

# MANITOBA CANADA

INGENUITY  
INVENTION  
INNOVATION



BIO INTERNATIONAL CONVENTION



June 13 – 16, 2022  
San Diego Convention Center

20  
22





## CLIFF CULLEN

Minister of Economic  
Development,  
Investment and Trade

### WELCOME TO THE 2022 BIO INTERNATIONAL CONVENTION.

As Minister of Economic Development, Investment and Trade with the Government of Manitoba, I am pleased to join the global biotech community at this flagship industry event with colleagues and industry leaders from our province and across Canada.

The remarkable past achievements and future benefits of biotechnology continue to improve

our health and the health of our planet. Manitoba is proud to be a leading Canadian bioscience industry destination with a number of advantages:

#### **MANITOBA IS AN ESTABLISHED BIOSCIENCE INDUSTRY LEADER AND EXPORTER.**

We are home to major multi-national corporations and emerging local companies that employ thousands of highly-skilled workers and represent a major source of economic output. In fact, health-related biotech products is our province's top export, and Manitoba is the second-largest pharmaceutical exporter in Canada.

#### **WE ARE A HIGH-VALUE GLOBAL INVESTMENT DESTINATION.**

Competitive business costs and labour rates, strong export trade, highly-skilled and educated workers, free and accessible healthcare, and a diverse, multicultural population provides high investment value and continued growth of the biotech sector in Manitoba.

#### **WE LEAD BIOTECH INNOVATION, RESEARCH, AND DEVELOPMENT.**

Biotech companies working and investing in Manitoba benefit from a world-class research and development community. Private and public research institutions, advanced manufacturing facilities, and a network of post-secondary institutions fuel innovation and prepare the workforce for future biotech careers.

#### **THE GOVERNMENT OF MANITOBA OFFERS A RANGE OF SUPPORTS FOR BIOTECH INDUSTRY**

#### **INVESTMENT, DEVELOPMENT AND EXPANSION.**

Examples of our targeted industry supports include funding for product development and commercialization, employee skills training, sector-specific workforce promotion, training and education, human resources development and a new public-private venture capital fund launching later this year.

#### **WE WORK DIRECTLY WITH THE BIOTECH INDUSTRY TO MAXIMIZE SECTOR GROWTH.**

Through close strategic partnerships with industry leaders and Bioscience Association Manitoba, the Government of Manitoba directly supports biotech sector promotion, investment attraction and development activities. Through this integrated public-private relationship, we ensure potential investors have a clear, single point-of-access to our services and supports.

My colleagues and I from Manitoba welcome the opportunity to discuss our province's unique investment advantages. For more information on all that Manitoba has to offer, visit: [www.manitoba.ca/business](http://www.manitoba.ca/business)

Thank you and enjoy the week.

**Honourable Cliff Cullen**

**Minister of Economic  
Development, Investment and  
Trade**





## WELCOME TO THE 2022 BIO INTERNATIONAL CONVENTION.

The Manitoba bioscience sector is more thriving and diverse than ever before. Our industry continues to find new and innovative ways to create solutions and to contribute to the sustainable economic growth of our province.

As an industry association, we are the hub and advocate for the innovators, entrepreneurs and established companies in Manitoba's growing bioscience industry.

Our member companies belong to one – often more than one – of three subsectors – Health biotech, Ag biotech, and Clean biotech.

Manitoba is poised to drive the bioeconomy to the next level with

increased investment and strategic partnerships. Traditionally known as the gateway to the West, Manitoba is quickly becoming the Gateway to the World.

We invite you to explore all the possibilities of the Manitoba Advantage!

[WWW.BIOMB.CA](http://WWW.BIOMB.CA)



**KIM  
KLINE**

President  
Bioscience Association  
Manitoba



# MANITOBA ADVANTAGE

# Ingenuity. Invention. Innovation:

## The Bioscience Future is Bright in Manitoba

**THE BIOSCIENCE INDUSTRY IN MANITOBA IS ONE THAT HAS SHOWN GREAT RESILIENCY AND THE ABILITY TO PIVOT** in response to the challenges of COVID-19, Sectors of the bio-economy relating to health and manufacturing such as medical and diagnostic laboratories and pharmaceutical manufacturing demonstrated agility to leverage pandemic related opportunities for growth. The importance of ag biotech to ensure food security became more relevant as shortages have occurred.

Manitoba has a strong and vibrant bioscience economy with more than 700 companies and organizations generating \$10.4 billion in total sales annually to Manitoba's GDP. Between 2017 & 2020, total revenues grew by 12%, from \$9.4 billion to \$10.4 billion, employed persons in the industry grew by 14% from 14,300 to 16,330.

The bioscience industry ranks 4th in the province among all major industries with respect to Direct GDP Contribution at \$5.6 billion in 2019. It is a high value added industry with direct GDP per worker of \$344,560.

In 2021 *medicaments*, which includes pharmaceuticals, vaccines, antibiotics for human and animal use, as well as vitamins and their derivatives, were the number one export from Manitoba worth \$2.2 billion. This category has been the number one export from the province since 2018. Manitoba is second only after Ontario for pharmaceutical and medicine manufacturing at \$2.3 billion.

Bioscience Association Manitoba (BAM) is a passionate advocate for the bioscience community, supporting members from clean, agricultural and health biotechnology. Since its inception 30 years ago, BAM has helped drive Manitoba's bioscience industry to become diverse, highly educated, and expansive, because of this, many long-standing companies have reached or are near the product expansion stage. This puts Manitoba in the right place, at the right time, to support the needs of our global community.

### Manitoba - Innovation Hub for Bioscience Industry

#### BAUSCH HEALTH

Bausch Health is Canada's largest publicly-traded pharmaceutical company. With its largest North American manufacturing site located in Steinbach, Manitoba, and employing 500, the company owns and operates a sprawling state-of-the-art facility which manages all of Bausch Health's manufacturing of controlled-release products. Each year, the facility produces and packages approximately 1.2 billion tablets or capsules of 12 different kinds of medications which are sold worldwide to treat pain, high blood pressure and depression.

#### IVC VITA HEALTH

Employing over 600, IVC Vita Health is Canada's largest private label manufacturer of a broad line of high-quality OTC drug products. The company has extensively invested in their regulatory and quality infrastructure to meet evolving regulatory expectations. The company has over 260,000 square feet of GMP licensed manufacturing, packaging and distribution facilities for Over-the-Counter Drug, Controlled Drug Product and Natural Health Products. IVC Vita Health was acquired by the International Vitamin Corporation who are committed to investing in, and aggressively growing both the domestic and international sales portfolio.

#### MEDICURE INC.

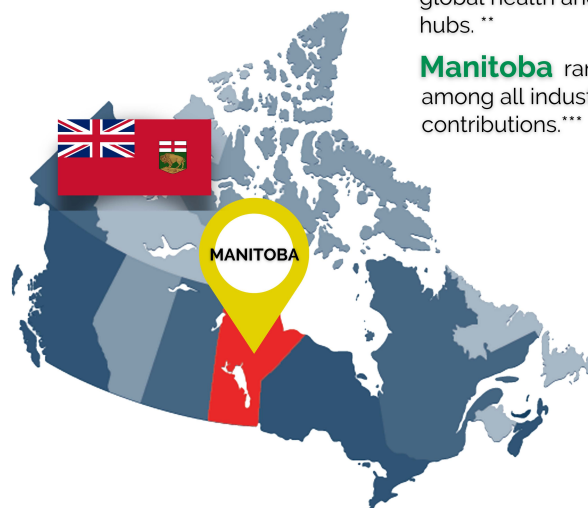
A public company since 1999, Medcure develops and commercializes pharmaceuticals and healthcare products for patients and prescribers with a U.S. focus. As a Specialty Pharma company with established sales of cardiovascular drugs, Aggrastat and ZYPITAMAG, Medcure carefully monitors opportunities within its own pipeline of products and possible strategic acquisitions in order to realize long-term value. It houses a commerce pharmacy platform through its subsidiary, Marley Drug™, where FDA approved medications can be purchased at discount prices for home delivery in all 50 States.

#### ROQUETTE

Roquette is a global leader in plant-based ingredients, a pioneer of plant proteins and a leading provider of pharmaceutical excipients. In late 2021, Roquette opened the largest pea protein processing facility in the world alongside some of the best experts in developing new plant-based foods – all based in Manitoba. The 200,000 square foot plant has the capacity to process 125,000 tons of yellow peas per year to meet an increase in annual global demand estimated at between 15 and 24 percent per year over the next decade.

**Canada** ranks **fourth** in global health and bioscience hubs. \*\*

**Manitoba** ranking **fourth** among all industries for contributions.\*\*\*







**medicaments:  
MANITOBA'S  
#1 EXPORT  
OVER \$2 BILLION**



**Manitoba is the  
2<sup>nd</sup> LARGEST  
PROVINCE  
for Pharmaceutical Manufacturing  
IN CANADA**

## Did you know?



**THE MANITOBA  
BIOSCIENCE INDUSTRY  
employs  
16,330  
individuals**



**THE INDUSTRY GENERATES  
\$10.4  
BILLION  
IN REVENUE**

### Manitoba - Innovation Hub for Bioscience Research

The pandemic highlighted the importance of science, research and innovation. At the heart of Manitoba's bioscience industry are supporting research organizations developing cutting edge technologies and discoveries that have helped advance the global science and healthcare communities.

#### RESEARCH MANITOBA

Research Manitoba provides funding support for Manitoba based companies and are the lead for Research Improvements Through Harmonization in Manitoba (RITHIM), the only program of its kind in Canada. RITHIM harmonizes the ethics, privacy and impact applications and processes throughout Manitoba into one streamlined system supported by a single electronic platform, making it easier and faster for researchers to undertake clinical studies.

#### ST. BONIFACE HOSPITAL ALBRECHTSEN RESEARCH CENTRE (SBRC)

SBRC is home to the:

- Institute of Cardiovascular Sciences which is widely regarded as one of the preeminent basic cardiovascular research programs in the world;

- Division of Neurodegenerative Disorders that is investigating mechanisms underlying, and identifying potential treatments for, diseases including Alzheimer's Disease, ischemic stroke, traumatic brain injury and aging related CNS degeneration;
- Canadian Centre for Agri-Food Research in Health and Medicine that assesses health related benefits found in nutraceuticals, functional foods, and natural health products (health food).

#### THE MANITOBA CENTRE FOR HEALTH POLICY (MCHP)

MCHP is a centre of research excellence that conducts world class population-based research on health, and the social determinants of health. MCHP develops and maintains the largest population-based data repository in Canada for use by the local, national and international research community, the *Manitoba Population Research Data Repository*. This comprehensive database was developed to describe and explain patterns of health care and profiles of health and illness, facilitating interdisciplinary research in areas such as health care, education, social services and justice.

#### CANADIAN SCIENCE CENTRE FOR HUMAN AND ANIMAL HEALTH (CSCHAH)


CSCHAH is Canada's only Containment Level 4 (CL4) laboratory facility. The Centre co-houses the Public Health Agency of Canada's National Microbiology Laboratory and the Canadian Food Inspection Agency's National Centre for Foreign Animal Disease. In concert, these laboratories have highly specialized construction and engineering controls and are equipped to safely diagnose, research, and develop treatments and vaccines for high-risk pathogens, such as Ebola and Nipah virus.

#### WHY MANITOBA?

Traditionally known as the gateway to the West, Manitoba is quickly becoming the Gateway to the World. Winnipeg was named the *World's Most Intelligent Community in 2021*, *World Greatest Places of 2021* by TIME and one of the *Top 20 Best Locations to Invest* by Site Selection magazine.

Manitoba's bioscience industry, while gaining strength and momentum, will continue to drive the bioeconomy to the next level through collaborations and partnerships across the country and around the world.

# MANITOBA'S INDUSTRY INCENTIVES



Our government understands the importance of supporting the competitiveness of the life sciences sector in Manitoba and has developed incentives to support businesses.

**Examples include:**

## Manitoba Industry Expansion Program

- The Industry Expansion Program is aimed at supporting companies that are locating new operations in Manitoba or expanding existing Manitoba operations.
- The program assists companies by contributing to their investment in skills training for employees. Financial assistance may cover up to 50% of training related costs.

## Workforce Development Program

- The Workforce Development Program assists companies to assess human resource management needs and develop and implement HR and workforce training and development plans.
- The amount of funding assistance provided is based on numerous factors including the net economic and other benefits to the Province of Manitoba, training reasons, outcomes and costs, workforce impact, etc.

Learn more: <https://bit.ly/3QapTLN>

# MANITOBA TAX CREDIT OPTIONS

- The **Manufacturing Investment Tax Credit** provides an 8% tax credit on purchases of new and/or used buildings and equipment for first-time use in manufacturing or processing in Manitoba. Seven percent of the MITC rate is refundable, and the other 1% is non-refundable. Any unused credits earned in a year can be carried forward up to ten years.
- The **Manitoba Works Capital Incentive** provides companies with a rebate of incremental education-related property taxes generated as a result of capital investment on the property.
- The **Manitoba Research and Development Tax Credit** targets scientific research and experimental development carried on in MB. The amount of the credit is equal to 15% of eligible expenditure. The tax credit is fully refundable for R&D under an eligible contract with a qualifying research institute. If not under an eligible contract, only 50% of the credit is refundable.

## Manitoba Green Programs and Incentives

- **Efficiency Manitoba** provides up to \$2 /square foot for buildings built beyond Manitoba's building code, with no project maximums. Additional incentives are available for various energy efficient technologies utilized in the build.
- The **Conservation and Climate Fund** supports projects occurring in Manitoba that incorporate actions to combat and adapt to climate change and protect the environment in alignment with the priorities and implementation of the Climate and Green Plan.
- The **Green Energy Equipment Tax Credit** is a refundable tax credit which promotes the production and purchase of machinery and equipment used to generate renewable energy in Manitoba. Geothermal heating equipment and Biomass fuel energy equipment is eligible for a maximum 15% credit; Solar thermal heating equipment is eligible for a 10% credit.



# Introducing Manitoba's Venture Capital Fund

**The Manitoba government is investing \$50 million in a new Venture Capital Fund to give Manitoba companies much-needed access to investment capital to fund innovation and expansion.**

*The Manitoba government is taking actions to make the province a more attractive place for new businesses to start, for existing businesses to grow and for foreign businesses to invest. Establishing the Venture Capital Fund is critical to connect Manitoba-focused businesses with the capital they need to pursue their dreams and build their businesses in Manitoba.*

## What is the Venture Capital Fund?

The Venture Capital Fund will be a *fund-of-funds* that will invest in privately managed investment funds that have proven, professional investment teams. By investing government's initial capital alongside private capital in these downstream funds, it will lever the initial capital, increasing the amounts available to be invested into Manitoba companies.

This *fund-of-funds* model is based on similar successful venture capital funding models in other provinces.

## Why is Manitoba doing this?

The Venture Capital Fund will provide a catalyst for the creation of multiple, independently managed Manitoba-focused investment funds dedicated to providing options for venture and growth capital for Manitoba businesses.

Access to capital is critical for the development and expansion of Manitoba businesses. By ensuring the availability of a greater breadth of capital in Manitoba, the Venture Capital Fund will make Manitoba a more attractive place for

entrepreneurship and for new economic opportunities. It will accelerate other economic development strategies, supporting sustained economic growth in Manitoba.

## How will it happen?

The Manitoba government is entering into an agreement with the Manitoba Technology Accelerator, who will establish a steering committee to manage the development of the Venture Capital Fund. The Manitoba Technology Accelerator is experienced in working with entrepreneurs and emerging companies to help connect them with venture capital.

The steering committee will be made up of representatives from industry, the community and the Manitoba government. It will be responsible for defining the Fund's structure and governance, for incorporating the Venture Capital Fund entity and establishing its initial governing body.

The aim is to have the Fund operational later this year, at which point the initial capital will transfer to the Fund.





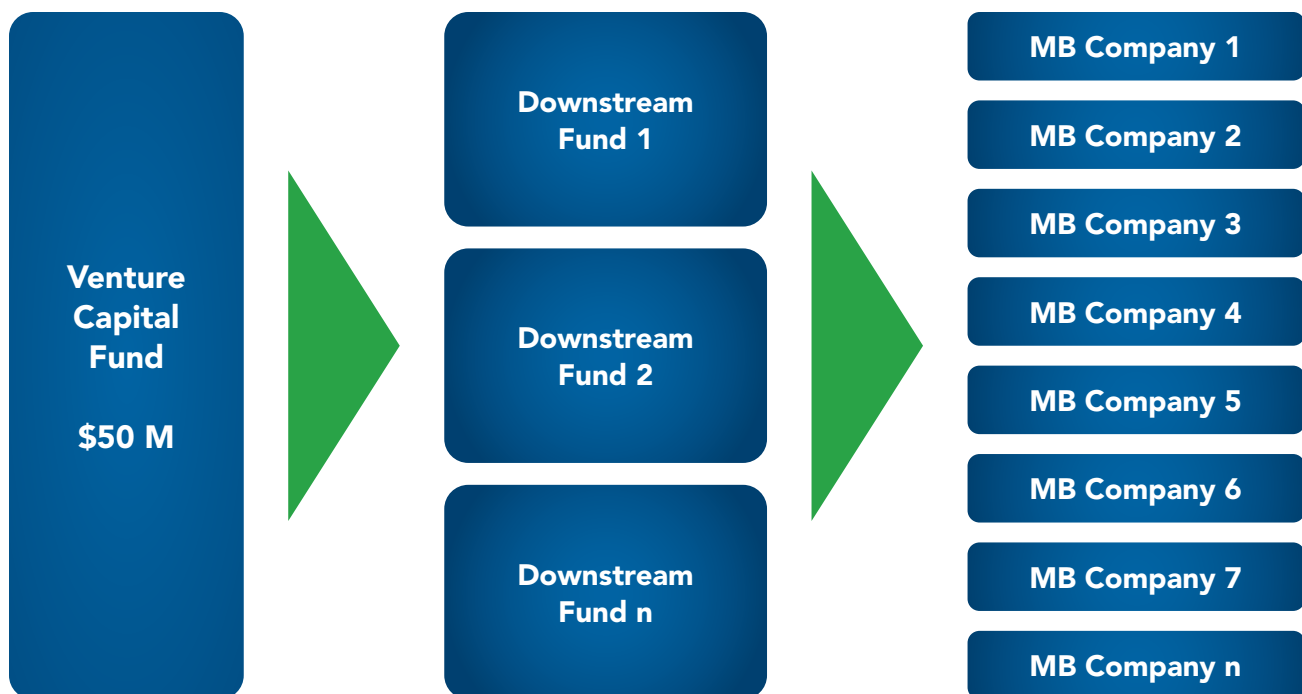
## How can companies access this capital?

The Venture Capital Fund will not invest directly in companies. It will invest alongside private investors in privately managed investment funds, which will, in turn, invest in Manitoba-focused businesses. Requiring the Fund to invest alongside private investors will make the fund a catalyst to attract significantly more capital than the initial \$50 million invested in the Fund.

The Venture Capital Fund will entertain proposals for the creation of downstream investment funds focused on a variety of sectors and types of businesses. The exact sectors and types of businesses will depend on the investment objectives of the individual downstream funds.

## Changes to the Small Business Venture Capital Tax Credit

To assist downstream funds in attracting private capital, Manitoba will also enhance the Small Business Venture Capital Tax Credit to benefit Manitobans who are willing to invest in the venture capitals funds. Changes will be made to permit qualified investors to receive the tax credit when investing in approved investment funds. Additionally, the tax credit is being made permanent.



# WINNIPEG MANITOBA, CANADA

Winnipeg is situated at the geographic centre of North America and is the northern gateway to the Mid-Continent Trade and Transportation Corridor, connecting the United States and Mexico.



## What the world is saying about Winnipeg:

- One of the top 20 best locations to invest in Canada
- Selected as the world's Most Intelligent Community by the Intelligent Community Forum for 2021
- TIME named Winnipeg one of its Greatest Places for 2021

## Keep your business costs down

99% of Winnipeg's electricity comes from renewable sources and our low electricity rates means we are #1 for utilities for North America.

## Connect to key ports and cities

Winnipeg is home to **CentrePort Canada**, North America's largest tri-modal inland port and **Foreign Trade Zone**.

## Build your dream team here

We are a **diverse city** with more than 100 languages spoken here. Manitoba's immigration program was the first of its kind in Canada and is the country's gold standard, making it quick and easy for companies to connect to global talent.

## Enjoy a high quality of life

We are an **affordable city** for families, young professionals, and remote work, with short commutes, and some of the cleanest air and highest number of sunny days in Canada.

Learn more at  
[economicdevelopmentwinnipeg.com](http://economicdevelopmentwinnipeg.com)



**WINNIPEG**  
MADE FROM WHAT'S REAL



## WHAT IS RITHIM?

RITHIM is a new provincial system involving multiple stakeholders to improve time to conduct for health research in Manitoba. RITHIM is unique across Canada in that it will harmonize ethics, privacy and institutional impact review processes, creating a more efficient process for health research reviews in Manitoba.

## WHY ARE WE DOING THIS?

### TO MAKE MANITOBA MORE COMPETITIVE

- Efficiency in the health research application process will help to retain world-class researchers and provide investment opportunities for industry.

### TO STREAMLINE OUR PROCESSES

- Historically, there have been many bodies responsible for providing ethics, privacy and institutional impact review in Manitoba. ONE SYSTEM will streamline and coordinate the application process and provide a user-friendly experience.

### TO IMPROVE TIME-TO-CONDUCT APPROACH

- Implementing a harmonized system will substantially improve our time to conduct for health research, which will enhance Manitoba's potential for research partnerships.

## WHO IS INVOLVED?

RITHIM is led by Research Manitoba, in partnership with key stakeholders in the province. Stakeholders include:

- Provincial Government;
- Regional Health Authorities;
- Universities;
- Hospitals and Healthcare Facilities;
- Researchers; and
- Corporate Industry.

## WHAT'S NEXT?

January 1st, 2022 marked a key milestone and important step for the RITHIM program, as the Personal Health Information Act (PHIA) amendments that enable the new harmonized process were proclaimed. RITHIM is now operating in a transitional phase until later in 2022, when the launch of the new electronic system will harmonize the application process and streamline reviews

## CONTACT US:

**FREYJA ARNASON**, Director, RITHIM

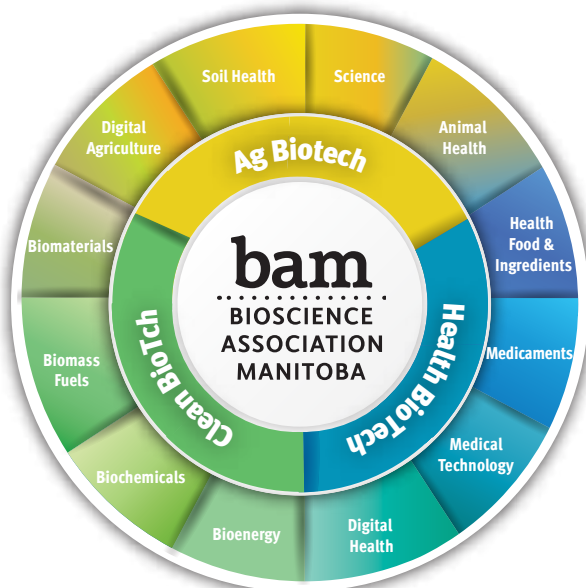
Email: [Freyja.Arnason@researchmb.ca](mailto:Freyja.Arnason@researchmb.ca)



**RITHIM.CA**



# THE BIOSCIENCE INDUSTRY IN MANITOBA



**INCLUDES PLANT SCIENCE, ANIMAL HEALTH, SOIL HEALTH AND DIGITAL AGRICULTURE**

The **AG BIOTECH** sector focuses on developing and commercializing innovations and tools related to agricultural plants or animals for the purpose of increasing yields, production efficiencies and/or impacts and/or improving nutritional profiles.



**INCLUDES HEALTHY FOOD AND INGREDIENTS, MEDICAMENTS, MEDICAL TECHNOLOGY AND DIGITAL HEALTH**

The **HEALTH BIOTECH** sector consists of companies developing and commercializing innovations that allow for the early identification, prevention and/or treatment of illness and disease.

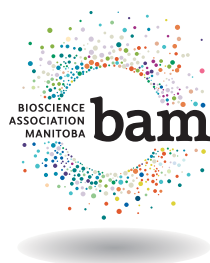


**INCLUDES BIOENERGY, BIOCHEMICALS, BIOMASS FUELS AND BIOMATERIALS**

The **CLEAN BIOTECH** sector uses materials from or with living organisms to generate new value-added products, with the goal to reduce negative impacts on the environment. Clean Biotech companies work in the areas of renewable fuels, industrial bioproducts and bioremediation technologies.

## BECOME A MEMBER

Find out more at [www.biomb.ca](http://www.biomb.ca) or contact **Judi Bahl** at [info@biomb.ca](mailto:info@biomb.ca)



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