



# 2021

## ANNUAL REPORT




# WHAT'S **IN** LIFE SCIENCES?

In addition to global health contributions through medical innovations such as the manufacturing of three COVID-19 vaccines, Indiana's vibrant and unique life sciences industry continues to make a significant impact on the state through its economic strength, contributing more than \$79 billion in 2021.

In 2021, BioCrossroads focused on collaborations among industry, academic, government and philanthropy; building the entrepreneurial ecosystem through seed investments; and establishing unique sector assets, such as sector-focused educational and market knowledge reports and analysis. In addition, a partnership with the Indiana Economic Development Corporation resulted in world-class companies expanding and building new facilities in the state to take advantage of life sciences assets. Talent also remains central to growth in Indiana's life sciences sector, and BioCrossroads is highlighting young talent and growing companies through the Career TraX project.

## INNOVATION **IN** 2021

**899**  
new patents  
granted



**61**  
new products  
approved by the FDA



**\$434M**  
venture  
capital funding



**37**  
companies  
funded



2021 **IN** LIFE SCIENCES  
EXPORTS

**\$12,766,690,010**

**3<sup>RD</sup>**  
highest  
in the  
U.S.

**\$79<sup>\*</sup>B**  
state economic  
impact

**>\$216K**  
exports per worker

WORK **IN** 2021<sup>\*</sup>

Workforce & Wages

**2,452**  
establishments

**58,928**  
jobs

**>\$6.2<sup>B</sup>**  
total industry wages

**>\$105,997**  
average IN life sciences wage

Average wage per person in life sciences is **>2x** the average wage per person in the private sector. **\$52,547** is the average wage for Indiana private sector

\*2020 data (BLS/IMPLAN)

analytiXin

# DRIVING INNOVATION

BioCrossroads has been spearheading AnalytiXIN since late 2020. AnalytiXIN is Indiana's place-focused collaboration to drive sustained innovation by connecting university assets and talent with industry in the areas of data sciences, including digital, AI and advanced analytic capabilities.

In 2021, BioCrossroads achieved three major milestones while moving the project forward.

One of the primary goals of AnalytiXIN is to have a common place where university and industry expertise, capabilities and talent could work. BioCrossroads engaged with all three research universities – Indiana University,

Purdue University and the University of Notre Dame – to bring them together at 16 Tech. They all have space at the AnalytiXIN offices at Hq0 where there is also ample room for participating organizations to work remotely or have meetings, workshops and educational sessions on-site. It also marks Notre Dame's first and only location in Indianapolis.

Recruiting and maintaining talent in the data sciences is another central focus of AnalytiXIN, particularly at our universities. In 2021, the grant funding to the universities via the AnalytiXIN program led to the recruitment of four new faculty members at the universities – three at Notre Dame and one at Indiana University.



INDIANA UNIVERSITY





Finally, the health data asset received a major boost with in-kind and financial support committed by Eli Lilly and Company and IU Health. These commitments, along with leadership and support from the Indiana Biobank within the Indiana University School of Medicine, form the basis for the asset. The asset will include clinical data, whole genome sequencing data and other non-clinical data focused on driving insights and discoveries that are accessible and usable by commercial and academic researchers. Partners will use the data to solve complex health and socio-economic problems in Indiana.





# Advancing Knowledge About Indiana's Life Sciences Impact Through Market Reports

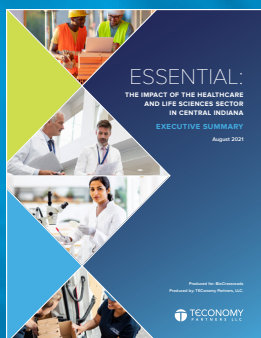
BioCrossroads released two new life sciences market reports in 2021:

***ESSENTIAL: The economic impact of Central Indiana's healthcare and life sciences sector*** discusses not only the economic measures of capital expenditures, wages and jobs, but also the non-traditional impacts, such as access to healthcare and its influence on economic development. It points out that the healthcare and life sciences ecosystem is larger than traditional research and

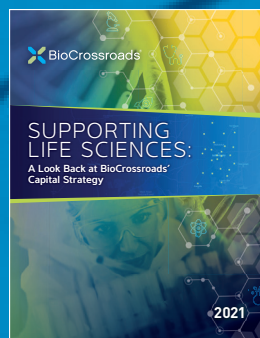
development, underscoring the importance of continued investment in the sector.

***SUPPORTING LIFE SCIENCES: A Look Back at BioCrossroads' Capital Strategy*** illustrates in detail the journey of organizing, developing and managing seed-stage and venture capital funds from 2002 to 2021.

In addition, two knowledge-specific annual reports were updated with the most recent data:



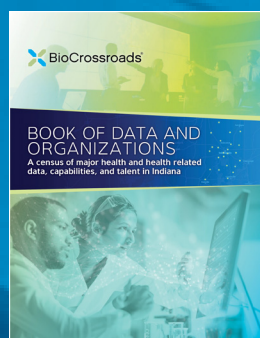
## **ESSENTIAL: The Impact of the Healthcare and Life Sciences Sector in Central Indiana**



## **SUPPORTING LIFE SCIENCES: A Look Back at BioCrossroads' Capital Strategy**



## **INDIANA LIFE SCIENCES CAPITAL: A Summary of 2020 Investments**



## **BOOK OF DATA AND ORGANIZATIONS: A Census of Major Health and Health- related Data, Capabilities, and Talent in Indiana**

*Indiana Life Sciences Capital 2020*, provides details on the funding events from a variety of sources, including Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) awards, venture capital, initial public offerings and related public offerings, and mergers and acquisitions.

The fourth edition of BioCrossroads' *Book of Data and Organizations* – a directory of Indiana enterprises in the health-

data intersection – includes information on Indiana's industry, government, health systems, academia, and digital health startups that have tremendous data and technology resources which are driving transformative healthcare and life sciences work locally and globally. The directory now includes snapshots of more than 40 organizations and initiatives involved in data science and data assets.

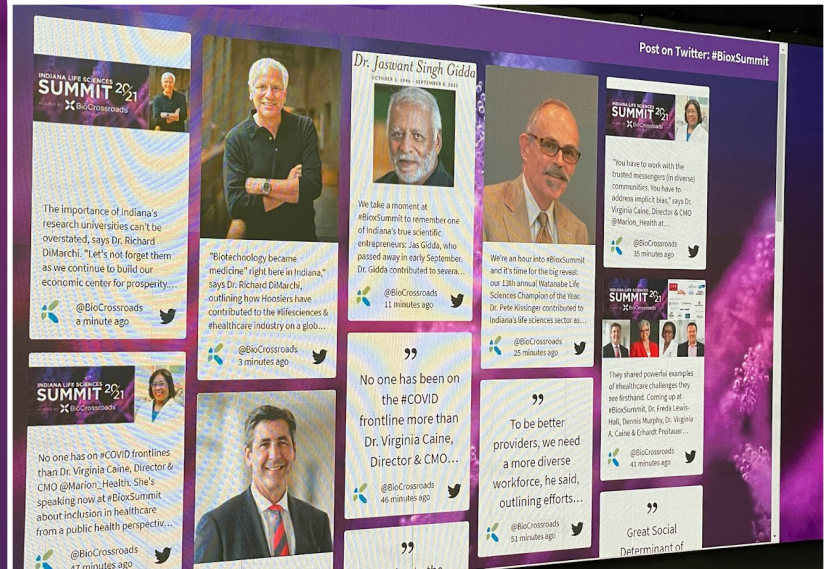




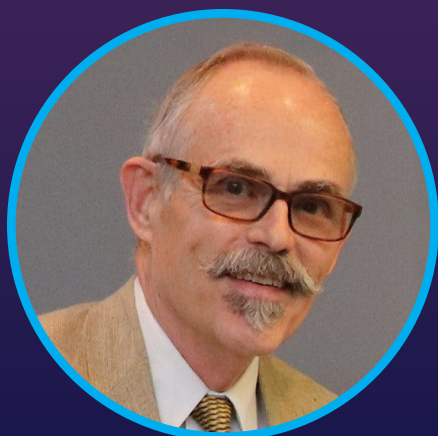
# INDIANA LIFE SCIENCES SUMMIT 2021

HOSTED BY  BioCrossroads®

2021 marked the 18th annual Indiana Life Sciences Summit. A virtual event for the second year in a row, the conference focused on what the life sciences industry has learned over the last 18 months, particularly in the areas of inclusion and collaboration. National and local thought leaders from industry and academia headlined the event, which had more than 600 online attendees. Dr. Peter Kissinger, notable academic, researcher, and founder of Bioanalytical Systems Inc. (now Inotiv) was recognized as the 2021 Watanabe Life Sciences Champion of the Year.



 **600+** ONLINE ATTENDEES



## 2021 AUGUST M. WATANABE LIFE SCIENCES CHAMPION OF THE YEAR

**Dr. Peter Kissinger**

Purdue Chemistry Professor  
and Founder of Inotiv



# FrameWORX

BioCrossroads hosted six FrameWorx sessions; three events were focused on COVID-19 related topics.

**JANUARY 7, 2021**

Valuable Lessons Learned from Indiana Universities' COVID-19 Response

**MARCH 10, 2021**

Indiana's Logistics and Life Sciences Sectors Work Together to Turn a Vaccine into Vaccinations

**JANUARY 27, 2021**

Emergency Use Authorization for COVID-19

**MAY 7, 2021**

A Look at Indiana's Emerging Radiopharmaceutical Industry

**FEBRUARY 18, 2021**

Tech Transfer in Indiana: The Road to Commercialization

**SEPTEMBER 10, 2021**

ESSENTIAL: The Impact of the Healthcare and Life Sciences Sector in Central Indiana

## Investing In Indiana's Life Sciences Future

BioCrossroads' Indiana Seed Fund program has invested in 32 companies since its first fund launched in 2005. Those 32 companies have gone on to raise nearly \$600 million. In 2021, Indiana Seed Fund III invested in Kovina Therapeutics, which is developing a treatment for ovarian cancer. The fund also made secondary investments in Gate Neurosciences, Scioto Biosciences, Novosteo and Lumavate.



# 32

Indiana start-up  
companies since  
2005 launch

# ~\$600M

raised by those  
32 companies

# \$23.25M

assets under  
management

# Early-in-career Talent Showcased Through Career TraX

## BIOCROSSROADS CAREER TRAX

Career TraX showcases Indiana's early-in-career life sciences jobs by profiling talent and companies on the BioCrossroads website and then connecting to the Ascend Indiana website to register career seekers. The site drives awareness about Indiana's life sciences industry to university students and other job seekers as a way to retain more talent in Indiana.





## WORLD-CLASS COMPANIES TAKE NOTE OF INDIANA'S INNOVATION AND WORKFORCE

In 2021, BioCrossroads entered into a partnership to provide market knowledge and expertise in the life sciences to the Indiana Economic Development Corporation (IEDC). This consulting work helped the IEDC obtain commitments from 23 life sciences companies who plan to invest over \$500 million and hire 2,100 employees throughout Indiana over the coming years.

**23** life sciences  
companies committed

**>\$500M** planned  
investment

**2,100** job  
commitments



# BOARD OF DIRECTORS

BioCrossroads Board of Directors members represent the state's industry, academic, philanthropic, and government sectors. The senior leaders on the Board are essential to BioCrossroads' success, and they are united in their commitment to find even more ways to collaborate, sustain investments and build upon the existing energy and assets of Indiana.

**Dan Peterson** is the Chairman of the Board.

**Dr. D. Craig Brater**

*Retired Dean  
Indiana University School of Medicine*

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Connected Care  
Eli Lilly and Company*

**Dr. Richard DiMarchi**

*Chief Scientific Officer  
MBX Biosciences*

**Claire Fiddian-Green**

*President and CEO  
Richard M. Fairbanks Foundation, Inc.*

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*Executive Vice President, Business  
Platforms  
Corteva Agriscience*

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**John "JJ" Spegele**

*Global VP, Business Transformation  
Indianapolis Site Lead  
Covance Clinical Trials Testing Solutions*

**William Stephan**

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Indiana University*

**Ron Stiver**

*President, System Clinical Services  
IU Health*

**Bryony Winn**

*President  
Anthem Health Solutions*

**Dr. Ramarao (Ram) Yeleti**

*Executive Vice President, Chief Physician  
Officer Chief Physician Executive  
Community Health Network*



1210 Waterway Blvd., Suite 5000  
Indianapolis, IN 46202  
317-238-2450

[www.biocrossroads.com](http://www.biocrossroads.com)

\*Data used in graphics are the most recent available and were compiled by the Indiana Business Research Center at the Indiana University Kelley School of Business and BioCrossroads.

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