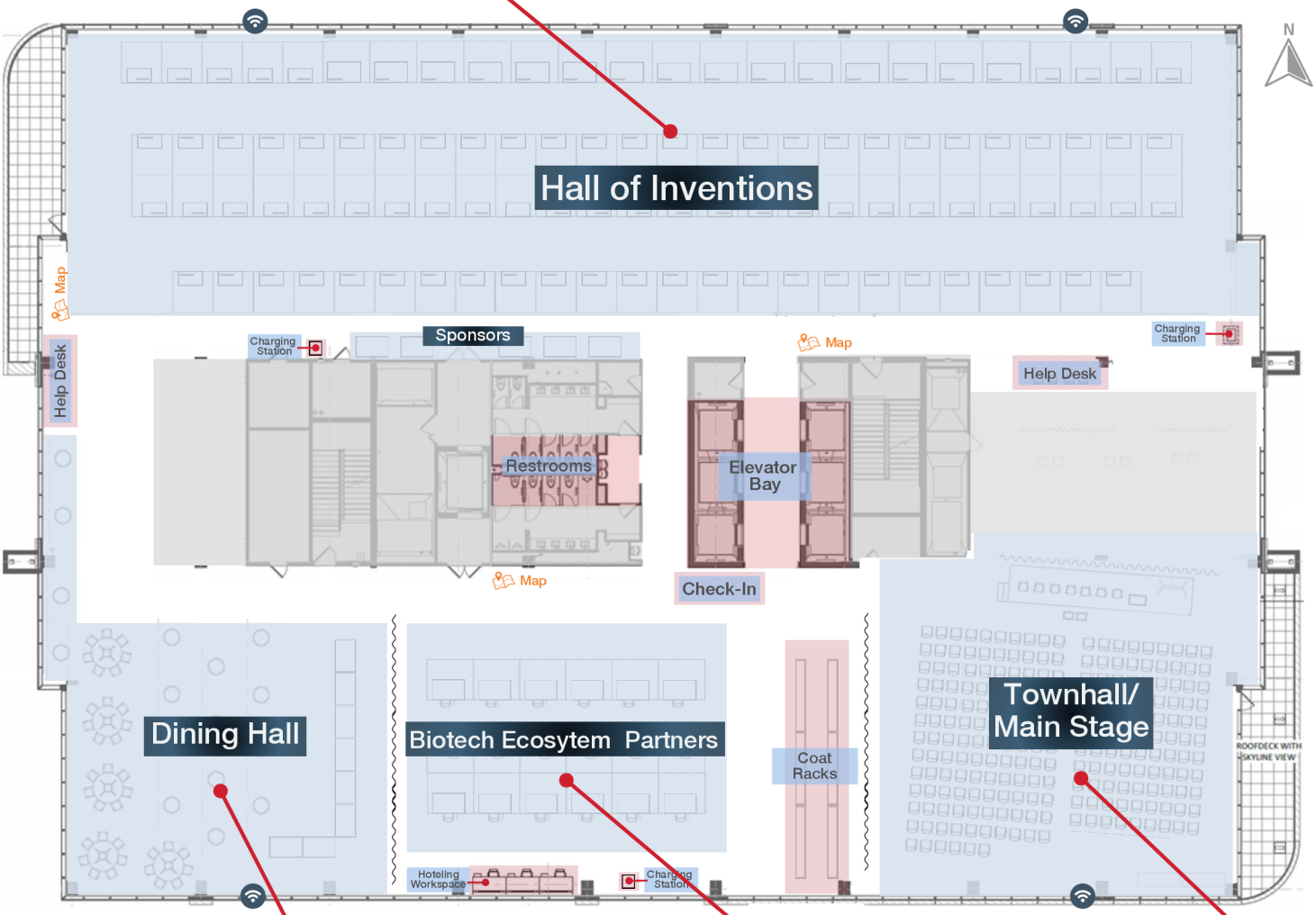
8:00 am	Registration	
8:30 am	Welcoming Remarks	• **Michelle Hoffmann** - Executive Director, Chicago Biomedical Consortium
8:40 am	Featured Guests	• **Steven M. Paul -** Venture Partner, Third Rock Ventures; Founder & Board Chair, Seaport Therapeutics; Former CEO, CSO & President of R&D, Karuna Therapeutics • **Jim Audia** - Drug Discovery & Early Development and Founding Scientist, FLARE Therapeutics *Introduced by **Jim Sullivan** - CEO, Vanqua Bio; Venture Partner, Orbimed*
9:10 am	Remarks	• **John Conrad** - President & CEO, Illinois Biotechnology Innovation Organization (iBio)
9:15 am	Keynote	• **Ted Love** - Chairman, Biotechnology Innovation Organization (BIO); Former President & CEO, Global Blood Therapeutics *Introduced by **Paul Burton** - Managing Partner, 2Flo Ventures*
9:45 am	Distinguished Speaker *(virtual)*	• **George Church** - Robert Winthrop Professor of Genetics, Harvard Medical School, co-founder of 50+ companies *Introduced by **Dimitra Georganopoulou** - General Partner, Qral Ventures*
10:15 am	Coffee Break	
10:45 am	Panel 1: Attracting capital to emerging biotech hubs	• **Martin D. Burke** - May and Ving Lee Professor for Chemical Innovation, and Professor of Chemistry • **Michal Preminger** - Regional Head, Johnson & Johnson Innovation, East North America • **Stephen Squinto** - CIO, J.P. Morgan Life Sciences Private Capital • **Dana Watt** - Partner, Breakout Ventures • **Tim Walbert** - Former Chairman, President & CEO, Horizon Therapeutics; Sr. Advisor, Amgen *Moderated by **Julia Monfrini Peev** - Managing Partner, PACE Healthcare Capital*
11:45 am	Introduction to Hall of Inventions	• **Michelle Hoffmann** - Executive Director, Chicago Biomedical Consortium
11:50 am	Hall of Inventions & Lunch	• **Hall of Invention companies** • **CDD Vault Introduction**
2:50 pm	Fireside Chat: Startup to growth and acquisition: a founder's perspective	• **Shoba Parthasarathi -** Founder & Principal, Intovis • **Erandi de Silva** - Partner, Drive Capital
3:20 pm	Panel 2: Connecting the dots: aligning academic discoveries with investors and advisors	• **Karen Heidelberger** - Partner & CPO, Deerfield Management • **Rima Chakrabarti** - Venture Partner, KdT Ventures • **Anya Schiess** - Managing Partner, J.P. Morgan Life Sciences Private Capital • **Christopher O'Donnell** - Executive Director, WRDM; Partner, Pfizer Ventures • **Mira Chaurushiya** - Managing Director, Westlake Village BioPartners • **Matthew McMahon** - Director, SEED, NIH *Moderated by **Ritu Shah** - Managing Director, Portal Innovations*
4:20 pm	Coffee Break	
4:45 pm	Panel 3: AI in the life sciences: promise and pitfalls	• **Matej Macak** - Partner, QuantumBlack / McKinsey & Company • **Milind Kamkolkar** - Venture Partner, RA Capital • **Renee Yao** - Ecosystem Business Development, Healthcare Life Sciences, NVIDIA • **Chris Ghadban** - Investor, The Venture Collective *Moderated by **Saif Rathore** - Senior Advisor, McKinsey & Company*
5:45 pm	Closing Remarks	
5:55 pm	Reception at Portal Innovations	

Event Map

@ 400 North Aberdeen, 15th Floor, Chicago, IL

Hall of Inventions

- Opens @ 11:50 am



Dining Hall

- Breakfast @ 8:00 am
- Lunch @ 11:50 am
- Coffee Breaks @ 10:15 am & 4:20pm

Biotech Ecosystem Partners

- Opens @ 11:50 am

Townhall

- Welcome @ 8:30 am
- Featured Guests @ 8:40 am
- Remarks @ 9:10 am
- Keynote Speaker @ 9:15 am
- Distinguished Speaker @ 9:45 am
- Panel 1@ 10:45 am
- Hall of Inventions Intro @11:45 am
- Fireside Chat @ 2:50 pm
- Panel 2 @ 3:20 pm
- Panel 3 @ 4:45 pm
- Closing Remarks @ 5:45 pm

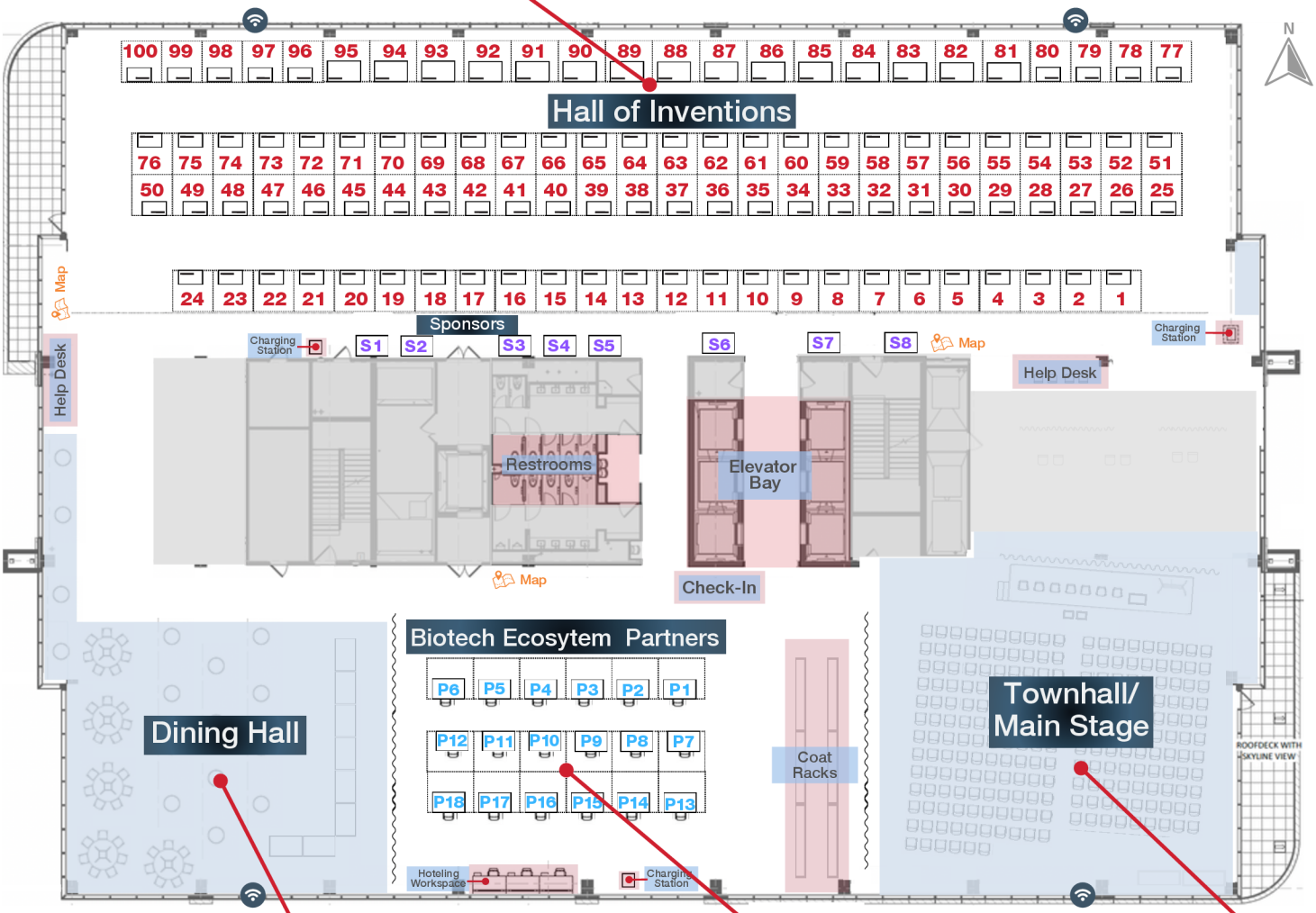
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Invited Speakers

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Featured Guests

8:40 am



Steven M. Paul, MD

Venture Partner, Third Rock Ventures; Founder & Board Chair, Seaport Therapeutics; Former CEO, CSO & President of R&D, Karuna Therapeutics

Steven M. Paul is the Founder and Chair of Seaport Therapeutics, a Venture Partner at Third Rock Ventures, and the Chairman of Rapport Therapeutics. He's the former President and CEO of Karuna Therapeutics (now Bristol Myers Squibb), and co-founder of Sage and Voyager Therapeutics. He was the Founding Director of the Appel Alzheimer's Disease Research Institute at Weill Cornell and is a current professor at Washington University School of Medicine. In his 17 years at Eli Lilly, he held key leadership roles and published over 550 papers. Dr. Paul is a fellow of the American Association for the Advancement of Science and a member of the National Academy of Medicine. He is also the chairman of the board of the Foundation for the National Institutes of Health.



Jim Audia, PhD

Founding Scientist, EVP Drug Discovery & Early Development, FLARE Therapeutics

Jim Audia is a chemist by training and began his career at Eli Lilly after postdoctoral training with Sam Danishefsky at Yale. Initially focused on psychiatric and neurodegenerative research, he led Lilly's Alzheimer's collaboration with Athena Neurosciences and developed numerous drug candidates. After retiring from Lilly in 2010, Jim was CSO at Constellation Pharmaceuticals, contributing to its acquisition by Morphosys. He then joined Northwestern University and the Chicago Biomedical Consortium as Executive Director before returning to industry roles, including Senior Advisor at Karuna Therapeutics and EVP of Drug Discovery & Early Development at Flare Therapeutics. Dr. Audia holds over 120 US patents and serves on various scientific advisory boards.

Introduction by:

Jim Sullivan, PhD

CEO, Vanqua Bio; Venture Partner, Orbimed



Remarks

9:10 am



John Conrad

President & CEO, Illinois Biotechnology Innovation Organization (iBio)

As President and CEO of iBIO, John's mission is to promote, connect and engage the members of the Illinois Life Sciences community to drive discovery, transform lives through groundbreaking research and grow the Illinois economy.

Keynote

9:15 am



Ted Love, MD

Chairman, Biotechnology Innovation Organization (BIO);
Former President & CEO, Global Blood Therapeutics

Ted Love is the former President and CEO of Global Blood Therapeutics (GBT), where he led the company's growth and the introduction of the first disease-modifying treatment for sickle cell disease. Under his leadership, GBT was acquired by Pfizer for $5.8 billion in 2022. He serves on the boards of Gilead Sciences, Structure Therapeutics, and Royalty Pharma plc, and chairs the Biotechnology Innovation Organization (BIO). He is a founding board member of Life Science Cares Bay Area. For two years he served as Executive Vice President, Research and Development and Technical Operations, at Onyx Pharmaceuticals, Inc., where he played an instrumental role in initiating and completing several of Onyx's first Phase 3 clinical trials. Prior to Onyx, he served as President, Chief Executive Officer and Chairman of Nuvelo, Inc., where he led the growth of the company to a market capitalization of $1 billion. Dr. Love has held senior roles at Theravance and Genentech. He holds a BA in molecular biology from Haverford College and an MD from Yale Medical School. He completed a residency in internal medicine and a fellowship in cardiology at the Massachusetts General Hospital. and has a background in internal medicine and cardiology.

Introduction by:

Paul Burton, JD, MBA

Managing Partner, 2Flo Ventures



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Distinguished Speaker

9:45 am (virtual)



George Church, PhD

Robert Winthrop Professor of Genetics, Harvard Medical School; co-founder of 50+ companies

George Church is a Professor of Genetics at Harvard Medical School and Director of PersonalGenomes.org, which provides the world's only open-access information on human Genomic, Environmental & Trait data (GET). His 1984 Harvard PhD included the first methods for direct genome sequencing, molecular multiplexing and barcoding. These led to the first genome sequence (pathogen, *Helicobacter pylori*) in 1994. His innovations are foundational to modern DNA sequencing and have led to numerous biotech startups in diagnostics and synthetic biology including Editas, Gen9/enEvolv/Zymergen/Warpdrive/Ginko, Veritas, Kome.PierianDx, Alacris, Nebula, AbVitro/Juno, and Egenesis. Dr. Church has advanced privacy, biosafety, and biosecurity policies and has received numerous honors, including election to NAS and NAE. He was director of an IARPA BRAIN Project and 3 NIH Centers for Excellence in Genomic Science. Dr. Church co-authored 650 papers, 156 patent publications and a book, *Regenesis.*

Introduction by:

Dimitra Georganopoulou, PhD

General Partner, Qral Ventures



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Panel 1: Biotech capital formation and ecosystem development

10:45 am



Moderator

Julia Monfrini Peev

Managing Partner, PACE Healthcare Capital

Julia Monfrini Peev is the Founder and Managing Partner of PACE Healthcare Capital, a venture capital firm investing in digital health and healthcare technologies based in Chicago, IL. As a seasoned institutional VC/PE investor, Julia has deployed $1B of capital in successful and transformative healthcare businesses, with a demonstrated track record.



Martin D. Burke, MD, PhD

May and Ving Lee Professor for Chemical Innovation, and Professor of Chemistry

Martin D. Burke is the scientific founder of four biotechnology companies with six drug candidates that have entered clinical trials to date. He is the founding Director of the Molecule Maker Lab at the Beckman Institute for Advanced Science and Technology and a founding member of the Molecule Maker Lab Institute at the Carl R. Woese Institute for Genomic Biology. He is a Fellow of the American Association for the Advancement of Science. Dr. Burke is now the May and Ving Lee Professor for Chemical Innovation in the Dept. of Chemistry at the University of Illinois at Urbana-Champaign.



Michal Preminger, PhD, MBA

Regional Head, Johnson & Johnson Innovation, East North America

Michal Preminger is Head of Johnson & Johnson Innovation LLC, East North America, managing co-investments in pharmaceuticals, consumer health, and medical devices. Previously, she was Executive Director at Harvard's Office of Technology Development, overseeing technology commercialization and industry collaborations. Dr. Preminger has held senior roles in biotech, co-founded a startup, and served on multiple advisory boards. She holds an MSc and PhD from Weizmann Institute, an MBA from INSEAD, and a BA in Medicine from Hebrew University.

Panel 1: Biotech capital formation and ecosystem development

10:45 am



Stephen Squinto, PhD

CIO, J.P. Morgan Life Sciences Private Capital

Stephen Squinto is the Chief Investment Officer for the newly formed J.P. Morgan Life Sciences Private Capital organization. He has contributed to multiple drug approvals in the US, EU, and other major global markets. In November 2014, Dr. Squinto retired as the Executive VP and Chief Global Operations Office at Alexion Pharmaceuticals, where he guided the discovery, development and commercial launches of Soliris and Stensiq. Prior to co-founding Alexion, Dr. Squinto helped build the drug discovery program at Regeneron Pharmaceuticals.



Dana Watt, PhD

Partner, Breakout Ventures

Dana Watt is a Partner at Breakout Ventures, where she drives the firm's seed investment strategy and supports company founders as they achieve commercialization milestones. Dr. Watt co-founded a molecular diagnostics spinout company during her postdoctoral fellowship at Washington University in St. Louis's entrepreneurship center, where she institutionalized support for SBIR/STTR-funded spinouts. Before joining Breakout in 2021, Dr. Watt was a Senior Investment Associate for the strategic healthcare venture fund Ascension Ventures and is a Kauffman Fellow.



Tim Walbert

Former Chairman, President & CEO, Horizon Therapeutics; Sr. Advisor, Amgen

Tim Walbert is a senior advisor at Amgen. He was Chairman, President, and CEO of Horizon Therapeutics until its $28.3 billion acquisition by Amgen in October 2023. Previously, he led IDM Pharma, which was acquired by Takeda, and NeoPharm. At Abbott (now AbbVie), he helped launch HUMIRA and led global cardiovascular strategy. Tim has served on multiple biotech boards, including Mirum Pharma and Century Therapeutics, and is involved with several advisory boards and business clubs. He holds a BA in business from Muhlenberg College.

Fireside Chat: Startup to growth and acquisition: a founder's perspective

2:50 pm



Shobha Parthasarathi, PhD

Founder and Principal, Intovis

Shobha Parthasarathi is the Founder and Principal of Intovis. She was a venture partner for Harrington Discovery Institute Ventures, which is a unique international initiative created to translate scientific discoveries from academia to clinical use. She also sits on the Advisory Board for Novo Nordisk's Bio Innovation Hub. Before founding Intovis, she was an Advisor and Vice President of External Innovation and New Ventures at Xontogeny. She was Vice President, Strategic Alliances and Business Development at Harrington Discovery Institute, and a Senior Director of Business Development at the North Carolina Biotechnology Center. Dr. Parthasarathi began her research career as a scientist in drug discovery at Takeda Oncology (Millennium Pharmaceuticals) in Cambridge, Massachusetts.



Erandi de Silva, PhD

Partner, Drive Capital

Erandi de Silva is an investment partner at Drive Capital. Prior to joining Drive, she co-founded Forge Biologics, a VC-backed CDMO headquartered in Columbus, OH, which was successfully acquired in 2023. She has over 15 years of experience in discovery research, translational therapeutic development, and partnering. She holds a PhD in Molecular Biology from Princeton University and a BS (Honors) in Biological Sciences from Stanford University. She has a strong commitment and track record in building and managing a diverse and innovative workforce. Dr. de Silva was honored as one of the Fiercest Women in Life Sciences by Fierce Pharma in 2022.

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Panel 2: Connecting the dots: aligning academic discoveries with investors and advisors

3:20 pm

Moderator



Ritu Shah

Managing Director, Portal Innovations

Ritu Shah has worked in pharmaceuticals and biotech for 25+ years, specifically around rare diseases and oncology. She spent the first part of her career in big pharma consulting which included R&D strategy roles at BMS, Amgen, Takeda, Astellas, and Abbott. Ritu then focused on portfolio and program management from R&D to Manufacturing to Commercial and Launch with Baxter, Baxalta, and Shire. Ritu has spent the last 7 years in biotech with a focus on gene therapy and rare disease at AveXis, Levo Therapeutics, and most recently, Chief Operating Officer at Pyxis Oncology. She is an experienced operator focused on portfolio and program management, operations, M&A, and strategy. Ritu has leveraged this experience to launch Ex³ at Portal Innovations which accelerates companies from seed to the next round of funding through IPO to reach patients as soon as possible.



Matthew McMahon, PhD

Director, Small business Education and Entrepreneurial Development, National Institutes of Health

Matthew McMahon leads the Small business Education and Entrepreneurial Development (SEED) Office at the National Institutes of Health (NIH). SEED helps academic innovators validate the potential health impacts of their discoveries through a national network of proof-of-concept centers and provides a host of professional advisory services to small business innovators funded by NIH's $1.3 billion/year SBIR and STTR programs. He previously served as the first director of the National Heart, Lung, and Blood Institute's Office of Translational Alliances and Coordination, and he created and led the National Eye Institute's Office of Translational Research. He was the principal scientist for the bionic eye company Second Sight Medical Products and a staff member on both the United States Senate and House of Representatives committees responsible for science, technology, and innovation policy.

Panel 2: Connecting the dots: aligning academic discoveries with investors and advisors

3:20 pm



Rima Chakrabarti, MD

Venture Partner, KdT Ventures

Rima Chakrabarti is a Venture Partner at KdT Ventures, an early-stage biotech venture capital firm, and CEO of Sentinel Biotherapeutics, a company focused on treating cancer with a modular immunotherapy delivery platform. She is also a co-founder of the RBL, a biotechnology company incubator in Houston, TX. Previously, she was a General Partner at KdT Ventures, where she led investments spanning surgical robotics, biomaterials, and engineered cell therapy. Dr. Chakrabarti is a trained neurologist and physician-scientist; her research focused on bioassay development using synthetic biology and molecular engineering.



Anya Schiess, MBA

Co-Managing Partner, J.P. Morgan Life Sciences Private Capital

Anya Schiess is Co-Managing Partner of Life Science Private Capital at J.P. Morgan, focusing on investments in life sciences and healthcare. She joined in 2022, leveraging J.P. Morgan's resources. Previously, Anya founded Healthy Ventures and was a venture capitalist at Thomas, McNerney & Partners. With a background in healthcare operations at Cardinal Health and Medtronic, she has launched numerous therapies. Anya holds a BA from Princeton and an MBA from Wharton.



Mira Chaurushiya, PhD

Managing Director, Westlake Village BioPartners

Mira Chaurushiya is a Managing Director at Westlake Village BioPartners with extensive experience in biological sciences and venture capital. After a postdoctoral fellowship in physiological chemistry at Genentech, she joined 5AM Ventures, investing in companies like Precision Nanosystems (acquired by Danaher) and Ideaya Biosciences (IDYA). She earned her PhD from UC San Diego and the Salk Institute and serves on the board of Biotech Connection Bay Area.

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Panel 2: Connecting the dots: aligning academic discoveries with investors and advisors

3:20 pm



Christopher O'Donnell, PhD

Executive Director, WRDM; Partner, Pfizer Ventures

Christopher O'Donnell is a Partner at Pfizer Ventures and Vice President of Worldwide Business Development at Pfizer. He oversees strategic equity investments, managing a portfolio including Adapsyn Bioscience, Nimbus, Pyxis Oncology, Strata Oncology and many others along with venture funds like Avant Bio, Mission BioCapital and Phoenix Venture Partners funds. With over 20 years of scientific leadership, Chris has a proven track record in advancing clinical candidates, building teams, and pioneering innovations in small molecule and antibody-drug conjugate development. He built and led the Applied Synthesis Technologies group within Pfizer R&D to help accelerate the delivery of Pfizer's small molecule portfolio. Prior to that, Chris built and led Pfizer's Antibody Drug Conjugate Oncology Medicinal Chemistry group which delivered new linker, payload and conjugation methods resulting in over 10 conjugates entering clinical development.

Chris received his BS in Chemistry from the University of Illinois-Urbana/Champaign and his PhD in Chemistry from the University of Wisconsin-Madison and joined Pfizer after completing post-doctoral studies at the University of California – Irvine.



Karen Heidelberger, MBA

Partner & CPO, Deerfield Management

Karen Heidelberger is a Partner and Chief Partnerships Officer at Deerfield Management, where she has been since 2002. She manages relationships with investors, partners, and academic institutions, and played a key role in conceptualizing and implementing the Cure initiative. Previously, she was a Trader at Deerfield and held roles at Merrill Lynch in Sales and Trading and Mergers and Acquisitions. With 22 years in healthcare and 28 years in finance, she is also active in Deerfield's Break into the Boardroom and Women in Science programs and serves on the Board of NewYorkBIO. Karen holds degrees from Cornell, Harvard Business School, and Columbia University.

Panel 3: AI in the life sciences: promise and pitfalls

4:45 pm

Moderator



Saif Rathore, MD, PhD

Senior Advisor, McKinsey & Company

Saif is a physician scientist with over 25 years of experience in strategy and operations, including the use of advanced analytics to accelerate research, discovery, and development in health care and the life sciences, working with companies across pharma, biotech, and medical tech. During his career, Dr. Rathore has served as SVP of Cellarity (a Flagship Pioneering company); the inaugural Global Head of Data and Analytics innovation at Cigna-Evernorth and Medical Director of Cigna Ventures; a partner at the Boston Consulting Group; and faculty in the Section of Cardiovascular Medicine at the Yale School of Medicine. Dr. Rathore received his MD and PhD (epidemiology) from Yale University and completed internal medicine at Massachusetts General Hospital. Saif has over 130 peer-reviewed publications and co-authored multiple professional guidelines and statements.



Matej Macak, PhD

Partner, QuantumBlack, McKinsey & Company

Matej Macak is a Partner at QuantumBlack / McKinsey & Company where he leads AI implementation projects focused on acceleration of R&D across life sciences and chemicals industries. At McKinsey and QuantumBlack, Dr. Macak advised 10+ Fortune 500 companies across Life Sciences and Chemicals on AI, digital. He led AI-based transformations covering R&D acceleration across value chain including target ID, drug discovery, and clinical development. Within his work he launched 5+ AI-based companies and centers of excellences across early-stage (e.g., startup, charity) and mature (e.g., Big Pharma) companies. Within McKinsey, he launched 5+ product-lines focused on R&D acceleration including CGT, small molecule and large molecule discovery, target ID.

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Panel 3: AI in the life sciences: promise and pitfalls

4:45 pm



Milind Kamkolkar, MS

Venture Partner, RA Capital

Milind Kamkolkar is a Venture Partner and leader of AI at RA Capital. He co-founded Paradigm in 2022 backed by Arch and General Catalyst. He raised 203.5M USD for their Series A, and focused on creating equitable access to clinical trials as a treatment option for any patient, anywhere. Before that, Milind was the CDO of Cellarity, a Flagship Pioneering biotechnology company that, using AI, is rewriting the rules of drug creation. At Sanofi, Milind was the pharmaceutical industry's first enterprise Chief Data Officer. As VP of AI & Behavioral Science at Novartis, Milind launched the AI & Data Science role in Digital Medicine. He was on the Board of Directors for Castor and Turbine, two techbio companies specializing in improving clinical trials and drug discovery simulation. Milind is a Former Special Advisor to the UN Global Sustainable Development Goals.



Renee Yao

Ecosystem Business Development, Healthcare Lifesciences, NVIDIA

Renee Yao leads ecosystem business development in healthcare life sciences at NVIDIA, where she focuses on scaling partners and startups. While managing a diverse portfolio, she also oversees over 3,000 healthcare startups in segments such as digital health, medical instruments, medical imaging, genomics, and drug discovery. Previously, Renee worked in product management for NVIDIA's AI systems, shaping bundle solutions and reference architectures for self-driving cars, telecommunications, and big data analytics industries. Outside of NVIDIA, Renee has founded six startups in areas including healthcare insurance, fashion, AI toys, and more.

Panel 3: AI in the life sciences: promise and pitfalls

4:45 pm



Chris Ghadban

Investor, The Venture Collective

Chris Ghadban currently leads the deeptech investment practice at The Venture Collective (TVC). In addition to his work as an investor, Chris is Founder of the nonprofit 1bio (One Ecosystem in Bio), a leading global community and content platform supporting bio-innovation. Prior to joining TVC, Chris was a Principal at Alix Ventures, where he helped lead the early-stage investment practice (pre-seed to series A) to support life science startups. Prior to joining Alix, Chris was the Director of GapSummit, and a Program Lead with AstraZeneca's Emerging Innovations Unit – S&E, BD, and innovation strategy.

Hall of Inventions

Hall of Inventions - Table Index

Hall of Inventions Innovators

Table	Featured Innovator	Technology	Lead Focus
1	Acorn Genetics (NU)	Diagnostics, Platform	Cardiovascular & Vascular Disease, Oncology, Neurology, Neurodegeneration
2	Cardio Diagnostics (UI)	Diagnostics, AI & Algorithms	Cardiovascular & Vascular Diseases
3	Cardiosense (NU)	Diagnostics, AI & Algorithms	Cardiovascular & Vascular Diseases
4	Concilio (UC)	Nanotechnology, Synthetic Biology	Cardiovascular & Vascular Diseases
5	Dupage Medical Technology (UIC)	Small Molecules, Peptides, Nanotechnology	Cardiovascular & Vascular Diseases
6	Lohman Technologies (UW)	Medical Device	Cardiovascular & Vascular Diseases
7	Mountview Therapeutics (LCH)	Nanotechnology, Gene Therapy, Nucleic Acid, Platform	Cardiovascular & Vascular Diseases, Acute Care
8	Resuscitation Therapeutics (RFU)	Small Molecules, AI & Algorithms, Medical Device, Biologics	Cardiovascular & Vascular Diseases, Acute Care
9	William Muller, MD, PhD (Faculty) (NU)	Peptides	Cardiovascular & Vascular Diseases, Autoimmunity
10	Paul Goldspink, PhD, & Beata Wolska, PhD (Faculty) (UIC)	Small Molecules, Peptides	Cardiovascular & Vascular Diseases, Rare & Genetic Diseases
11	Prenosis (UIUC)	AI & Algorithms, Diagnostics, Point of Care, Medical Device, Platform	Acute Care
12	Terry Vanden Hoek, MD, & Jing Li, MD (Faculty) (UIC)	Peptides	Acute Care
13	Dimension Inx (UIC)	Synthetic Biology, Nanotechnology	Surgical
14	Amphix Bio (NU)	Nanotechnology, Peptides, Platform	Surgical, Neurology, Rare & Genetic Diseases
15	Trace Biosciences (O)	Diagnostics, Imaging	Surgical, Real-time Visualization
16	3^2 Biosciences (UC) (UW)	Diagnostics, Biologics, Platform	Microbiome, AgBio & Food
17	3Bar Biologics (OSU)	CDMO	Microbiome, AgBio & Food
18	MicroMGX (NU)	Small Molecules, Biologics, Platform	Microbiome, AgBio & Food
19	Yobee Care (NU)	Other (Probiotic Solutions)	Microbiome, AgBio & Food
20	BiomeSense (UC)	AI & Algorithms, Platform	Microbiome, AgBio & Food
21	Ali Keshavarzian, MD (Faculty) (RushU)	Small Molecules	Microbiome, AgBio & Food
22	Opera Bioscience (NU)	Protein Engineering, Platform	Microbiome, AgBio & Food, Oncology
23	AirAnswers (RFU)	Diagnostics	Allergy
24	BAnta Therapeutics (UIC)	Small Molecules, Peptides, Nanotechnology	Allergy, Cardiovascular & Vascular Diseases, Rare & Genetic Diseases
25	Claudyn Biotech (UC) (UIC)	Small Molecules, Peptides	Autoimmunity
26	ClostraBio (UC)	Nanotechnology, Synthetic Biology	Autoimmunity, Microbiome, AgBio & Food
27	COUR Pharmaceuticals (NU)	Nanotechnology, Platform	Autoimmunity
28	EVOQ Therapeutics (UM)	Vaccines, Platform	Autoimmuniy
29	Signl (UC)	Vaccines	Autoimmunity
30	Syenex (NU)	Synthetic Biology, Cell Therapy, Platform	Autoimmunity, Oncology, Rare & Genetic Diseases
31	ARTEC Biotech (LCH)	Cell Therapy	Oncology
32	Atzeyo Biosensors (UIUC)	Diagnostics, Medical Device, Platform	Oncology
33	Serder Bulun, MD, & Ping Yin, MD, PhD (Faculty) (NU)	Small Molecules	Oncology, Women's Health
34	Eleuthra Photonics (UIUC)	Diagnostics, Imaging, Medical Device	Oncology
35	Ellis Bio (UC)	Nucleic Acid, Research Tools	Oncology
36	Aplexis (NU)	Small Molecules	Oncology
37	Sean Fanning, PhD (Faculty) (LUC)	Small Molecules	Oncology
38	Gregor Diagnostics (UW)	Diagnostics	Oncology
39	Anthony Kossiakoff, PhD (Faculty) (UC)	Protein Engineering, Monoclonal Antibodies	Oncology
40	Grove Biopharma (NU)	Synthetic Biology, Platform	Oncology
41	Promiss Diagnostics (UW)	Diagnostics, AI & Algorithms	Oncology
42	Shana O. Kelley, PhD, & Randy Atwal, PhD (NU)	Small Molecules, Platform	Oncology
43	Immuto Scientific (UW)	Antibodies, Biologics, Platform	Oncology
44	M3D (UM)	Medical Device	Oncology
45	Irina Balyasnikova, PhD (Faculty) (NU)	Biologics, Antibodies, Protein Engineering	Oncology
46	NovaScan (UW)	Diagnostics, AI & Algorithms, Imaging, Medical Device	Oncology

Affiliated Institutions

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RFU - Rosalind Franklin University
RushU - Rush University
UC - University of Chicago
UM - University of Michigan
UI - University of Iowa
UIC - University of Illinois Chicago
UIUC - University of Illinois Urbana-Champaign
UW - University of Wisconsin

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Hall of Inventions Innovators *(cont.)*

Table	Featured Innovator	Technology	Lead Focus
47	OrisDX (UC) (O)	Diagnostics	Oncology
48	Modumab Therapeutics (NU)	Biologics, Antibodies, Platform	Oncology, Autoimmunity
49	SimBioSys (UIUC)	AI & Algorithms, Diagnostics, Medical Device	Oncology
50	Vortex Therapeutics (NU)	Small Molecules	Oncology
51	Xiaoyu Zhang, PhD (Faculty) (NU)	Small Molecules	Oncology
52	Riptide Therapeutics (UC)	Small Molecules	Oncology
53	Abcon Therapeutics (UM) (O)	Antibodies	Oncology, Autoimmunity
54	Saros Therapeutics (UM)	Nanotechnology, Platform	Oncology, Autoimmunity
55	Varchas Biotechnologies (NU)	Cell Therapy	Oncology, Autoimmunity
56	Temprian Oncology (NU)	Nanotechnology	Oncology
56	Temprian Therapeutics (NU)	Gene Therapy, Nucleic acids, Platform	Autoimmunity
56	Vivacelle Bio (O)	Nanotechnology, Synthetic Biology	Autoimmunity, Acute Care, Surgical, Cardiovascular & Vascular Diseases
57	Tensor (UC)	AI & Algorithms, Diagnostics, Platform	Oncology, Drug & Target ID
58	ReAx Biotechnologies (UC)	Small Molecules, Platform	Oncology, Autoimmunity, Proteostasis, Drug & Target ID
59	Enzyme by Design (UIC)	Protein Engineering	Oncology, Proteostasis
60	Clarix Imaging (UC)	Imaging, AI & Algorithms, Medical Device	Oncology, Surgical
61	IMMUNARTES (UC)	Biologics, Antibodies, Vaccines	Infectious Diseases
62	Irina Nesterova, PhD (Faculty) (NIU)	Diagnostic, Point of Care, Nucleic Acid, Platform	Infectious Diseases
63	Perseid Medical (UIUC)	Medical Device	Infectious Diseases
64	Synpha Biosciences (UW)	Synthetic Biology, AI & Algorithms, Biologics, Platform	Infectious Diseases
65	Vastimmune Biologics (UIC)	Vaccines, Nanotechnology	Infectious Diseases
66	Venumadhav Korampally, PhD (Faculty) (NIU)	Medical Device, Diagnostics, Nucleic Acid, Platform	Infectious Diseases, Microbiome, AgBio & Food
67	Juan Mendoza, PhD (Faculty) (UC)	Protein Engineering	Infectious Diseases
68	Sahar Vahabzadeh, PhD (Faculty) (NIU)	Nanotechnology, Synthetic Biology, Medical Device	Infectious Diseases, Ophthalmology, Surgical
69	Loyola Clinical NLP (LUC)	AI & Algorithms	Other (Clinical Services)
70	Mudassir Rashid, PhD (Faculty) (IIT)	Medical Device, AI & Algorithms	Other (Diabetes)
71	Katz Diagnostics (RushU) (NU)	Diagnostics	Other (Fibromyalgia)
72	Stemloop (NU)	Synthetic Biology, Diagnostics, Protein Engineering, Nucleic Acid, AI & Algorithms, Platform	Microbiome, AgBio & Food, Other
73	Sibel Health (NU)	Medical Device	Other (Sensors)
74	Anapneo (IIT)	Small Molecules	Other (Sleep Apnea)
75	SNC Therapeutics (NU) (O)	Nanotechnology, Small Molecules, Gene Therapy, Platform	Oncology, Diabetes, Rare & Genetic Diseases
76	Ikaika Therapeutics (NU)	Antibodies	Rare & Genetic Diseases
77	Syntax Bio (UIC)	Nanotechnology, Cell Therapy, Gene Therapy, Platform	Rare & Genetic Diseases
78	Selagine (UIC)	Biologics	Ophthalmology
79	Siloam Vision (UIC) (O)	Diagnostics, AI & Algorithms	Ophthalmology
80	Inomagen Therapeutics (NU)	Gene therapy	Oncology
81	Biagon (IIT)	Other (Computational Biology), Platform	Drug & Target ID
82	Intero Biosystems (UM)	Other (Organoids), Platform	Drug & Target ID
83	SynthBits (UC)	Nanotechnology, Imaging	Drug & Target ID
84	CellCipher (UC) (O)	AI & Algorithms, Precision Medicine, Platform	Oncology, Neurology, Neurodegeneration, Drug & Target ID
85	Neuroplastica (NU)	Platform, Synthetic Biology	Neurology, Neuropsychiatry & Mood Disorders, Rare & Genetic Diseases, Drug & Target ID
86	Cadenza Bio (UIUC)	Small Molecules, Platform	Neurology, Neurodegeneration
87	NeuraWorx Medical Technologies (UW)	Medical Device	Neurology, Neurodegeneration
88	Vanqua Bio (NU)	Small Molecules, Platform	Neurology, Neurodegenerative Disorders
89	Stem Pharm (UW)	Small Molecules, Platform	Neurology, Neurodegeneration, Drug & Target ID
90	Akava Therapeutics (NU)	Small Molecules, Peptides	Neurology, Neurodegeneration, Oncology
91	Blue Arbor Technologies (UM)	Medical Device	Neurology

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Hall of Inventions Innovators *(cont.)*

Table	Featured Innovator	Technology	Lead Focus
92	Lysosomal Therapeutics (NU)	Platform	Neurology
93	KeyWise AI (UIC) (O)	AI & Algorithms	Neurology, Neuropsychiatry & Mood Disorders, Neurodegeneration
94	Peter Penzes, PhD, & Euan Parnell, PhD (Faculty) (NU)	Small Molecules	Neurology, Neuropsychiatry & Autism Spectrum Disorders, Rare & Genetic Diseases
95	Sigenics (IIT)	Medical Device	Neurology
96	Samie Tootooni, PhD (Faculty) (LUC)	Diagnostics, AI & Algorithms	Neurology, Cardiovascular & Vascular Diseases
97	Rhaeos (NU)	Medical Device	Neurology, Neurodegeneration, Acute Care, Surgical
98	Bright Minds Biosciences (UIC)	Small Molecules	Neurology, Rare & Genetic Diseases, Neuropsychiatry & Mood Disorders
99	Stream Neuroscience (NIU) (O)	Small Molecules	Neurology, Rare & Genetic Diseases, Neuropsychiatry & Mood Disorders
100	Pax Neuroscience (UIC)	Diagnostics	Neurology, Neuropsychiatry & Mood Disorders

Biotech Ecosystem Partners

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P3	Polsky Center at The University of Chicago
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Biotech Ecosystem Partners

Office of Technology Management at University of Illinois Chicago

P1

Melissa Maderia, PhD, MBA • Assistant Director
Maryna Solkovksi, PhD • Technology Manager

The Office of Technology Management (OTM) at University of Illinois Chicago (UIC) works with university members to advance research, education, and economic development. These advances have come from all corners of the University and their impact has created businesses, jobs, and economic well-being. With multiple therapeutics in the market, UIC has consistently exceeded the national average in royalty revenue with $450M generated over the last 15 years.

INVO/InQbation Lab at Northwestern University

P2

Lisa Dhar, PhD • AVP, Innovation & New Ventures
Sonia Kim, PhD • Executive Director, Querrey InQbation Lab

The Innovation and New Ventures Office (INVO) and the Querrey InQbation Lab support Northwestern University inventors and entrepreneurs who seek to commercialize their discoveries and technologies. The InQbation Lab is home to a growing ecosystem of founders, faculty, students, and staff focused on translating research-driven innovations that will lead to impactful technologies benefitting society.

Polsky Center at The University of Chicago

P3

Fei Li, PhD, MBA • Senior Manager, Venture Partnerships

The Polsky Center for Entrepreneurship and Innovation serves The University of Chicago by advancing innovative ideas and technologies from The University of Chicago ecosystem to the world. The Polsky Center has provided over two decades of venture support for students and faculty interested in entrepreneurship as well as robust training for students interested in pursuing a career in venture capital and private equity.

Rosalind Franklin University of Medicine and Science

P4

Michael Rosen, PhD • Managing Director, Innovation and Research Park and Helix 51 Incubator

Every day at Rosalind Franklin University of Medicine and Science, our world-class researchers are forging paths in the lab toward new ways to diagnose and treat a range of devastating diseases. This groundbreaking work in our labs is just the beginning. Changing and saving lives involves collaboration with both industry partners and innovators who help translate lab discoveries into desperately needed therapeutics and diagnostics.

Biotech Ecosystem Partners

Center for Health Innovation and Entrepreneurship at Loyola University

P5

Michael Bloom, PhD • Founding Director, Center for Health Innovation and Entrepreneurship
Susan Baker, PhD • Professor, Department of Microbiology & Immunology

The Center for Health Innovation and Entrepreneurship (CHIE) was established in 2020 by the Parkinson School of Health Sciences and Public Health as a central hub for scholars, community partners, thought leaders, entrepreneurs, and students. CHIE fosters purpose-driven research and education aimed at reducing health inequities and improving health care delivery for all.

Illinois Institute of Technology

P6

Maryam Saleh, PhD • Executive Director of the Ed Kaplan Family Institute for Innovation and Tech Entrepreneurship
Fred Hickernell, PhD • Vice Provost for Research Professor, Department of Applied Mathematics

Illinois Institute of Technology is a private, technology-focused research university offering undergraduate and graduate degrees in engineering, science, architecture, business, design, human sciences, computing, and law. Illinois Tech offers exceptional preparation for professions that require technological sophistication, an innovative mindset, and an entrepreneurial spirit.

Rush University

P7

Stefan Green, PhD • Associate Professor, Department of internal Medicine

Researchers at Rush University are leading efforts to cure disease and promote health equity in both Chicago and around the world. Students and faculty work together to conduct basic science, translational, clinical, medical education, and community-based research that spans the entire healthcare field.

Discovery Partners Institute

P8

Robert Okabe • Director, New Business Ventures
Nilofar Khanbhai • Venture Creation Lead

The Discovery Partners Institute leverages the knowledge enterprise of the entire University of Illinois System by advancing new avenues of applied research, developing new ventures from System innovations, and providing access to technology careers for those unable to access traditional pathways to new economy jobs.

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Biotech Ecosystem Partners

Carl R. Woese Institute for Genomic Biology at University of Illinois Urbana-Champaign

P9

Tracy Parish • Director of External Relations and Strategic Partnerships

The Carl R. Woese Institute for Genomic Biology (IGB) at the University of Illinois Urbana-Champaign (UIUC) is an interdisciplinary institute dedicated to transformative research and technology in life sciences using team-based strategies to tackle grand societal challenges. The IGB embodies its motto, Where Science Meets Society, by engaging with the public through innovative research programs and inclusive community events.

University of Illinois Urbana-Champaign

P9

A. Mariana Lencina, PhD • Senior Technology Manager
Gerald Wilson, PhD, MBA • Director of Entrepreneurship

The University of Illinois Urbana–Champaign is a public land-grant research university in Illinois in the twin cities of Champaign and Urbana. It is the flagship institution of the University of Illinois system and was founded in 1867. The university serves the people of Illinois through a shared commitment to excellence in teaching, research, public engagement, economic development and health care. Faculty, staff, and students share their knowledge, expertise, and resources with residents in every corner of the state through public service and outreach programs.

Northern Illinois University

P10

Selina Cervantes, PhD • Research Assistant
Venumadhav Korampally, PhD • Associate Professor, Department of Electrical Engineering

The College of Engineering and Engineering Technology (CEET) at Northern Illinois University (NIU) offers accredited programs in various engineering fields, including electrical, mechanical, biomedical, and more. With hands-on learning from day one, close industry partnerships, and strong research opportunities, CEET prepares students to be leaders. Boasting a near-perfect job placement rate, CEET is dedicated to student success.

Ann & Robert H. Lurie Children's Hospital of Chicago

P11

Kosh Ghosh, MBA • Executive Director, Innovation Programs
Amanda Maldonado, PhD • Innovation Portfolio Manager

Stanley Manne Children's Research Institute at Ann & Robert H. Lurie Children's Hospital of Chicago aims to generate new knowledge and translate advancements in the prevention, diagnosis, and treatment of diseases that affect children's health through adolescence and adulthood. As one of the nation's premier institutes for pediatric research, the Manne Research Institute collaborates with Northwestern University, community partners, and other medical centers and academic institutions across the globe.

Biotech Ecosystem Partners

Wisconsin Alumni Research Foundation

P12

Michael Partsch, MBA • Chief Venture Officer
Jonathan Young, PhD • Head of WARF Therapeutics
Joshua Carson, PhD • Venture Manager

The Wisconsin Alumni Research Foundation (WARF) was established in 1925 as an independent, nonprofit foundation. WARF manages more than 1,900 patents and an investment portfolio of $2.7 billion as it funds university research, obtains patents for campus discoveries, and licenses inventions to industry.

The University of Michigan - Innovation Partnerships

P13

Sarah Jameson-Valencia, MBA • Associate Director of Ventures, Life Sciences
Dave Repp • Director of Ventures and Managing Director of the Accelerate Blue Fund

Innovation Partnerships is the primary gateway for University of Michigan (U-M) researchers seeking to increase the impact of their work by connecting with the private sector. Our team of experts help amplify the impact of U-M research through corporate-sponsored research collaborations, licensing and intellectual property strategies, and connections with business mentors, entrepreneurs, and investors to support startup company formation.

The Consortium for Technology & Innovation in Pediatrics

P14

Juan Salomon Espinoza, MD, FAAP • Director, Principal Investigator
Rachel Spencer • Program Coordinator, Communications

The Consortium for Technology & Innovation in Pediatrics (CTIP) is a pediatric medical device accelerator based at Ann & Robert H. Lurie Children's Hospital of Chicago and Children's Hospital Los Angeles (CHLA). CTIP promotes the development and commercialization of pediatric medical devices by simultaneously engaging and coordinating clinicians, engineers, regulators, hospital administrators, industry, patients, and the business community.

NIH NINDS - Small Business Program

P15

Annette Gilchrist, PhD • Program Director, Drug Discovery

The NINDS Small Business Program works to achieve the mission of the National Institute of Neurological Disorders and Stroke by supporting innovative ideas at different stages of development, including applied bench research, translational research, and early-stage clinical trials.

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Biotech Ecosystem Partners

Federal Laboratory Consortium

P15

Whitney A. Hastings, PhD • Chair, FLC Sr. Technology Transfer Manager, NCI
Hemant Bhimnathwala, PhD • Sr. Innovation & Commercialization Manager, Argonne National Lab

The Federal Laboratory Consortium (FLC), a nationwide network of more than 300 laboratories, provides strategies and opportunities for accelerating the development of federal technologies into the marketplace through a collaborative process called technology transfer (T2). Public-private partnerships play an essential role in the FLC's mission to increase the impact of federal T2 for the benefit of society, the economy, and national security.

Illinois Science and Technology Coalition

P16

Jacob Barry • Innovation Program Manager

The Illinois Science & Technology Coalition is a member-driven non-profit that strengthens the state's innovation economy through ecosystem programming and support, data insights, and non-partisan policy along with advocacy at a state and national level. Our impactful STEM education programs connect classrooms with companies to solve real world problems while preparing the next generation of STEM talent.

SmartHealth Catalyzer, Inc

P17

Tom Denison • CEO of SmartHealth Catalyzer, Inc

SmartHealth Catalyzer, Inc. builds and seed funds biomedical startups based on the most promising innovations discovered at Midwest universities and research hospitals. Located at the epicenter of the largest biomedical cluster in the Midwest, SmartHealth builds biomedical startups comprised of elite bioentrepreneurs and biotech experts each with 30+ years industry experience and expertise across drug, diagnostic, and med device.

Hall of Inventions

Table # 16

3^2 Biosciences

Technology: Diagnostics; Biologics; Platform • Lead Focus: Microbiome, AgBio & Food • Pre-Seed • Founded 2023

- Three Squared Biosciences aims to redefine healthcare by improving health span through microbiome-based innovations, focusing on gut microbiome diagnostics and therapies to prevent and treat disease.
- Three Squared Biosciences has developed two platform technologies: a diagnostic management tool (GB Platform) to define the functional health of the gut microbiome and microbiome-based interventions (CS Platform) to modulate the gut microbiome and prevent disease. These technologies are designed to measure and restore balance within the gut microbiome, which is linked to numerous chronic diseases.
- Led by CEO Peter Farmakis, MBA, a seasoned executive with a strong track record in life sciences and supported by three scientific founders from the University of Chicago/University of Wisconsin-Madison, including world-renowned experts in gut microbiome research.

Table # 17

3Bar Biologics

Technology: CDMO • Lead Focus: Microbiome, AgBio & Food • Series A • Founded 2013

- 3BarBio partners with discovery companies who want to commercialize microbes and distributors who want to sell beneficial microbes.
- 3BarBio enables the further adoption of biologics by designing innovative packaging and delivery solutions, verified by microbiologists, for its partners. 3BarBio is a biological contract development and manufacturing organization (CDMO) focusing on delivering viable microbes to the end user with packaging innovations and biomanufacturing.
- With technology and talent from Ohio State University, the team is led by CEO Bruce Caldwell who brings 30 years of customer discovery and product innovation leadership from a career at Scotts Miracle-Gro and Procter & Gamble. Mr. Caldwell earned a BS ChE from Georgia Tech and an MBA from U. Cincinnati.

Table # 53

Abcon Therapeutics

Technology: Antibodies • Lead Focus: Oncology; Autoimmunity • Seed • Founded 2020

- Abcon Therapeutics, Inc. is dedicated to the development of first-in-class therapeutics for treating cancer and autoimmunity.
- Abcon Therapeutics' first products include a high affinity, fully humanized, anti-CD6 monoclonal antibody & an antibody-drug conjugate, which has been highly effective in treating preclinical models of T-cell lymphoma & several T cell-mediated autoimmune diseases. Abcon Therapeutics is raising SAFE notes to advance their product for treating solid tumors, as well as their nanobody and nano-Fc fusion proteins for graft-versus-host disease and other autoimmune indications.
- Tony Giordano, PhD, is an experienced entrepreneur who has founded/co-founded/led eight biotechnology companies (one completed an IPO, two were acquired). Scientific founders include Dr. Feng Lin, a Professor at Cleveland Clinic and Dr. David Fox, MD, a Professor at the University of Michigan.

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Hall of Inventions

Table # 1

Acorn Genetics

Technology: Diagnostics; Platform • Lead Focus: Cardiovascular & Vascular; Oncology; Neurodegeneration • Seed • Founded 2019

- Acorn Genetics emphasizes privacy and protection of genetic data. The company's services include delivering at-home genetic testing through a fast and precise genetic sequencer, enabling clients to take action against diseases such as cancer, Alzheimer's, and heart disease years before their health is affected.
- Acorn Genetics' third-generation graphene-based genome sequencer provides results with higher accuracy, cost-efficiency, and speed than other systems on the market.
- Founder and CEO Ana Cornell is a Thiel Fellow and was previously an undergraduate at Northwestern University. Based on work done in Professor Nathan Gianneschi's lab at Northwestern, Acorn is currently sponsored by the NSF, the Thiel Foundation, VentureWell, and The Garage at Northwestern.

Table # 23

AirAnswers

Technology: Diagnostics • Lead Focus: Allergy • Pre-Seed • Founded 2016

- AirAnswers aims to become a key component of indoor air quality management for people with pulmonary inflammation.
- AirAnswers has a breakthrough proprietary collector of airborne pathogens (mold, allergens, bacteria, viruses) down to 0.1 micron in size for lab analysis using electrokinetic technology. This technology enables characterization of indoor quality for remediation and maintenance. They believe what is measured can be managed.
- Founded by former executives of Abbott Laboratories with decades of experience in laboratory testing, AirAnswers, Inc. is currently operating within the Incubator at Rosalind Franklin University.

Table # 90

Akava Therapeutics

Technology: Small Molecules; Peptides • Lead Focus: Neurodegeneration; Oncology • Seed • Founded 2019

- Akava Therapeutics' mission is to discover and develop first-in-class inhibition therapeutics addressing unmet medical needs in neurodegeneration and oncology, allowing patients to live longer with improved quality of life.
- They are developing first-in-class small molecule therapeutics that inhibit protein aggregation, inhibit enzymes, and inhibit cancer for a variety of neurodegenerative diseases and cancers. AKV9, Akava's lead candidate for ALS, is the first compound to directly target upper motor neurons (UMN), an area of early degeneration.
- Founder, Richard B. Silverman, PhD, is the Patrick G. Ryan/Aon Professor in the Departments of Chemistry, Molecular Biosciences, and Pharmacology at Northwestern University. Dr. Silverman is the inventor of the molecule that became the blockbuster drug Lyrica®, marketed by Pfizer, with peak annual sales of $5.5 billion, the inventor of CPP-115, licensed to Catalyst Pharmaceuticals, which successfully completed a Phase I clinical trial, and the inventor of OV329, licensed to Ovid Therapeutics for epilepsies.

Hall of Inventions

Table # 14

Amphix Bio

Technology: Nanotechnology; Peptides; Platform; • Lead Focus: Neurology; Surgical; Rare & Genetic Diseases • Seed • Founded 2019

- Amphix Bio's mission is to develop regenerative therapeutics that promote healing after traumatic injury and increase human healthspans - the time that people can live productive, fulfilling lives.
- Amphix Bio's supramolecular therapeutics platform triggers targeted regenerative signaling pathways and provides an extracellular scaffold to support tissue growth. Their first two programs are regenerative therapies for spinal fusion surgery and acute spinal cord injury.
- Nick Sather, PhD, (CEO) co-founded Amphix Bio and has led the company from the initial tech transfer through to pre-clinical development. He has 10+ year of experience with Amphix Bio's core technology platform, beginning with his PhD research in the Stupp Lab at Northwestern University. Prof. Sam Stupp is a professor of Chemistry, Materials Science, Medicine, & Biomedical Engineering at Northwestern University and is a pioneer in the field of supramolecular nanomedicine. He co-founded Amphix Bio based on the technology platform developed in his laboratory over the course two decades.

Table # 74

Anapneo

Technology: Small Molecules • Lead Focus: Sleep Apnea • Pre-Seed • Founded 2019

- Anapneo Therapeutics develops novel agents for sleep apnea, a disorder for which the standard of care is often poorly tolerated and for which no pharmacotherapies are FDA-approved.
- Supported by a $9.6M NIH grant, Anapneo has developed a family of highly potent inhibitors of sleep disordered breathing (sleep apnea). Anapneo compounds act through a novel mechanism involving gasotransmission in the carotid body. Anapneo has completed IND-enabling toxicology and pharmacology studies for their lead compound, TRI-114. They aim to complete remaining IND requirements and initiate clinical trials within 15 months of receipt of additional funding.
- They are led by Co-founder David McCormick, PhD, President of IIT Research Institute and Professor of Biology at IIT and Co-founder Nanduri Prabhakar, PhD, Professor of Medicine at the University of Chicago.

Table # 36

Aplexis

Technology: Small Molecules • Lead Focus: Oncology • Pre-Seed • Founded 2023

- Aplexis is a start-up biopharmaceutical company focusing on the development of small molecule inhibitors to treat myeloproliferative neoplasms.
- The lead product, APX-052, is designed to target Pleckstrin-2, a proto-oncoprotein that contributes to the development of myeloproliferative neoplasms. They have shown that APX-052 directly targets Plek2 and reduces thrombosis and MPN symptoms in animal models.
- Co-founder Dr. Peng Ji is a Professor and Vice Chair of Research in the Department of Pathology at Northwestern University. He is also the Chief Pathology Officer of the Silver Family Blood Cancer Institute at Lurie Comprehensive Cancer Center at Northwestern University. He has expertise in diagnostic hematopathology and scientific research in the areas of hematopoiesis and hematologic malignancies.

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Hall of Inventions

Table # 31

ARTEC Biotech

Technology: Cell Therapy • Lead Focus: Oncology • Pre-Seed • Founded 2020

- ARTEC Biotech's goals are to pioneer the next wave of immunotherapy treatments by harnessing the power of iPSC-derived Natural Killer (NK) cells and to establish strategic partnerships and collaborations that accelerate the development and commercialization of NK cell therapies.
- ARTEC Biotech employs proprietary technology to differentiate iPSCs into highly potent NK cells. These cells are designed to target and destroy cancer cells without harming surrounding healthy tissue. The platform holds promise not only in oncology but also for treating viral infections, showcasing its broad therapeutic potential.
- Vasil Galat, PhD, Founder and CEO of ARTEC Biotech, is Director of the Stem Cell Facility at Ann & Robert H. Lurie Children's Hospital. He brings a rich background in academic and clinical settings to his leadership at ARTEC Biotech.

Table # 32

Atzeyo Biosensors

Technology: Diagnostics; Medical Device; Platform • Lead Focus: Oncology • Pre-Seed • Founded 2023

- Atzeyo aims to make real-time, affordable, personalized cancer diagnostics accessible to clinicians, enhancing patient outcomes through early detection and continuous monitoring.
- Atzeyo combines the quality, accuracy, and reliability of core lab with the speed, ease of use, and cost of POC. This improves on current cancer diagnostics, which suffer from high cost, long testing time, and complex results.
- Atzeyo's technology originates from the lab of Co-founder Brian Cunningham, PhD, Professor of Electrical & Computer Engineering and Intel Alumni Endowed Chair at the University of Illinois-Urbana Champaign. Co-founder Priya Balachandran, PhD, has 20+ years of experience in building specialized technologies from concept to market. Senior Leader Dominique Kendrick RPh, MBA, RAC, has > 25 years of biotech experience.

Table # 45

Irina Balyasnikova, PhD

Technology: Biologics; Antibodies; Protein Engineering • Lead Focus: Oncology • Pre-Seed

- Dr. Irina Balyasnikova is a Professor of Neurological Surgery at Northwestern University with a strong background in antibody engineering, glioblastoma biology, and the development of immunotherapeutic and drug delivery approaches to brain tumors.
- They use antibody engineering approaches to develop Tri-Specific T-cell Engaging (TriTE) antibodies for immune-targeting glioblastoma and other target-specific brain and peripheral solid tumors. TRiTE is an "all-in-one" therapeutic directed to several tumor-associated antigens. It engages T cells to kill cancer cells in tumors with heterogeneous antigen expression. They aim to select a TriTE lead candidate for IND-enabling studies and clinical translation.

Hall of Inventions

Table # 24

BAnta Therapeutics

Technology: Small Molecules; Peptides; Nanotechnology • Lead Focus: Allergy; Cardiovascular & Vascular Diseases; Rare & Genetic Disease • Pre-Seed • Founded 2024

- The goal of BAnta Therapeutics is to develop novel biased antagonists of GPCRs, focused on chemokine receptors. They aim to avoid the development of antagonist tolerance, a likely cause of chemokine receptor antagonist failures in clinical trials across multiple disease indications.
- The core technologies are novel peptide, nanoparticle, and small molecule biased antagonists of chemokine receptors.
- Steven J. Ackerman, PhD, is the Co-founder, CEO, and President of the start-up company BAnta Therapeutics. Dr. Ackerman is a Professor in the Department of Biochemistry and Molecular Genetics at the University of Illinois Chicago. He has 45+ years of experience in protein biochemistry, immunobiology and molecular biology, focused on inflammation, eosinophils and the pathogenesis of asthma and other allergic diseases, including basic science and clinical/translational research, and associated entrepreneurial ventures.

Table # 81

Biagon

Technology: Computational Biology; Platform • Lead Focus: Drug & Target ID • Pre-Seed • Founded 2024

- Biagon creates solutions to empower drug developers during lead optimization for GPCR-targeting campaigns. Their technology unveils mechanisms of activation and predicts the signaling efficacy of GPCR ligands.
- They build GPCR-specific machine learning models based on first-in-class technology to enable virtual screens of signaling activity of GPCR-binding across multiple intracellular pathways. Their in silico assays will bring down time and resource usage for wet lab testing. Their ML approach is transparent, revealing receptor conformations with distinct signaling profiles, which directly informs structure-based drug design.
- Biagon is co-founded by David Cooper (CEO) and Dr. David Minh (CSO). Dr. Minh is the Robert E. Frey Jr. Endowed Chair in the Chemistry Department of Illinois Institute of Technology.

Table # 20

BiomeSense

Technology: AI & Algorithms; Platform • Lead Focus: Microbiome, AgBio & Food • Seed • Founded 2018

- BiomeSense aims to unlock the gut microbiome as a new frontier of personalized medicine by leveraging their platform technology to dramatically increase the quality & quantity of data available to the field.
- BiomeSense has developed a sample-to-answer platform consisting of two components, GutLab and MetaBiome. GutLab is a breakthrough fully-automated, at-home mini-lab for continuous tracking of a user's microbiome. MetaBiome is an AI-enabled bioinformatic solution that captures and analyzes the data produced by the GutLab to identify novel biological insights.
- Led by Kevin Honaker, a life sciences commercialization leader with 10+ years of experience and a strong background in personalized medicine, and Dr. Jack Gilbert, Faculty Director of The Microbiome Center at the University of Chicago and a key thought leader in the microbiome field, co-founder of the Earth Microbiome Project and American Gut along with hundreds of published papers on microbial ecology.

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Table # 91

Blue Arbor Technologies

Technology: Medical Device • Lead Focus: Neurology • Pre-Seed • Founded 2023

- Blue Arbor Technologies, Inc. seeks to revolutionize the field of prosthetic rehabilitation after limb loss. They are creating products that allow patients with limb loss to accurately and reliably control a prosthetic device with unparalleled degrees of freedom.
- Their innovative neuroprosthetic interface detects voluntary nerve and muscle control signals to facilitate naturalistic function of prosthetics.
- Dr. Paul Cederna is the President/Founder. He is the Chief of Plastic Surgery, Robert Oneal Professor of Plastic Surgery, and Professor of Biomedical Engineering at the University of Michigan.

Table # 98

Bright Minds Biosciences

Technology: Small Molecules • Lead Focus: Neurology; Rare & Genetic Diseases; Neuropsychiatry & Mood Disorders • IPO • Founded 2017

- Bright Minds Biosciences is focused on creating the next generation of serotonin drugs that will precisely target specific conditions leading to a dramatic reduction in side effects and improved therapeutic action, transforming patient lives.
- Bright Minds Biosciences is a clinical-stage biotechnology company developing novel and highly selective serotonin agonists for epilepsy, depression and other CNS disorders. The technology behind BMB-101 is licensed from UIC. Their current goal is to advance its lead candidates via partnering with pharma companies.
- With technology from the University of Illinois Chicago, the team is led by CEO Ian McDonald and former investment banker Jan Torleif Pedersen, (CSO) who spent 20 years at Lundbeck, as well as Alex Vasilkevich, (COO) who has a track record of developing innovative biotech and pharma products.

Table # 33

Serder Bulun, MD & Ping Yin, MD, PhD

Technology: Small Molecules • Lead Focus: Oncology, Women's Health • Pre-Seed

- Serdar E Bulun, MD, is the Chair and the John J Sciarra Professor of Obstetrics and Gynecology at Northwestern Feinberg School of Medicine. Ping Yin, MD, PhD, is a Research Professor in Reproductive Science in Medicine at Northwestern's Department of Obstetrics and Gynecology.
- Uterine leiomyomas, commonly known as fibroids, affect 70-80% of women of reproductive age, and currently, no long-term, non-invasive treatment options are available. Our research has identified the enzyme tryptophan 2,3-dioxygenase (TDO2) as a potential novel drug target, offering promise for the development of a long-term, non-hormonal, and disease-modifying treatment for leiomyomas. Their goal is to generate novel, selective, potent TDO2 inhibitors as the first step towards developing a non-hormonal drug for uterine leiomyomas.

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Table # 86

Cadenza Bio

Technology: Small Molecules; Platform • Lead Focus: Neurology, Neurodegeneration • Seed • Founded 2022

- Cadenza Bio's goal goes beyond incremental improvements to alleviate symptoms, instead halting progression, promoting repair, and restoring quality of life to enable total activity for patients with Multiple Sclerosis.
- Cadenza Bio's patented and patent-pending therapeutic assets have shown therapeutic efficacy in preclinical animal models of Multiple Sclerosis and Endometriosis. In Multiple Sclerosis animal models, their compounds reduced inflammation while simultaneously promoting re-myelination. They expect this dual approach will halt progression and restore function.
- Cadenza Bio's CEO, Dr. Carol Curtis, has previous experience managing operations, supervising R&D, interacting with the FDA, and securing financing for four early-stage biotech companies. Scientific founders include Dr. John Katzenellenbogen, Professor of Chemistry at the University of Illinois Urbana Champaign, and Dr. Seema Tiwari-Woodruff, Professor of Biomedical Sciences at the University of California-Riverside.

Table # 2

Cardio Diagnostics

Technology: Diagnostics; AI & Algorithms • Lead Focus: Cardiovascular & Vascular Diseases • IPO • Founded 2017

- Cardio Diagnostics aims to become the new standard for precision cardiovascular diagnostics and care, drive the adoption of solutions among healthcare stakeholders, and gain broader reimbursement and coverage for solutions.
- They offer clinically validated precision cardiovascular medicine technology that harnesses the power of epigenetics, genetics, and artificial intelligence to assess risk for, diagnose, manage, and monitor coronary heart disease.
- Meesha Dogan, PhD, is the CEO and Founder of Cardio Diagnostics. She holds a PhD in Biomedical Engineering and BSE/MS degrees in Chemical Engineering from the University of Iowa. She is an inventor of seven granted patents and has several pending patents worldwide for the technology behind Cardio Diagnostics.

Table # 3

Cardiosense

Technology: Diagnostics; AI & Algorithms • Lead Focus: Cardiovascular & Vascular Diseases • Series A • Founded 2020

- Cardiosense aims to utilize biosignals for unprecedented visibility into cardiac function.
- Cardiosense is building a digital biomarker platform that leverages novel, multi-sensor devices and an advanced proprietary signal processing pipeline to identify pre-symptomatic markers of cardiac disease. At the end of 2022, the company announced $15.1 million in Series A funding, co-led by Broadview Ventures and Hatteras Venture Partners, with participation from Laerdal Million Lives Fund, OSF Ventures, UnityPoint Health Ventures, and Portal Innovations.
- Amit Gupta, MBA, is the CEO who attained his MBA from the Kellogg School of Management at Northwestern University. CTO Andrew Carek, PhD, attained his doctorate in electrical engineering from the Georgia Institute of Technology. The technology originates from the Northwestern lab of Co-founder Mozziyar Etemadi, MD, PhD, Assistant Professor of Anesthesiology and Biomedical Engineering at the McCormick School of Engineering.

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Table # 84

CellCipher

Technology: AI & Algorithms; Precision Medicine; Platform • Lead Focus: Oncology; Neurology; Neurodegeneration; Drug & Target ID • Pre-Seed • Founded 2023

- CellCipher aims to rescue failed drugs by identifying drug-specific genetic biomarkers of toxicity risk and identifying patients who are at low risk for adverse events.
- CellCipher uses cutting-edge techniques from stem cell biology, genomics, and machine learning to understand how human genetic variation impacts drug responses. They combine a proprietary human in vitro model with single-cell transcriptomics to capture multi-dimensional genomic data from human cells.
- CellCipher was co-founded by Dr. Katherine Rhodes, (CEO), Dr. Natalia Gonzales, (CCO), and Dr. Yoav Gilad, (CSO), Professor of Medicine at the University of Chicago. The team includes Dr. Alexis Battle, CTO, director of the Malone Center for Engineering in Healthcare at Johns Hopkins and Deputy Director of new AI-X Foundry.

Table # 60

Clarix Imaging

Technology: Imaging; AI & Algorithms; Medical Device • Lead Focus: Oncology; Surgical • Series A • Founded 2016

- Clarix Imaging's mission is to empower clinicians with clear tumor visualization and intelligent analysis for precision and personalized medicine based on breakthrough innovations in imaging science and AI.
- Clarix Imaging is a commercial-stage company that developed a portable high-resolution 3D imaging system for use in the operating room to ensure the full resection of cancer during the initial surgery. The FDA cleared product true 3D VSI-360 enables clarity for intraoperative specimen margin visualization in the operating room. Clarix Imaging is looking to scale up revenues and expand internationally in the next 12 months.
- Dr. Xiaochuan Pan, Co-founder of Clarix Imaging, is a Professor at The University of Chicago. Dr. Pan's research centers on physics, algorithms, and engineering underpinning tomographic imaging and its biomedical and clinical applications.

Table # 25

Claudyn Biotech

Technology: Small Molecules; Peptides • Lead Focus: Autoimmunity • Pre-Seed • Founded 2022

- Claudyn Biotech is developing a novel class of drugs to block claudin channels to treat autoimmune conditions.
- The novel class of molecules increases epithelial barrier function, reduces sodium and water transport in human organoids, and limits colitis in mouse models of Inflammatory Bowel Disease (IBD). In contrast to existing therapies that target the immune system, claudin-2 blockers target the tight junction, do not suppress the immune system, and act without need for absorption.
- Co-founders Chris Weber, MD, PhD, Associate Professor of Pathology, University of Chicago; Le Shen, MB, PhD, Research Associate Professor of Surgery, University of Chicago; Fatemeh Khalili-Araghi, PhD, University of Illinois in Chicago

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Table # 26

ClostraBio

Technology: Nanotechnology; Synthetic Biology • Lead Focus: Autoimmunity; Microbiome, AgBio & Food • Series A • Founded 2016

- The ClostraBio team is developing both a dietary supplement and a plug-n-play platform for delivery of bacterial metabolites to target gut health, inflammatory bowel disease (IBD), and food allergy.
- Ritu Shah joined ClostraBio as CEO in December 2022. Ritu is a seasoned biotech executive with over two decades of experience. She has a proven track record of success in leading four successful mergers & acquisitions along with new company formation and operations. Ritu is the Managing Director at Portal Innovations, a Chicago-based venture development engine focused on early-stage life sciences enterprises, where she will position and accelerate seeded companies to the next round of funding. Ritu received her BS in Chemical Engineering from the University of Notre Dame. Co-founder, Jefferey Hubbell, is the Barry L. MacLean Professor of Molecular Engineering Innovation and Enterprise at the Pritzker School of Molecular Engineering at the University of Chicago.

Table # 4

Concilio

Technology: Nanotechnology; Synthetic Biology • Lead Focus: Cardiovascular & Vascular Diseases • Pre-Seed

- Concilio's patented nanotechnology platform effectively delivers the miR-92a inhibitor to inflamed endothelial cells.
- The first indication is arteriovenous fistula (AVF) failure. Intravenous administration of Concilio's therapeutic would limit the number of follow-up surgeries needed for renal dialysis patients.
- President Matthew Tirrell, PhD, is the D. Gale Johnson Distinguished Service Professor Emeritus at the University of Chicago and former inaugural Dean of the Pritzker School of Molecular Engineering. CSO Yun Fang, PhD, is an American Heart Association Fellow and Associate Professor of Medicine at The University of Chicago. CEO Jeffrey Hubbell, PhD, is the Eugene Bell Professor in Tissue Engineering and Vice Dean at the Pritzker School of Molecular Engineering at the University of Chicago.

Table # 27

COUR Pharmaceuticals

Technology: Nanotechnology; Platform • Lead Focus: Autoimmunity • Series A • Founded 2014

- COUR aims to develop first-in-class, disease-modifying therapies for autoimmune diseases that work without immune system suppression.
- COUR is advancing a portfolio of nanoparticles, based on its proprietary technology platform, to treat autoimmune diseases via antigen-specific immune tolerance. By encapsulating specific self-antigens within biodegradable COUR nanoparticles (CNPs), they are able to target antigen-presenting cells (APCs), which are reprogrammed to present the antigens to T cells with a tolerogenic signal, leading to T cell tolerance.
- Dannielle Appelhans, President and CEO, joined COUR as COO in 2023 and transitioned to her current role in September 2024. As a member of the COUR leadership team, she has led R&D, technical development, clinical operations, quality, technical operations, and has played a pivotal role in shaping corporate strategy. COUR leverages decades of research from Northwestern University with their nanoparticle science to achieve their goals.

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Table # 13

Dimension Inx

Technology: Synthetic Biology; Nanotechnology • Lead Focus: Surgical • Series A • Founded 2016

- Dimension Inx creates biomaterials to recapitulate human physiology. The company's products offer a bio-fabrication process that provides the versatility, manufacturability, and affordability necessary for the widespread adoption of regenerative medical products, enabling clinicians and surgeons to eliminate the need for organ transplantation.
- Dimension Inx received FDA clearance for CMFlex, the first 3D-printed regenerative bone graft for oral and facial bone defects.
- CEO and co-founder Caralynn Collens, MD, MBA, has experience across biotechnology, advanced manufacturing, and entrepreneurship. CSO and co-founder Ramille Shah, PhD, is currently Professor of Biomedical Engineering at the University of Illinois Chicago and has 20+ years of experience in biomaterials and tissue regeneration.

Table # 5

Dupage Medical Technology

Technology: Small Molecules; Peptides; Nanotechnology • Lead Focus: Cardiovascular & Vascular Diseases • Pre-Seed • Founded 2012

- The major focus of the company is to develop effective and safer drugs to treat cardiovascular diseases that involve thrombosis and inflammation.
- Dupage Medical Technology is developing innovative peptide drugs encapsulated in a unique lipid formulation to yield high loading peptide nanoparticles (HLPN) for efficient intracellular peptide delivery, enabling in vivo therapeutic use of peptides targeting the intracellular compartment.
- Xiaoping Du, MD, PhD, received his medical degree from Suzhou Medical College, China, and PhD degree from the University of Sydney, Australia. He is Distinguished Professor in the Department of Pharmacology and Regenerative Medicine, at the University of Illinois Chicago. He is an expert in studying thrombosis (“clotting”), bleeding, and inflammation.

Table # 34

Eleuthra Photonics

Technology: Diagnostics; Imaging; Medical Device • Lead Focus: Oncology • Pre-Seed • Founded 2023

- Eleuthra Photonics aims to revolutionize histopathology by offering faster, more accurate diagnostics through its optical imaging solutions. Their goal is to improve diagnostic precision and speed, ultimately leading to better patient outcomes in cancer and disease treatment.
- Eleuthra Photonics develops image-based diagnostic tools, leveraging advanced nonlinear optics and label-free imaging. Their primary product, PixelPath™, enables pathologists to analyze tissue samples in real-time, bypassing traditional staining methods to provide rapid, multidimensional insights into cancer and other diseases.
- Dr. Kayvan F. Tehrani, founder and CEO, is an experienced biophotonics engineer with over 11 years of expertise in microscopy and bioimaging. Based on technology from the University of Illinois at Urbana-Champaign, his vision is to push the boundaries of medical diagnostics by advancing real-time, label-free optical imaging technologies.

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Table # 35

Ellis Bio

Technology: Nucleic Acid; Research Tools • Lead Focus: Oncology • Pre-Seed • Founded 2023

- Ellis Bio is committed to providing academic and industry researchers with advanced epigenomic tools.
- They have developed novel bisulfite conversion methods for methylation assays, optimized for speed and reduced DNA degradation.
- Professor Chuan He is the Scientific Founder of Ellis Bio. Professor He is the John T Wilson Distinguished Service Professor at University of Chicago, HHMI Investigator, 2023 Wolf Prize Laureate, and member of the American Academy of Sciences.

Table # 59

Enzyme by Design

Technology: Protein Engineering • Lead Focus: Oncology; Proteostasis • Pre-seed • Founded 2017

- Enzyme by Design aims to engineer safer cancer therapeutics for cancers in which there is a large unmet clinical need.
- Their lead asparaginase-based therapeutic has high anti-cancer activity with minimal off-target effects. The startup has been awarded >$3.5M in SBIR funding, including a Phase 2 grant.
- President, CEO, and CSO Arnon Lavie, PhD, is Professor of Biochemistry and Molecular Genetics at University of Illinois Chicago. He is an expert structural biologist with documented success in modifying the substrate specificity of medically relevant enzymes. COO, Amanda M. Schalk, PhD, spent five years as a postdoc in Dr. Lavie's lab characterizing the structures and enzymatic activities of L-asparaginases.

Table # 28

EVOQ Therapeutics

Technology: Vaccines; Platform • Lead Focus: Autoimmunity • Seed • Founded 2016

- Unlike conventional methods reliant on systemic immune suppression, EVOQ's NanoDisc Platform operates under a vaccine paradigm, tailored to each specific disease. By teaching the body to tolerate the offending antigen, EVOQ aims to fundamentally reshape the treatment landscape for autoimmune diseases.
- The team's internal development program in Celiac disease is rapidly progressing towards clinical trials, with a full IND submission targeted for 2025. We have exciting progress in the reversal of Type 1 Diabetes in animal models. EVOQ also benefits from a pre-clinical partnership with Gilead since 2023, focusing on RA and Lupus.
- Under the leadership of our CSO and co-founders, Dr. James Moon and Dr. Anna Schwendeman, both professors at the University of Michigan, EVOQ continues to advance scientific frontiers.

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Table # 37

Sean W. Fanning, PhD

Technology: Small Molecules • Lead Focus: Oncology • Pre-Seed

- Dr. Sean Fanning, Assistant Professor of Cancer Biology at Loyola University Chicago, is a renowned expert on endocrine therapies in breast cancer. His lab takes the unique approach of using these molecules to reprogram the breast cancer cell to engage new therapeutic modalities.
- Dr. Fanning is developing a new form of endocrine therapy for breast cancer that harnesses the transcriptional power of the estrogen receptor to engage new therapeutic activities. His goal is to further optimize the lead series developed in his lab which, in addition to being effective endocrine therapies, uniquely suppresses the tumor's ability to evade immunity.

Table # 10

Paul Goldspink, PhD & Beata Wolska, PhD

Technology: Small Molecules; Peptides • Lead Focus: Cardiovascular & Vascular Disease, Rare & Genetic Disease • Pre-Seed

- Dr. Goldspink and Dr. Wolska have a range of biophysical assays and tools to interrogate hypertrophic cardiomyopathy (HCM), which is a genetic form of heart failure caused by mutations in the proteins that allow the heart to contract and relax. Thin filament HCM mutations are severe, but no treatment exists. The team has screened 1.3 billion virtual compounds using a machine learning platform to identify small molecules that target the protein interaction which allows relaxation of the heart muscles.
- Paul Goldspink, PhD, is a Research Associate Professor at the University of Illinois Chicago in the Department of Physiology and Biophysics. Beata Wolska, PhD, is a Professor in the Department of Physiology and Biophysics at the University of Illinois Chicago.

Table # 38

Gregor Diagnostics

Technology: Diagnostics • Lead Focus: Oncology • Series A • Founded 2017

- Gregor Diagnostics' ultimate mission is to develop a suite of non-invasive, semen-based tests, to help physicians and patients navigate prostate cancer care.
- They are developing novel, non-invasive prostate cancer diagnostic tests with best-in-class accuracy and at-home sample collection. The goal of the company is to raise a Series B ($15M raised to date in prior rounds) to take our exciting feasibility data into the pivotal studies necessary to bring these tests to market.
- The executive team at Gregor Diagnostics includes Lauren Tyra, PhD, CEO; Tobias Zutz, MS, CTO and Founder; Duncan Whitney, CSO. Together they combine 80+ years of experience in oncology and diagnostic development.

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Table # 40

Grove Biopharma

Technology: Synthetic Biology; Platform • Lead Focus: Oncology • Seed• Founded 2020

- Grove Biopharma's research programs focus on addressing significant unmet medical needs in oncology and other rare diseases through targeting select transcription factor protein-protein interactions.
- Grove Biopharma is an early-stage biotech company, pioneering a novel chemistry platform of synthetic biologics for targeting intracellular protein-protein interactions – Precision Linked Proteomimetics (PLPs). This novel platform enables the development of first-in-class drugs.
- The key technology was created by Co-founder Professor Nathan Gianneschi, PhD, at Northwestern University.

Table # 76

Ikaika Therapeutics

Technology: Antibodies • Lead Focus: Rare & Genetic Diseases • Seed • Founded 2021

- Ikaika aims to expand the frontier of fibrotic treatments through the power of genetics.
- Ikaika Therapeutics is developing first-in-class therapies that slow disease progression by preventing fibrosis accumulation and preserving organ function. The lead therapeutic IKN-001 is an antibody that protects latent TGF-β binding protein 4 (LTBP4), a driver of fibrotic disease severity in conditions such as muscular dystrophy. IKN-001 regulates the release of activated TGF-β by stabilizing the large latent complex.
- Elizabeth McNally, MD, PhD, is the CEO of Ikaika and the Elizabeth J. Ward endowed Professor and the Director of the Center for Genetic Medicine at Northwestern University. Co-founder and CSO, Alexis Demonbreun, PhD, is an Associate Professor in the Center for Genetic Medicine at Northwestern University.

Table # 61

IMMUNARTES

Technology: Biologics; Antibodies; Vaccines• Lead Focus: Infectious Diseases • Pre-Seed • Founded 2017

- IMMUNARTES aims to tackle the global health crisis posed by antibiotic-resistant *Staphylococcus aureus*, focusing on creating effective vaccines and therapeutics to protect against this dangerous pathogen.
- IMMUNARTES is developing innovative vaccines and therapeutics aimed at neutralizing the immune evasive properties of MRSA, enabling patients with *S. aureus* infections or colonization to generate broad protective antibody responses. These products have shown high efficacy in animal models and are approaching clinical testing.
- Dr. Vilasack Thammavongsa, CEO, is an experienced immunologist with a strong background in microbial pathogenesis and vaccine development. Founder Dr. Dominique Missiakas, CSO, is a distinguished microbiologist at the University of Chicago whose research has significantly advanced the understanding of *S. aureus* pathogenesis.

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Table # 43

Immuto Scientific

Technology: Antibodies; Biologics; Platform • Lead Focus: Oncology • Seed • Founded 2021

- Immuto Scientific's goal is to enable rational design for all therapeutics and expand the world of druggable proteome. Immuto seeks to reimagine the drug discovery process to tackle currently untreatable diseases and provide hope for patients in need.
- Immuto's proprietary platform identifies new, highly disease specific drug targets and enables the development of precision biotherapeutics with unprecedented safety and efficacy profiles. The core platform empirically derives native-state structures at amino acid resolution for any protein or peptide, alone or in a complex, in just a few weeks.
- Faraz Choudhury, PhD, is the Co-founder and CEO of Immuto. Dr. Choudhury received his PhD from the University of Wisconsin - Madison and he is the co-inventor of Immuto's core technology. Dr. Daniel Benjamin, PhD, is the CTO and Co-founder of Immuto Scientific. Dr. Benjamin received his PhD from the University of Wisconsin-Madison and during his doctoral research he spearheaded the design, development, and engineering of the technology.

Table # 82

Intero Biosystems

Technology: Organoids; Platform • Lead Focus: Drug & Target ID • Pre-Seed • Founded 2024

- Intero Bio's vision is to revolutionize drug development by providing miniature human organs "in a dish" to better predict how drugs will behave in humans before advancing to clinical trials.
- Intero Bio's product, GastroScreen, is the first and only stem cell-derived human intestinal organoid containing functioning neurons, blood vessels, muscle, and the inner lining of the intestine. These miniature guts feature proper 3D spatial organization and can mimic the major functions of the organ, offering a model of both healthy and diseased human intestines.
- Dr. Charlie Childs, PhD, optimized GastroScreen by refining the first stem cell-derived human intestinal organoid protocol initially developed by Dr. Jason Spence, CSO, at the University of Michigan. Madeline Eiken, MS, is a biomedical engineer with experience in cell manufacturing in the industry.

Table # 71

Katz Diagnostics

Technology: Diagnostics • Lead Focus: Fibromyalgia • Pre-Seed • Founded 2023

- Katz Diagnostics' mission is to help patients suffering from fibromyalgia.
- Katz Diagnostics is developing a muscle pressure diagnostic test optimized for diagnosing fibromyalgia. Fibromyalgia patients have widespread chronic pain, frequently experience fatigue, and often have cognitive fog. There are no clinical diagnostics and few medications to help these patients. Diagnosis today is based on the American College of Rheumatology assessment for the evaluation of symptoms.
- Dr. Robert Katz is a Professor of Medicine at Rush Medical College and affiliated with Northwestern University's Feinberg School of Medicine. Dr. Katz is a Best Doctor according to Chicago Magazine and has been in each issue for over 20 years, which includes only 7% of physicians in Illinois. He is in the top 1% of physicians nationally according to U.S. News & World Report, and he is a Master of the American College of Rheumatology, their highest award.

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Table # 42

Shana O. Kelley, PhD & Randy Atwal, PhD

Technology: Small Molecules; Phenotypic Screening Platform • Lead Focus: Oncology • Series A • Founded 2022

- Leveraging whole-genome CRISPR-editing and a large-scale phenotypic screen platform for druggable genetic regulators discovery, Drs. Kelley and Atwal have identified a novel regulator of KRAS degradation and developed a small molecule based, first-in-class, allele-selective mutant KRAS protein degrader.
- The effort is currently at the pre-seed stage.
- Shana Kelley, PhD is the President of the Chan Zuckerberg Biohub Chicago and the Neena B. Schwartz Professor of Chemistry and Biomedical Engineering at Northwestern University. Dr. Kelley a founder of four molecular diagnostics companies: GeneOhm Sciences (acquired by Becton Dickinson in 2005), Xagenic Inc. (acquired by General Atomics in 2017), CTRL Therapeutics (founded in 2019), and Arma Biosciences (founded in 2021). Randy S. Atwal, PhD is a Moderna Global Fellow and a Research Assistant Professor in the Kelley lab, leading novel target discovery and hit to lead development programs.

Table # 21

Ali Keshavarzian, MD

Technology: Small Molecules • Lead Focus: Microbiome, AgBio & Food • Pre-Seed

- Ali Keshavarzian, MD, is a Professor in the Department of Pharmacology at Rush University as a Physician-Scientist and has been a practicing gastroenterologist with a specialty in managing patients with inflammatory bowel disease for over 37 years.
- Dr. Keshavarzian, one of the leaders of the RUSH Center of Integrated Microbiome and Chronobiology, has been studying the impact of environmental factors (stress, alcohol, sleep and circadian disruption) on intestinal barrier function host/microbe interaction that promote intestinal and systemic (gut-derived) inflammation. His work investigating the gut microbiome and its role in various diseases led to the development of a prebiotic formulation under open label clinical trials for treatment of Parkinson's Disease.

Table # 93

KeyWise AI

Technology: AI & Algorithms • Lead Focus: Neurology; Neuropsychiatry & Mood Disorders; Neurodegeneration • Seed • Founded 2019

- The goal of KeyWise AI is to develop tools to help restore and retain brain health.
- KeyWise AI has developed Skye™, a fitness tracker for the brain using smartphone-based interactions. Skye™ is an advanced system designed and developed by KeyWise AI to continuously assess cognitive performance by capturing keystroke behavior, never content. Data is collected passively as a person uses their phone as they normally do to type emails, social media posts, text messages.
- The core team of KeyWise AI includes three co-founders with extensive expertise in psychiatry and neuroscience. Dr. Olu Ajilore is a professor in Psychiatry at the University of Illinois Chicago and Dr. Alex Leow is a Professor of Psychiatry and Biomedical Engineering at the same institution. Dr. Reanne Moore is a Professor in Residence in the Department of Psychiatry at the University of California - San Diego.

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Table # 66

Venumadhav Korampally, PhD

Technology: Medical Device; Diagnostics; Nucleic Acid; Platform • Lead Focus: Infectious Diseases; Microbiome, AgBio & Food • Pre-Seed

- Venumadhav Korampally, PhD, is an associate professor of electrical engineering at Northern Illinois University. His research interests have been in the development of lab-on-chip devices, paper diagnostics, and Chem-Biosensors.
- They are creating LFA 2.0 devices that interface with electronics to enable programmed fluid control and handling. This advancement facilitates the seamless adoption of complex, multi-step diagnostic assays—such as enzyme-linked immunosorbent assays (ELISA) and nucleic acid amplification tests—as well as emerging diagnostics based on CRISPR technology, all within a lateral flow assay format. The goal of this project is to make advanced diagnostic tests more accessible at the point of care.

Table # 39

Anthony Kossiakoff, PhD

Technology: Protein Engineering; Monoclonal Antibodies • Lead Focus: Oncology • Pre-Seed

- Anthony Kossiakoff, PhD, has 15 years of industry experience as Director of Protein Engineering at Genentech, Inc. He has had long standing collaborations with Celgene and BMS. He has a well-established record in cytokine biology, structural biology and antibody engineering. He is a member of the NAS.
- The Kossiakoff lab identified a novel class of cancer biomarkers that are exquisitely tumor specific. These novel antigens are shown to be only displayed on the surface of transformed cells, not normal tissue. As such, they are unique candidates for targeting by immunotherapeutic approaches. This class of biomarkers is being targeted by customized BiTE and CAR-T constructs in *in vivo* animal studies.

Table # 6

Lohman Technologies

Technology: Medical Device • Lead Focus: Cardiovascular & Vascular Diseases • Pre-Seed • Founded 2014

- Lohman Technologies is the creator of the HomECG+ solution, an FDA-cleared, clinical grade remote monitoring solution for atrial fibrillation (Afib) detection.
- The company is seeking clinical and investor partnerships as it continues to develop its at home ECG device.
- Jason Dvorak is the President and Director, and brings nearly 30 years of experience in the healthcare industry. Jason has worked in revenue cycle management and healthcare device deployment, providing key business development direction to the Lohman Technologies team.

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Table # 69

Loyola Clinical NLP

Technology: AI & Algorithms • Lead Focus: Clinical Services • Pre-Seed • Founded 2019

- Loyola Clinical NLP's goal is to improve patient care by giving healthcare professionals the tools necessary to better utilize clinical notes.
- Loyola Clinical NLP offers near real-time natural language processing for healthcare and other domains. Approximately 80% of clinical information remains largely unutilized in clinical textual notes. To reduce the technical challenges of performing and utilizing data processed with cNLP, Loyola has developed a new approach to cNLP and its use in a general-purpose clinical inference engine.
- Loyola Clinical NLP has an extensive history in innovation and clinical research informatics. The team is led by Dr. Kathy Bobay, Professor at Loyola University Chicago.

Table # 92

Lysosomal Therapeutics

Technology: Platform • Lead Focus: Neurology • Acquired by BIAL • Founded 2011

- The promise of Lysosomal Therapeutics, Inc is in addressing unmet medical needs and potentially revolutionizing treatment options for patients with complex neurological disorders.
- Lysosomal Therapeutics' unique approach leverages the genetically and clinically validated link between lysosomal disorders and neurodegenerative diseases to establish a distinctive platform for novel drug discovery, with a focus on conditions like Parkinson's disease.
- Lysosomal Therapeutics' lead product is based on the research from Dr. Joseph Mazzulli, Associate Professor of Neurology at Northwestern University.

Table # 44

M3D

Technology: Medical Device • Lead Focus: Oncology • Seed • Founded 2023

- M3D's mission is to leverage advances in real time high resolution radiation visualization to improve patient outcomes and safety for healthcare facilities.
- M3D offers real-time radiation imaging and measurement for surgical guidance and nuclear dosimetry. Their technology enables the real time visualization of radiation and helps healthcare workers in the treatment of a wide variety of patient conditions.
- M3D is led by an ex-McKinsey consultant with three successful exits and experience scaling organizations and GTM teams. Michael Hopkins, CEO and Co-Founder, received his MBA from University of Michigan.

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Table # 67

Juan L. Mendoza, PhD

Technology: Protein Engineering • Lead Focus: Infectious Diseases • Pre-Seed

- Juan Mendoza, PhD, is an Assistant Professor of Molecular Engineering in the Department of Biochemistry and Molecular Biology at the University of Chicago. Dr. Mendoza has spent over a decade studying cytokine structures and using novel approaches to modulate their activity.
- Dr. Mendoza's research brings together cancer research, bioinformatics, protein engineering, structural biology, and immunology to forge a new path forward in the discovery and design of new immunotherapeutics. Through protein engineering and new drug discovery assays, the Mendoza lab aims to understand and find new ways to tune cytokine signaling within cells.

Table # 18

MicroMGx

Technology: Small Molecules; Biologics; Platform • Lead Focus: Microbiome, AgBio & Food • Seed • Founded 2015

- MicroMGx's goal is to develop molecules to defeat new herbicide-resistant weeds and help farmers dramatically reduce weed-induced crop loss.
- MicroMGx has a lead product that is a naturally produced small molecule, MGX-1001, the first non-selective herbicide with a new mechanism of action in 35 years.
- Neil L. Kelleher, PhD, is the CEO and the Walter and Mary Elizabeth Glass Professor of Chemistry, Molecular Biosciences, and Medicine at Northwestern University, specializing in mass spectrometry for proteomics and natural products chemistry. He is also an experienced entrepreneur, having co-founded MicroMGx and several other companies, including Proteinaceous and Integrated Protein Technologies.

Table # 48

Modumab Therapeutics

Technology: Biologics; Antibodies; Platform • Lead Focus: Oncology; Autoimmunity • Pre-Seed • Founded 2021

- ModuMab has developed a platform technology that creates multi-functional biologics in a fraction of time compared to conventional approaches.
- Leveraging ModuMab's high-throughput biologic synthesis platform can create single agent, first-in-class medicines that address multiple targets and mechanisms in oncology and immunology.
- ModuMab Co-inventor Milan Mrksich, PhD, is the Henry Wade Rogers Professor of Biomedical Engineering at Northwestern University and the founding director of Northwestern's Center for Synthetic Biology. Dr. Mrksich is also the founder of SAMDI Tech, Inc. and 480 Biomedical, Inc. Co-inventor Justin Modica, PhD, is a Research Associate Scientist in the Mrksich Group at Northwestern University.

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Table # 7

MountView Therapeutics

Technology: Nanotechnology; Gene Therapy; Nucleic Acid; Platform • Lead Focus: Cardiovascular & Vascular Diseases; Acute Care • Seed • Founded 2022

- The goal of MountView Therapeutics is to develop vascular endothelium-targeted therapies for the treatment of major human diseases with an initial focus on pulmonary artery hypertension and severe sepsis/acute respiratory distress syndrome.
- MountView Therapeutics is developing transformative polymer nanoparticle technologies for gene (genome editors, mRNA, siRNA, antisense) and/or drug delivery targeting blood vascular endothelium to treat human diseases caused by endothelial dysfunction including cardiovascular diseases, pulmonary artery hypertension, severe sepsis/acute respiratory distress syndrome (ARDS), cancer, and cancer metastasis.
- The Founder, Dr. Youyang Zhao, serves as the Director of Genetic Medicine and Nanotechnology Development Center (GeneMeNDer) at Lurie Children's Hospital of Chicago.

Table # 9

William A. Muller, MD, PhD

Technology: Peptides • Lead Focus: Cardiovascular & Vascular Disease; Autoimmunity • Pre-Seed

- Dr. Muller has developed a cell-permeable peptide that blocks inflammation by blocking transmigration of leukocytes across endothelial cells. This peptide does not interfere with leukocyte function or ability to initiate an inflammatory immune response, providing anti-inflammatory therapy without immunosuppression. This therapeutic has been evaluated in several mouse models of acute inflammation and ischemia/perfusion injury in pigs. Current work is focused on preparing a package for an IND application.
- William A. Muller, MD, PhD, is a Professor of Pathology at Northwestern University Feinberg School of Medicine.

Table # 62

Irina Nesterova, PhD

Technology: Diagnostics; Point of Care; Nucleic Acid; Platform • Lead Focus: Infectious Diseases • Pre-Seed

- Dr. Nesterova's lab focuses on developing new approaches to molecular diagnostics and the analysis of living systems. The lab has developed simple, near-infrared fluorescent that fluoresces upon binding to a protein target using phthalocyanine fluorophores. To enable selectivity of target binding, each sensor has an "anchor" domain that is based on a known inhibitor for the target. The aim is to use such sensors to develop a platform for point-of-care molecular diagnostics.
- Dr. Irina Nesterova, PhD, is a Professor in the Department of Chemistry and Biochemistry at Northern Illinois University.

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Table # 87

NeuraWorx Medical Technologies

Technology: Medical Device • Lead Focus: Neurology, Neurodegeneration • Seed • Founded 2021

- Neuraworx Medical Technologies, Inc. is a medical device company whose goal is to treat and prevent central nervous system diseases and disorders like Alzheimer's and TBI, helping people worldwide improve their brain health and quality of life.
- Neuraworx is developing the first-in-class Cerebrovascular Pacing System for enhancing the brain's glymphatic, meningeal lymphatic, and cerebrovascular systems, increasing cerebral spinal fluid and blood flow to treat CNS disorders.
- Chris Minar, CEO, has developed and commercialized over 40 medical devices at multiple medical device start-ups and companies such as Stereotaxis, Integer, and Abbott. He is a board member and advisor for multiple medical device companies. Scientific founders Dr. Kip Ludwing, Associate Professor of Neurological Surgery and Co-Director of the Wisconsin Institute for Translational Neuroengineering and Dr. Justin Williams, Professor of Biomedical Engineering, are both of the University of Wisconsin - Madison.

Table # 85

Neuroplastica

Technology: Synthetic Biology; Platform • Lead Focus: Drug & Target ID; Neuropsychiatry & Mood Disorders; Rare & Genetic Diseases • Pre-Seed • Founded 2023

- The loss of neuroplasticity, the ability to adjust connections among neurons, is critical in many neurodevelopmental conditions. The goal of Neuroplastica is to expedite the search for tailored therapeutics for single-gene neurodevelopmental disorders.
- Neuroplastica's platform uses advanced synthetic biology sensors for highly accurate, dynamic measurements of neuroplasticity, enabling high-throughput screening (HTS) and in vivo tracking of drug effects.
- Dr. Yevgenia Kozorovitskiy is an Associate Professor of Neurobiology at Northwestern University and Dr. Pushpa Kumari is a Research Associate in the laboratory. They are co-inventors of the neuroplasticity biosensor family and Co-founders of Neuroplastica.

Table # 46

NovaScan

Technology: Diagnostics; AI & Algorithms; Imaging; Medical Device • Lead Focus: Oncology • Series B • Founded 2017

- NovaScan is an oncology company that has developed a technology platform for cancer detection and assessment.
- NovaScan combines spectral bioimpedance with machine learning to assess the Cole frequency and other signal features that in turn indicate the presence and aggressiveness of cancer. NovaScan has two lead products: MarginScan, used for detecting margin in surgical excisions with a lead indication for skin cancer; and nsCanary, used for biopsy assessment with lead indications in pancreatic, biliary and lung cancer.
- NovaScan CEO Craig Davis has been active in both early stage and medtech for many years. He was involved in the founding of New Aera (sold to Inogen) and was a partner in the two-person family office that co-founded OrthoScan (acquired by ATON GmbH). NovaScan was founded by William Gregory, PhD, a Professor of Electrical Engineering at the University of Wisconsin - Milwaukee.

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Table # 22

Opera Bioscience

Technology: Protein Engineering; Platform • Lead Focus: Microbiome, AgBio & Food; Oncology • Pre-Seed • Founded 2021

- The mission of Opera Biosciences is to make biosimilars and cell therapies affordable by transforming decades old tools for recombinant protein manufacturing.
- Opera's microbial platform allows for a simple protein purification process and avoids protein misfolding. Proteins synthesized via this new platform have higher purity and higher quality than competitors, saving time and money.
- Co-founder and CEO Gerry Sapienza received his MBA from Northwestern University Kellogg School of Management. CSO Julie Liang, PhD, completed her doctoral studies in the lab of Chief Science Advisor and co-founder, Danielle Tullman-Ercek, PhD, at Northwestern University.

Table # 47

OrisDX

Technology: Diagnostics • Lead Focus: Oncology • Pre-Seed • Founded 2022

- OrisDX's mission is to revolutionize early disease detection through next-generation salivary diagnostics, beginning with oral cancer detection and HPV infection.
- OrisDX's groundbreaking product is a novel salivary diagnostic aid for oral cancer and HPV that employs non-invasive, genetic molecular techniques, boasting a 93% sensitivity and 99% specificity. The oral rinse test, based on a unique 7-gene panel, not only delivers definitive results but also facilitates early intervention, reducing the reliance on invasive procedures.
- Harald Steltzer, our CEO, brings over 30 years of life science experience, with the last 10 leading early-stage startups. Dr. Nishant Agrawal and his Co-founders are world-renowned surgeons and cancer biologists from the University of Chicago and Johns Hopkins who have been recognized for pioneering the concept of 'liquid biopsies' for cancer.

Table # 100

Pax Neuroscience

Technology: Diagnostics • Lead Focus: Neurology, Neuropsychiatry & Mood Disorders • Pre-Seed • Founded 2020

- The ultimate mission of Pax Neuroscience is to transform patient outcomes by integrating the cellular biology of depression into its diagnosis and treatment, and to develop a new standard of care for depression.
- Pax Neuroscience develops blood tests for determining depression and personalizing antidepressant treatment.
- Mark M. Rasenick, PhD, President and CSO, is a Distinguished University Professor at the University of Illinois Chicago College of Medicine, Research Career Scientist at Jesse Brown VAMC, and Chair of the American Brain Coalition. He is a specialist in the biology of mood disorders and long-time advisor to policymakers on mental health.

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Table # 94

Peter Penzes, PhD & Euan Parnell, PhD

Technology: Small Molecules • Lead Focus: Neurology; Neuropsychiatry & Autism Spectrum Disorders; Rare & Genetic Diseases • Pre-Seed

- The Penzes lab is developing a Kalirin inhibitor that acts upstream of actin polymerization to reduce dendritic spine density and normalize neuronal activity in Fragile X syndrome. Their goal is to develop novel small-molecule therapeutics for neurodevelopmental disorders based on cutting-edge functional genomics.
- Peter Penzes, PhD, is the Ruth and Evelyn Dunbar Endowed Professor of Neuroscience, Psychiatry, and Pharmacology, the Director of the Center for Autism and Neurodevelopment, and the Director of the NIMH Conte Center at Northwestern University. Euan Parnell, PhD, is Research Assistant Professor of Neuroscience at Northwestern University Feinberg School of Medicine.

Table # 63

Perseid Medical

Technology: Medical Device • Lead Focus: Infectious Diseases • Pre-Seed • Founded 2024

- Perseid Medical's goal is to reduce the costs and burden of managing otitis media for children everywhere suffering from this disease. Every year, 665 million antibiotic prescriptions will not be written and countless surgeries to place drainage tubes will be avoided.
- They are developing a therapeutic medical device that can cure cases of otitis media (ear infections) without using antibiotics or pharmacological agents. Their technology provides a localized, antibiotic-free, non-surgical, and point-of-care treatment that will drastically change the standard of care for otitis media.
- Guillermo L. Monroy, PhD, is a Co-founder of Perseid Medical and has many years of clinical translational research, medical device development, and regulatory experience. This device is a product of a multi-investigator research effort from the University of Illinois Urbana-Champaign.

Table # 11

Prenosis

Technology: AI & Algorithms; Diagnostics; Point of Care; Medical Device; Platform • Lead Focus: Acute Care • Series A • Founded 2014

- Prenosis aims to bring precision medicine to the acute care environment with tools that enable providers to understand biological signatures of disease populations and choose the right therapy for the individual.
- The Immunix™ precision medicine platform empowers the development and validation of new precision medicine tools, and real-time implementation of those tools, to improve patient care. The first commercially available solution on the Immunix™ platform is the Sepsis ImmunoScore™. The Sepsis ImmunoScore™ is the first-ever FDA authorized AI sepsis diagnostic solution.
- Bobby Reddy, Jr., PhD, is the CEO and Co-founder of Prenosis. He has more than a decade of experience in the research and development of early screening technologies for debilitating diseases with a deep understanding of clinical issues. He received a PhD in electrical engineering from the University of Illinois at Urbana-Champaign and an M.S. in electrical engineering from the University of California, Irvine.

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Table # 41

Promiss Diagnostics

Technology: Diagnostics; AI & Algorithms • Lead Focus: Oncology • Seed • Founded 2017

- PROMISS® Diagnostics is developing an innovative, machine-learning-based clinical diagnostic test for ovarian cancer: PROMISS® (Predicting Risk of Ovarian Malignancy In Serum Samples).
- The PROMISS® test utilizes well-characterized, objective parameters in a proprietary algorithm to provide a concise score that indicates the presence of ovarian cancer. The company is seeking to expand its current clinical and investment partners.
- Jalal Sulaiman, MSEE, MS, MBA, is the President and CEO of PROMISS, with over a decade of experience in operations and supply chain, organization management, and strategic planning in the healthcare industry. Roa Qato, MD, OB/GYN, is the CMO. Grady Barnes, PhD, is a Senior Product Developer, and brings over 30 years of experience in research and development, with specialized expertise in launching in vitro diagnostics, including assays, kits, hardware, and software.

Table # 70

Mudassir Rashid, PhD

Technology: Medical Device; AI & Algorithms • Lead Focus: Diabetes • Pre-Seed

- Dr. Rashid's research has pioneered the multivariable automated insulin delivery (mvAID) system, also known as multivariable artificial pancreas (mvAP), for people with type 1 diabetes mellitus. The fully automated mobile application collects data from a continuous glucose monitoring (CGM) sensor and a wristband. The system can predict food consumption, intensity and duration of physical activities, and the occurrence of acute psychological stress. mvAID then provides real-time information to the user and makes suggestions about insulin doses and meal consumptions to keep the glucose in range. The long-term goal of the Rashid lab is to innovate novel digital health and precision medicine techniques.
- Dr. Mudassir Rashid is Assistant Professor and Director of Illinois Tech's Pharmaceutical Engineering Program. Dr. Rashid's research interests include machine learning, deep learning, virtual patients, medical digital twins, and artificial intelligence in medicine, especially ambient intelligent systems in healthcare.

Table # 58

ReAx Biotechnologies

Technology: Small Molecules; Platform • Lead Focus: Oncology; Autoimmunity; Proteostasis; Drug & Target ID • Seed • Founded 2021

- The mission of ReAx Biotechnologies is to deliver transformative therapies for challenging protein targets using our innovative discovery platform. The initial focus of the company is on challenging best-in-class and first-in-class targets in oncology and immunology.
- ReAx has a proprietary, integrated chemistry and technology discovery engine enabling ultrasensitive, multiplexed, high-throughput chemoproteomics in any cellular environment.
- ReAx is a team of experts in biology, chemistry, and computation, accelerating the journey from discovery to treatment. ReAx founder, Raymond Moellering, PhD, is a Professor of Chemistry at University of Chicago.

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Table # 8

Resuscitation Therapeutics

Technology: Small Molecules; AI & Algorithms; Medical Device; Biologics • Lead Focus: Cardiovascular & Vascular Diseases; Acute Care • Pre-Seed • Founded 2017

- Resuscitation Therapeutics, Inc. (RTx) aims to develop and commercialize new therapies and strategies for resuscitation from life-threatening medical emergencies. They plan to implement in pre-hospital and hospital settings in both civilian and military environments.
- RTx's most advanced project is a new treatment for resuscitation during out-of-hospital cardiac arrest that uniquely targets reperfusion injury. RTx's goal is to submit an IND application for a pivotal phase 3 study, followed by a BLA for commercialization.
- Founded by Dr. Raúl J. Gazmuri, MD, PhD, FCCM, in 2017, the company has its roots in decades of preclinical resuscitation research conducted at the Resuscitation Institute of Rosalind Franklin University of Medicine and Science (RFUMS).

Table # 97

Rhaeos

Technology: Medical Device • Lead Focus: Neurology; Neurodegeneration; Acute Care; Surgical • Series A • Founded 2018

- Rhaeos is initially targeting hydrocephalus, a life-threatening condition caused by an abnormal accumulation of cerebrospinal fluid in the brain that is treated with shunt implants to drain the fluid build up.
- FlowSense, a wireless wearable device that can monitor subdermal fluid flow throughout the body, rapidly and noninvasively assesses shunt integrity for patients with hydrocephalus.
- CEO Anna Lisa Somera, MS, MBA, MPH, is a serial entrepreneur with experience in startups, venture capital, technology transfer, biomedical research, and life science consulting. Co-Founder and President John Rogers, PhD, is the Louis Simpson and Kimberly Querrey Professor of Materials Science and Engineering, Biomedical Engineering, and Neurological Surgery and the Director of the Querrey Simpson Institute for Bioelectronics.

Table # 52

Riptide Therapeutics

Technology: Small Molecules • Lead Focus: Oncology • Pre-Seed • Founded 2021

- The mission of the company is to deliver new telomerase-targeting drugs through IND approval and into successful clinical trials, and usher in a new paradigm for telomerase as an oncology drug target focused on therapy sensitization.
- Riptide Therapeutics is developing a new generation of telomerase-targeting drugs to attack cancer therapy resistance mechanisms, activating anti-tumor immunity when combined with conventional therapy.
- Co-founder Dr. Grant Frost is a former postdoctoral fellow in medicinal chemistry at Northwestern University who founded Riptide with Prof. Karl Scheidt of Northwestern University and Prof. Stephen Kron of the University of Chicago.

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Table # 54

Saros Therapeutics

Technology: Nanotechnology; Platform • Lead Focus: Oncology; Autoimmunity • Pre-Seed • Founded 2021

- Saros Therapeutics is dedicated to the development and delivery of novel immunotherapies to improve and extend the lives of patients, addressing significant unmet needs in oncology and autoimmunity.
- Their advanced nanoparticle technology precisely targets and enhances innate immune pathways. The lead program in oncology has robust efficacy data, a wide therapeutic index, and scalable manufacturing processes. Saros is raising capital to complete an IND filing and begin a first-in-human trial.
- The company is led by entrepreneurs experienced in drug development and biotech investing. CEO and Co-founder, Matthew Martin, PhD, has more than 15 years of management and leadership experience and co-founder Rich Johnson, PhD, brings over 28 years of experience leading biopharma R&D groups. This technology stems from research conducted by CSO and Co-founder James Moon, PhD, at the University of Michigan.

Table # 78

Selagine

Technology: Biologics • Lead Focus: Ophthalmology • Seed • Founded 2020

- The ultimate goal of Selagine, Inc. is to help patients suffering from debilitating ocular surface disease and improve their quality of life.
- Selagine, Inc. is a spin-out company from the University of Illinois at Chicago, focused on advancing novel applications of immunoglobulin eye drops to treat dry eye disease.
- Sandeep Jain, MD, is the B.A. Field Professor of Ophthalmology at the University of Illinois Chicago Department of Ophthalmology and Visual Sciences and Director of the UIC Dry Eye and ocular Graft-Vs-Host Disease clinic. Dr. Jain is a clinician-scientist and an academic entrepreneur who has made innovative clinical and basic research discoveries and successfully translated them into therapeutic and diagnostic strategies. He has established a novel academic entrepreneurship program that makes feasible the discovery and development of novel treatments for ocular surface diseases.

Table # 73

Sibel Health

Technology: Medical Device • Lead Focus: Sensors • Series B • Founded 2017

- The mission of Sibel Health is to deliver Better Health Data for All®.
- Sibel Health has launched technologies in more than 20 countries, supported more than 30 major clinical trials, obtained multiple FDA 510(k) clearances, and monitored 15,000 individuals worldwide. The ANNE Central Monitor presents vitals data from 16 beds on one screen and is compatible with third-party devices. The ADAM sensor enables the capture of vibrations related to scratching that occur in the sound frequency range but are not detectable with the accelerometers of typical wrist-worn wearable sensors.
- Steve Xu, MD, MSc, holds an appointment as the Director of Medical Research at the Querrey Simpson Institute for Bioelectronics at Northwestern University, and he is the Ruth K. Freinkel, MD, Professor in the Department of Dermatology at Northwestern University.

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Table # 95

Sigenics

Technology: Medical Device • Lead Focus: Neurology • Pre-Seed • Founded 2000

- Sigenics, Inc. focuses on implantable electronic devices and systems to act as neural interfaces.
- They have a novel technology, Intracortical Visual Prosthesis (ICVP): Brain-Machine Interface for Stimulation and Recording from the Human Brain. This technology is currently in clinical trials for visual prosthesis. They aim to demonstrate feasibility of using this as a chronic multichannel wireless interface.
- CEO, Dr. Philip Troyk is a Professor of Biomedical Engineering and Executive Director of the Pritzker Institute of Biomedical Science and Engineering at Illinois Institute of Techology.

Table # 29

SignI

Technology: Vaccines • Lead Focus: Autoimmunity • Pre-Seed • Founded 2023

- SignI's goal is to save lives by tuning the immune system. They are a pre-clinical biotech striving to make every vaccine safer and more effective with plans to expand to other immunotherapies.
- SignI's compounds mix with most vaccines to reduce adverse side effects such as fever, soreness in shoulder, and fatigue while increasing the vaccine's overall protection and durability.
- Founder Aaron Esser-Kahn, PhD, is Professor of Molecular Engineering at the University of Chicago. Co-founder Jeremiah Kim, PhD, worked on SignI's technology while at the University of Chicago.

Table # 79

Siloam Vision

Technology: Diagnostics; AI & Algorithms • Lead Focus: Ophthalmology • Pre-Seed • Founded 2022

- Siloam Vision aims to reduce preventable blindness around the world.
- Their technology integrates artificial intelligence and cloud-based services with an optimized retinal camera to implement an effective, affordable, and scalable solution for detecting blinding eye disease, especially in at-risk premature babies.
- CEO and Co-Founder J. Peter Campbell, MD, MPH, is an Associate Professor of Ophthalmology at the Oregon Health Sciences University School of Medicine. Siloam Vision's technology is based on work from the lab of Professor Paul Chan, MD, MBA, FACS, Head of the Department of Ophthalmology and Visual Sciences; the John H. Panton Professor of Ophthalmology; Director of the Pediatric Retina and Retinopathy of Prematurity Service; and co-Director Vitreoretinal Fellowship Program at the University of Illinois Chicago.

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Table # 49

SimBioSys

Technology: AI & Algorithms; Diagnostics; Medical Device • Lead Focus: Oncology • Series A • Founded 2018

- See cancer more completely, treat it more precisely. SimBioSys was founded with the goal of building the first digital precision medicine platform for cancer care.
- SimBioSys' visualization and diagnostic technology is designed to deliver precision answers to critical clinical questions and individualize patient treatment. Their comprehensive approach addresses tumor heterogeneity by looking at the tumor in its entirety - beyond biopsies or 2D pathology slides.
- Co-founder Joe Peterson's 15 years of scientific research have spanned investigating combustion and explosion, to analyzing the role of the environment on microbes' behavior, to examining individual differences in breast tumors. As CTO, Joe strives to leverage work based on his doctoral research at University of Illinois Urbana-Champaign to create enterprise technologies that drive new clinical decision making while fostering lasting innovation across cancer treatment.

Table # 75

SNC Therapeutics

Technology: Nanotechnology; Small Molecules; Gene Therapy; Platform • Lead Focus: Oncology; Diabetes; Rare & Genetic Diseases • Seed • Founded 2022

- The goal of SNC Therapeutics, Inc. is to bring disruptive therapeutic delivery to patients. By targeting therapeutics specifically, we can achieve greater efficiency with limited side effects.
- SNCs or Synthetic NanoCarriers are nonviral polymer drug vehicles that enable next-generation delivery of therapeutics, particularly for the modulation of the immune system. Indications include small molecule delivery for type 1 diabetes onset delay and gene delivery for oncology.
- Evan Scott, PhD, CEO and Founder, is a preeminent professor of Biomedical Engineering at Northwestern University and the University of Virginia in Biomedical Engineering. He has 2 decades of experience in immunomodulatory nanomaterials. He is renowned for his pioneering work utilizing nanotechnology to combat cancer, glaucoma, and heart disease, among other diseases and ailments. Jacqueline Burke, PhD, and our CSO, is an entrepreneur-scientist with foundational interests in type 1 diabetes and biomaterials for immune tolerance.

Table # 89

Stem Pharm

Technology: Small Molecules; Platform • Lead Focus: Neurology; Neurodegeneration; Drug & Target ID • Pre-Seed • Founded 2015

- Stem Pharm is a drug discovery company targeting neuroinflammatory-related diseases using its proprietary 3D human neural organoid platform.
- Stem Pharm's therapeutic programs are focused on developing small molecule drugs for Alzheimer's Disease and Temporal Lobe Epilepsy. The Company is raising a $3M Seed Round to validate the disease models, confirm targets, and generate hits that can be taken into lead optimization under Series A financing.
- The leadership team (Steve Visuri, CEO; Connie Lebakken, COO; Ryan Gordon, CBO; Bill Murphy, CSO) consists of 4 PhD level scientists and business leaders with deep industry expertise, having taken 10+ products through the FDA, commercialized over 30 life science products and technologies, and has had 6 successful startup exits. The company is a spin out from UW - Madison and the laboratory of Dr. Murphy.

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Table # 72

Stemloop

Technology: Synthetic Biology; Diagnostics; Protein Engineering; Nucleic Acids; AI & Algorithms; Platform • Lead Focus: Microbiome; AgBio & Food • Seed • Founded 2019

- Limitations in traditional approaches to measure small molecules result in a chemical information bottleneck that slows the pace of progress across industries, including the $4T bioeconomy, and creates a chemical information gap that precludes application of AI/ML to the physical, non-digital world of molecules. Stemloop makes it easy, cost-effective, and fast to measure small molecules.
- Stemloop has established a platform that combines computational discovery (Plover Pipeline™), high-throughput data generation, and patented "cell-free biosensor" formats (e.g., ROSALIND™) to address large unmet chemical testing needs—at scale—with inexpensive and easy-to-use sensors inspired by biology.
- CEO Khalid Alam (2x founder) cofounded Stemloop with Mike Jewett (5x co-founder, Stanford) and Julius Lucks, PhD, (Northwestern). Advisors include world-leading experts at the intersection of AI/ML and synthetic biology, notably Jim Collins, PhD, (MIT), Andy Ellington, PhD, (UTexas) and John Cumbers, PhD, (SynBioBeta).

Table # 99

Stream Neuroscience

Technology: Small Molecules • Lead Focus: Neurology; Rare & Genetic Diseases; Neuropsychiatry & Mood Disorders; Neurodegeneration • Seed • Founded 2024

- Stream Neuroscience's powerful new therapies delve deep inside the cell to activate crucial signaling molecules, allowing for regulation of several biological pathways responsible for neurological disease and brain health.
- Stream Neuroscience is developing small molecule inhibitors of phosphodiesterase 4B (PDE4B), in collaboration with Dr. Tim Hagen at Northern Illinois University, for the treatment of epilepsy, cognitive disorders, and depression. They have strong in vivo efficacy data in mice and patient-derived brain organoids, as well as target engagement, in vitro ADME, and preliminary PK/PD data on lead candidates. They are interested in pharma partnering or a Series A raise to complete IND-enabling studies and Phase I clinical trials.
- Deborah Kurrasch, PhD, is the Co-founder and CEO of Stream Neuroscience. PDE4 was identified using platform technology developed in Dr. Kurrasch's laboratory at the University of Calgary.

Table # 30

Syenex

Technology: Synthetic Biology; Cell Therapy; Platform • Lead Focus: Autoimmunity; Oncology; Rare & Genetic Diseases • Pre-Seed • Founded 2022

- Syenex's goal is to accelerate new cures by providing universal access to premier synthetic biology tools to academia, biopharma, and manufactures in cell therapy.
- Syenex is developing next generation delivery vectors and synbio tools for therapeutic immune cell and stem cell engineering.
- Jay Rosanelli co-founded Syenex in 2022 with Josh Leonard, PhD, Northwestern Professor of Synthetic Biology. Prior to forming Syenex, Jay was CFO/COO of Alloy Therapeutics after having spent most of his career as a venture capital investor in biotech and tech.

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Table # 64

Synpha Biosciences

Technology: Synthetic Biology; AI & Algorithms; Biologics; Platform • Lead Focus: Infectious Diseases • Seed • Founded 2024

- Synpha's therapeutics are proactively designed to address bacterial resistance without unintended damage to the healthy, protective bacteria in the microbiome. The focus is on anti-bacterial resistant infections.
- Synpha Biosciences builds synthetic phage therapeutics that specifically destroy disease-causing bacteria. They use a novel AI/ML process and a patented synthetic biology platform to overcome hurdles faced by other phage therapeutics and broad-spectrum antibiotics. They aim to raise a seed round to efficiently pursue multiple bacterial targets and accelerate their entry into clinical trials in a Series A, IND-enabling round.
- The three Founders, Rob Miller (CEO), Phil Huss (CSO), and Vatsan Raman (SAB Chair and Associate Professor at the University of Wisconsin - Madison) have extensive experience in healthcare, the microbiome, and in synthetic and phage biology and AI machine learning.

Table # 77

Syntax Bio

Technology: Nanotechnology; Cell Therapy; Gene Therapy; Platform • Lead Focus: Rare & Genetic Disease • Series A • Founded 2021

- Syntax Bio's mission is to make cell therapies work for people in need of their life-altering and life saving potential.
- Syntax Bio's technology platform provides control over the complex developmental biology needed to manufacture stem cell-derived cell therapies. Syntax Bio leverages CRISPR-Cas9 powered technology to generate customizable, preprogrammed DNA instruction sets to control the step-wise differentiation of pluripotent stem cells.
- Co-founder and CEO Ryan Clarke, PhD, obtained his doctorate in embryonic stem cell genetics and epigenetics from University of Illinois Chicago. CSO and Co-founder Brad Merril, PhD, is a Professor in the Department of Biochemistry and Molecular Genetics at the University of Illinois Chicago.

Table # 83

SynthBits

Technology: Nanotechnology; Imaging • Lead Focus: Drug & Target ID • Pre-Seed • Founded 2024

- SynthBits' goal is to help our customers extract all the information they need from their samples to assist with diagnostics, drug discovery, and basic research.
- SynthBits builds chemically synthesized quantum sensors and microscopes to measure them. The sensors are single-molecule magnets with an optical interface. This technology promises highly sensitive, highly multiplexed, multimodal images of biosamples.
- Dr. Berk Kovos, the CEO and founder of SynthBits holds a PhD in quantum science and engineering from the University of Chicago, where he worked on the underlying SynthBits' technology, and has 2 years of industry experience.

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Table # 56

Temprian Oncology

Technology: Nanotechnology • Lead Focus: Oncology • Pre-Seed • Founded 2023

- Temprian Oncology is developing a nanoparticle prodrug delivery platform for the treatment of metastatic melanoma.
- Their prodrug supercarrier delivery system ensures targeted release of the therapeutic within the tumor cells in a pH dependent manner. A variant of the prodrug is approved for skin bleaching while the delivery system reduces side effects.
- Temprian Oncology CEO Kettil Cedercreutz, PhD, has a solid background in market-oriented development of products and services. Lead inventors, Caroline Le Poole, PhD, (CIO) and SonBinh Nguyen, PhD, (CSO) are professors at Northwestern University.

Table # 56

Temprian Therapeutics

Technology: Gene Therapy; Nucleic Acids; Platform • Lead Focus: Autoimmunity • Seed • Founded 2019

- Temprian Therapeutics is developing a novel, safe, and effective treatment for vitiligo, a chronic autoimmune disease that causes patches of skin to lose pigmentation.
- Lead candidate TT-01 is a novel treatment that blocks the autoimmune response to melanocytes. It has successfully treated vitiligo in mouse and porcine models and is being developed for first-in-human studies.
- Temprian Therapeutics CEO Sumeet Dagar PhD, MBA, is an accomplished senior executive in the biopharmaceutical industry with over 23 years of global cross-functional experience. Co-founder and CSO Caroline Le Poole, PhD, is a Professor of Dermatology, Microbiology and Immunology at Northwestern Feinberg School of Medicine.

Table # 57

Tensor

Technology: AI & Algorithms; Diagnostics; Platform • Lead Focus: Oncology; Drug & Target ID • Pre-Seed • Founded 2023

- Tensor is delineating the 'language' of cancer to fuel the next generation of therapies, diagnostics, and prognostics.
- They are developing a platform technology that combines new statistical methods, patient samples, and transcriptional profiling. As a proof-of-concept, the Raman lab has perfectly distinguished responders from non-responders in a published paper on immunotherapy efficacy in melanoma and identified the cell types mediating responder status.
- Co-founder Arjun Raman, MD, PhD, is the Joseph Regenstein Professor of Biochemistry and Molecular Biology, with a joint appointment in the Pritzker School of Molecular Engineering (PME) at the University of Chicago. Vivek Behera, MD, PhD, is a Hematology and Oncology Fellow at the University of Chicago.

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Table #

Therome Innovation Partners

Technology: Nanotechnology • Lead Focus: Ophthalmology • Pre-Seed • Founded 2018

- Therome Innovation Partners is a pharmaceutical product development company dedicated to improving the quality of life for those with serious long-term degenerative diseases and unmet needs.
- Therome Innovation Partners has developed a system for controlled-release ocular drug delivery via an implantable vitreal depot.
- Led by Founders, Dr. Elizabeth R. Gaillard, Professor and Distinguished Research Professor, Department of Chemistry and Biochemistry at Northern Illinois University and Dr. Kalyan Karumanchi, a life science research consultant and entrepreneur.

Table # 96

Samie Tootooni, PhD

Technology: Diagnostics; AI & Algorithms • Lead Focus: Neurology; Cardiovascular & Vascular Diseases • Pre-Seed

- Dr. Tootooni is developing StrokePath, an AI-based tool to help EMTs identify severe strokes more accurately and swiftly. Emergency Medical Technicians (EMTs) play a crucial role in stroke care, but current tools like the Cincinnati Prehospital Stroke Scale often fail to detect strokes accurately, leading to unnecessary delays and misdirected patients. The goal is to implement this tool across all Chicagoland EMS regions, addressing unique regional challenges through detailed data collection and assessment and using Consolidated Framework for Implementation Research (CFIR) to ensure effective integration into existing emergency medical systems.
- Mohammad Samie Tootooni, PhD, is an Assistant Professor in the Department of Health Informatics and Data Science at Loyal University.

Table # 15

Trace Biosciences

Technology: Diagnostics; Imaging • Lead Focus: Surgical; Real-time Visualization • Pre-Seed • Founded 2019

- The primary goal of Trace Biosciences is to progress the application of Nerve Trace to human patients. They aim to dose their first patient in the next 6 months. Having completed IND-enabling work, they are seeking seed funding ahead of phase 2 clinical trials.
- Nerve Trace uses near-infrared fluorescence and clinically available imaging systems to allow visualization of nerves, even when buried beneath tissues, so surgeons can cut by color and spare critical nerves from damage.
- Trace Biosciences was founded by Connor Barth, PhD (CEO), Summer Gibbs, PhD (CSO), and Lei Wang, PhD (CTO). Dr. Wang is the inventor the Nerve Trace probe and all this work was performed and then spun out of Dr. Gibbs' laboratory at Oregon Health & Science University in the Department of Biomedical Engineering.

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Table # 68

Sahar Vahabzadeh, PhD

Technology: Nanotechnology; Synthetic Biology; Medical Device • Lead Focus: Infectious Diseases; Ophthalmology; Surgical • Pre-Seed

- Core-shell fibers are nanomaterials with advantageous attributes in drug delivery and tissue regeneration. These fibers preserve bioactive compounds and enable controlled and targeted release of these compounds. Dr. Vababzadeh aims to apply the controlled release of biomolecules for antibacterial and tissue regeneration purposes.
- This research is led by Sahar Vababzadeh, PhD, Associate Professor in Mechanical Engineering with expertise in materials science, additive manufacturing, biomaterials, and tissue regeneration. Nicholas Pohlman, PhD, is a Professor in Mechanical Engineering at Northern Illinois University.

Table # 12

Terry Vanden Hoek, MD & Jing Li, MD

Technology: Peptides • Lead Focus: Acute Care • Pre-seed

- Drs. Li and Hoek have developed an injectable, rapidly acting peptide, UIC-101, that activates Akt and improves neurologically intact survival after cardiac arrest. No drugs exist for this purpose, and current standard-of-care includes active thermal cooling after return of spontaneous circulation. UIC-101 inhibits the interaction of PHLPP1 phosphatase with its membrane adaptor, leading to Akt activation and metabolic recovery, which mimics the effects of early cooling during CPR, where every minute matters.
- Terry Vanden Hoek, MD, FACEP, is a Professor and Head of the Department of Emergency Medicine at the University of Illinois Chicago as well as a member of the National Academy of Medicine. Jing Li, MD, Co-inventor, is the Director of Translational Science and Education, Department of Emergency Medicine at the University of Illinois Hospital & Health Sciences System.

Table # 88

Vanqua Bio

Technology: Small Molecules; Platform • Lead Focus: Neurology; Neurodegenerative Disorders • Series B • Founded 2019

- Vanqua Bio aims to utilize human genetics and patient-derived neuronal cells to identify, validate, and clinically translate novel disease pathways associated with lysosomal dysfunction or aberrant activation of the innate immune system.
- Vanqua Bio is a biopharmaceutical company dedicated to discovering and developing next-generation medicines that have the potential to transform the lives of patients with neurodegenerative diseases. Our lead program targets the genetic association between the GBA1 gene, the gene that encodes GCase, and the lysosomal dysfunction that occurs in Parkinson's disease (GBA-PD).
- Vanqua was founded in 2019 by Dr. Jim Sullivan, former VP of Research at AbbVie, and Dr. Dimitri Krainc, Chair of Neurology at Northwestern University.

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Table # 55

Varchas Biotechnologies

Technology: Cell Therapy • Lead Focus: Oncology; Autoimmunity • Pre-Seed • Founded 2023

- At Varchas Biotechnologies, the mission is to advance immunotherapy for human health by developing a Modified Antibody Specific Switchable Chimeric Antigen Receptor (MASS-CAR).
- MASS-CAR allogeneic cell platforms harness the chemical labeling of antibodies to target tumors and enhance immune responses. They are building an off-the-shelf, universal CAR-T cell therapy with potential to address multiple indications.
- The team is led by Dr. Ashima Shukla, a seasoned entrepreneur and acting CEO, and Dr. Vipul Shukla, Co-founder and esteemed academic from Northwestern University. Dr. A. Shukla's expertise in cancer biology and immunology, coupled with her commitment to pioneering innovative immunotherapies for cancer and autoimmunity, drives their mission forward.

Table # 65

Vastimmune Biologics

Technology: Vaccines; Nanotechnology • Lead Focus: Infectious Diseases • Pre-Seed • Founded 2024

- The goal of Vastimmune Biologics is to bring to market innovative vaccine technologies that provide broadly protective immunity against influenza A virus.
- Vastimmune's technology offers an innovative vaccine that elicits broad protection against diverse influenza A virus subtypes. This technological advancement is made possible by displaying the entire highly conserved influenza A virus (IAV) matrix protein 2 (M2), which is shared by >99% of IAV, in its natural transmembrane configuration in nanodiscs (M2ND).
- Dr. Federico A. Zuckermann is a Professor of Immunology at the University of Illinois Urbana-Champaign. He has authored nearly 100 publications and is a co-inventor of more than a dozen patents. Dr. Zuckermann has founded two biologics companies: Aptimmune, and Vastimmune.

Table # 56

Vivacelle Bio

Technology: Nanotechnology; Synthetic Biology • Lead Focus: Acute Care; Surgical; Cardiovascular Disease • Series B • Founded 2013

- Vivacelle Bio, Inc. (VBI) is a clinical stage life science company focused on saving lives by bringing to market a new paradigm in the correction of hypovolemia by fluid resuscitation.
- Vivacelle Bio's current two products (VBI-1 and VBI-S) are designed to treat hypovolemia that results from acute blood loss following trauma or surgery, medical conditions such as burns, sepsis or diarrheal disease.
- CEO Harven V. DeShield, PhD, JD, previously served as CLO and COO of Vivacelle Bio, Inc. for four years. He is also a former Vice President of Commercialization and Business Development for a biomedical device company developing next generation novel wound healing medical device technologies and therapies.

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Table # 50

Vortex Therapeutics

Technology: Small Molecules • Lead Focus: Oncology • Pre-Seed • Founded 2017

- Vortex Therapeutics' mission is to develop therapeutics to target the canonically undruggable target MYC. They are currently raising a seed round to support IND-enabling activities to advance into a Phase I trial.
- They are developing small molecule, orally bioavailable, direct inhibitors for MYC, which is commonly overexpressed in over 70% of cancers.
- Vortex Therapeutics was founded by Dr. Sarki Abdulkadir, MD, PhD, a cancer biologist and the John T. Grayhack, MD, Professor of Urological Research at Northwestern University, and Dr. Gary Schiltz, PhD, a medicinal chemist and Professor of Pharmacology at Northwestern University.

Table # 19

Yobee Care

Technology: Probiotic Solutions • Lead Focus: Microbiome; AgBio & Food • Seed • Founded 2018

- Yobee's mission is to revolutionize scalp, hair, and skin care by eliminating the need for chemical-laden products. Utilizing PROBYOME™, a blend of paraprobiotics, organic honey, organic turmeric, and Vitamin B12, Yobee ensures natural and effective care.
- PROBYOME™ is a patented blend of natural and anti-inflammatory ingredients like paraprobiotics, organic honey, organic turmeric, and Vitamin B12. This natural solution has been clinically proven to be safe and effective in kids and adults, significantly reducing dry scalp symptoms, including redness, dryness, and irritation. By supporting a healthy microbiome, Yobee provides relief for various scalp and skin conditions.
- Ruchi Gupta, MD, MPH, has 20 years of experience as a board-certified pediatrician and health researcher and serves as the Founding Director of the Center for Food Allergy & Asthma Research (CFAAR) at Northwestern University Feinberg School of Medicine and Lurie Children's Hospital of Chicago.

Table # 51

Xiaoyu Zhang, PhD

Technology: Small Molecules • Lead Focus: Oncology • Pre-Seed

- Dr. Zhang is developing a CRISPR activation screening platform to identify E3 ligases for targeted protein degradation. Dr. Zhang's interdisciplinary research program focuses on three primary areas: 1) cancer neoantigen modulators for innovative cancer immunotherapy; 2) selective cancer therapy by identifying cancer-specific vulnerabilities; and 3) small molecule degraders targeting not-yet-druggable oncogenic proteins. The group is committed to targeting disease-causing proteins that were previously considered undruggable, opening up new possibilities for treating a wide range of human diseases.
- Dr. Xiaoyu Zhang, PhD, is an Assistant Professor of Chemistry at Northwestern University.

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