### **READY ON DAY 1**

Building the world's first comprehensive portfolio of antiviral drugs.



1,900,000 lives lost worldwide before vaccines were available

**15** percent increase in US mortality

**23,000,000** US jobs lost **14,000,000,000,000** dollars in US economic damage

**3.5** percent decrease in global GDP

## Imagine if we had been ready

7,054,000 deaths worldwide 20 years of US educational progress erased
1,190,000 US deaths—70% more than *all combat deaths since 1775* 65.000,000 long COVID cases worldwide

**27** percent of global population remains unvaccinated

### Pandemics are not rare events

The number of zoonotic spillover events and reported deaths increased at an exponential rate from 1963 to 2019.<sup>1</sup>

Annually, there are approximately<sup>2</sup>:

- 100 significant outbreaks (triggering WHO Disease Outbreak News reports)
- 5 new emerging infectious diseases
- ~25% probability of a pandemic ≥ COVID-19 during 10-year period:
- Metabiota<sup>3</sup> 22%-28%
- Airfinity<sup>4</sup> **27.5%**



#### Source:

1. BMJ Global Health, Nov 2023 2. WHO 3. Rebranded Gingko Bioworks 2022 4. London-based disease forecasting company.

#### Viruses have an Achilles' heel

- Viruses cluster into families
- Viruses within each family share common features that can be targeted by antiviral drugs

No one knows which specific viruses come next, but we do know the *families* from which they will likely emerge *broad-spectrum:* effective against multiple viruses in a given family

small molecule drugs:

organic compounds with low molecular weight (think aspirin, not biologics)



### **GOAL: 2 drugs per high-risk family**

- Work against an <u>entire virus family</u>
  - Protect against future threats
  - No need for genetic sequence
- Can be <u>shipped immediately</u> to the point of outbreak
  - Reduce disease, hospitalization and death
  - Slow viral spread

### 16 drugs total

11/6/2024





#### "Why isn't anyone else doing this?"

#### **Discovery gap**

Academics focus on drug discovery, not drug development.

#### Pharma model

Businesses develop drugs to target specific indications for existing markets.

#### **Disease X problem**

There is no business model to fight diseases that don't yet exist.



#### **CHALLENGE:** Incentivize antiviral R&D to prepare for Disease X

### **READDI** is the solution

A mission-driven biotechnology company acting in the public interest, READDI accelerates broad-spectrum small molecule antiviral discovery and development.

Committed to equitable global access

Addressing market failure to disrupt the panic-neglect cycle of pandemic response



We are aggregating a portfolio of broad-spectrum International Pandemic **IPPS** drugs — from a coalition of innovators at Preparedness Secretariat different stages of development — to target all high-risk virus families. National Institute of Allergy and Infectious Diseases Ĩ THE UNIVERSITY of NORTH CAROLINA World Health Organization 11 at CHAPEL HILL **INDUSTRY** 15 PARTNERS 37 **GOVT. AGENCIES** RESEARCH & NGOs INSTITUTIONS **READDI's Global Network: 63 collaborators and growing** 

#### **Leadership** Founded by world-renowned virologists



Ralph S. Baric Mark Heise

Co-founder and Scientific Adviser



James Rosen CEO and Director



Co-founder and

Scientific Adviser

Fletcher Fairey Executive VP, Business



Nathaniel Moorman

Co-founder and

**Logan Ward** Director of Communications

#### **Select Board Members**





**John Bamforth** 30 years at Eli Lilly

Richard Burr Former U.S. Senator

Laurent Fraisse R&D Dir, Drugs for Neglected Diseases Init



Lydia Ogden Global Public Health R&D Policy and External Engagement Leader, J&J



Barbara Stephenson UNC Chief Global Officer and former U.S. Ambassador



Brad Wilken Bill & Melinda Gates Foundation



#### **READDI leads the world in antiviral therapeutics R&D**

- Core implementation partner in the 100 Days Mission, the global pandemic preparedness effort launched by the G7
- Lead contributor to 100 Days Mission Therapeutics Roadmap
- Co-leading Therapeutics Development Coalition alongside the WHO, Unitaid, DNDi and others

"The highest priority is to gather resources to support READDI's work. Drugs are the gating item."

— Jeremy Farrar, WHO Chief Scientist





### **Preparing for the next threat**



# High-risk virus families

- Encompass all viruses that cause WHO priority diseases
- Likely origin of future Disease X
- No antivirals or vaccines exist to stop Disease X



Arenavirus



Bunyavirus



Coronavirus



**Filovirus** 



Flavivirus

Orthomyxovirus



Paramyxovirus



Togavirus



11/6/2024

### READDI Prospective Pipeline

 30 active programs and growing





World-class drug development and innovative financing to prepare humanity for Disease X.



#### **Funders**



## Help us prepare for the next pandemic.

