# ARIA

ARIA's mission is to unlock scientific and technological breakthroughs that benefit **everyone**.

# Core tenets of a new kind of R&D agency

- + Bold and long-term
- + Breaking silos
- + People, then projects
- + Science entrepreneurship

Our Programme Directors develop a concrete vision for how technology could enable a better future, and direct research to make it a reality











David 'davidad' Dalrymple

Gemma Bale

Angie Burnett

Cohort 2

Jacques Carolan

Jenny Read



Cohort 1

Mark Symes



Sarah Bohndiek



Surai



Brian

Wang

Alex



Claire Donoghue



Rico Chandra



Yannick Wurm



Bramhavar

Nicole Wheeler



Ivan Jayapurna



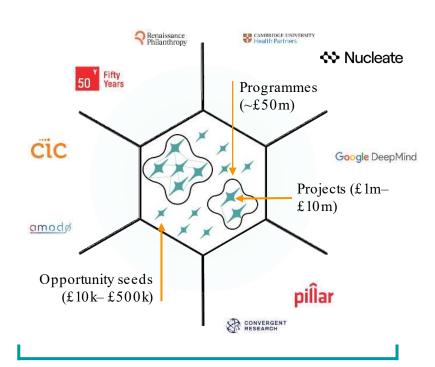
Obadia



Nathan Wolfe

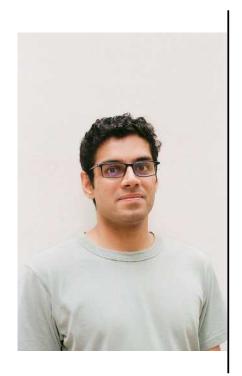
#### What is an ARIA Opportunity Space?

- + Opportunity space : Important if true, ripe and underexplored.
- + **Programme**: Coordinated, mission driven R&D effort.
- + **Projects**: Across diverse institutions and fields.
- + **Seeds**: High variance ideas.
- + Activation Partners: Talent, capital and communities



#### **Activation Partners**

ARIA



#### Aayush, Frontier Specialist

- + Co-developing Manufacturing Abundance and Scalable Neural Interfaces opportunity spaces at ARIA.
- + Part of a team of 4, spanning nearly all of ARIA's opportunity spaces.
- + Always seeking new programme and opportunity space ideas!

#### Our opportunity spaces



## Nature Computes Better

What if we could exploit principles found in natural systems to build dramatically more efficient computers?



Programmable Plants



### Scalable Neural Interfaces

What if we could solve the mysteries of neurological disorders and mental health by interfacing with the brain in new ways?



Scoping Our Planet

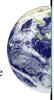


Mathematics for Safe AI



Smarter Robot Bodies

What if we could create highly dexterous, general purpose robots to ease the labour shortage of tomorrow?



Future Proofing
Our Climate and
Weather



Bioenergetic Engineering

What if we could engineer the flow of biological energy to cure diseases, power new technologies, and help restore the environment?



Shaping Innate Immunity

What if we could modulate innate immunity with precision and control to unlock a new paradigm in human health?



Trust Everything, Everywhere



Manufacturing
Abundance



Engineering Ecosystem Resilience



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Manufacturing
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Engineering Ecosystem Resilience



#### Manufacturing Abundance

Programme Director: Ivan Jayapurna

Ages of human history have often been defined by materials that transformed societies and mark breakthroughs in mastery over matter.

What if we could assemble molecules into materials that provide bespoke solutions for the challenges of today?



#### Engineering Ecosystem Resilience

Programme Director: Yannick Wurm

Nature's services underpin over half of global GDP, but climate change and overexploitation are threatening ecosystem collapse.

What if we could engineer resilient ecosystems that enable both humanity and nature to thrive?

#### How it works in practice: the ARIA model

Building in public	Teaming events	Concept papers	Full proposals	Scientific entrepreneurship
Workshops, online theses and feedback forms for engaging critique on our thinking	To catalyse new communities and encourage vertically integrated teams across silos	Open for 3 weeks, "1 page"	Open for 4-5 weeks	Supporting translation and impact through a variety of initiatives – fellowships, engineering support, access to philanthropic or private capital

#### Engage with us

- + Apply for funding opportunities
- + Discover our emerging areas
- + Get the latest updates from ARIA

#### **FAQs**

- + ARIA takes no IP/ equity
- + ARIA pays 100% overheads



@aria\_research



Advanced Research + Invention Agency (ARIA)



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