

Plausible tomorrows 2035-2049



Vinod Khosla
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**Experts extrapolate the past... and do harm when
people believe them!**

**Entrepreneurs, with passion for a vision, invent
the future they want**

#1: expertise will be free

We will be capable of having AI-based near free tutors for every child, and doctors for every citizen 24x7, accessibly & affordably

#2: labor will be near free

We will have a billion bipedal (and other) robots freeing humans from the slavery of the bottom 50% of undesirable jobs, creating a larger industry than the auto industry

#3: computer use will grow expansively

There will be a billion+ programmers all “programming” in natural, human language, dramatically increasing what can be done with computers. Computers will adapt to humans, not humans to computers, democratizing computers

#4: AI will play a large role in entertainment & design

Music and entertainment could be plentiful, and personalized for you and your mood! Content creation would be commoditized, but not change the celebrity-consumer relationship

#5: internet access will be mostly by agents

Most consumer access of the internet could be agents acting for consumers doing tasks and fending off marketers and bots. Tens of billions of agents, on the internet will be normal

#6: there will be clean, dispatchable electric power

By 2050, fusion boilers will retrofit and replace coal and natural gas boilers reducing the need to build whole new fusion plants. Superhot geothermal >400C is also a real alternative

#7: cars could be displaced in cities

We could replace the majority of cars in most cities with personal autonomous transit as on-demand, affordable, public transit with little public financing. This will reduce congestion, increase city street throughput





#8: flying will be faster

We will have Mach 5 planes that get us from NYC to London in 90 minutes – on sustainable aviation fuel, making the world closer!

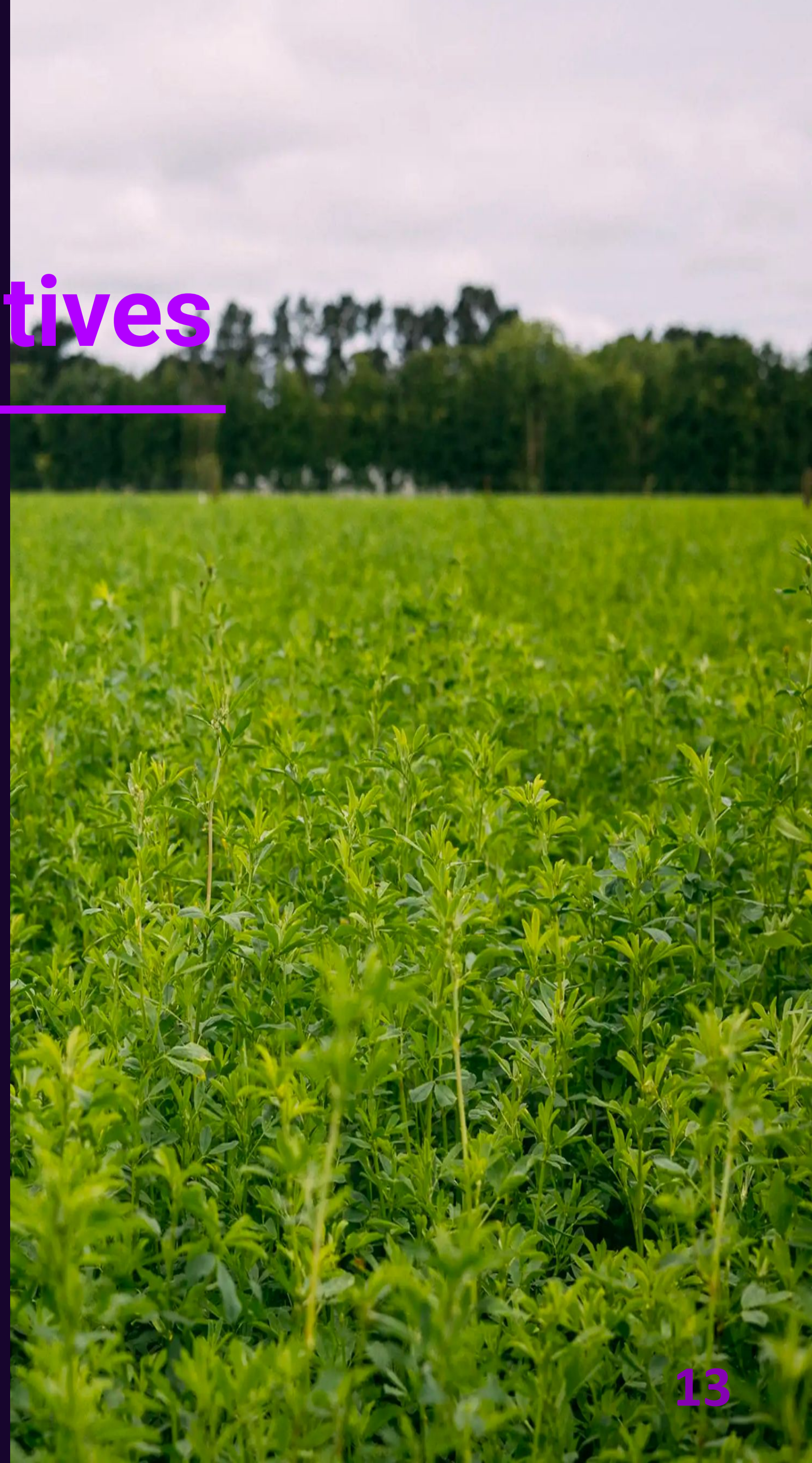


#9: resources will be plentiful

We can discover more natural resources than we consume in the next few decades. We will prove all resource doomers on lithium, cobalt, copper, etc wrong.

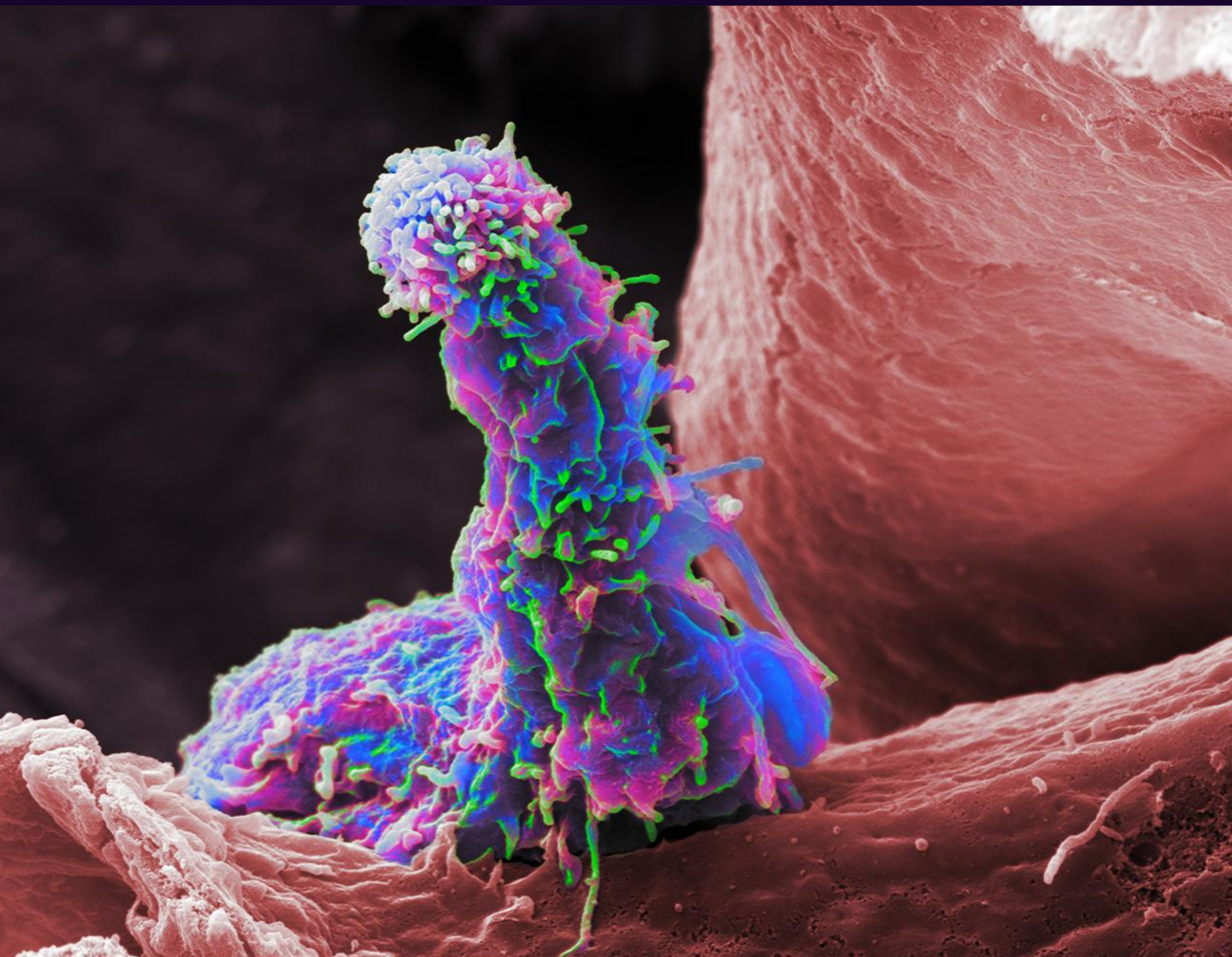
#10: food & fertilizers will have alternatives

We could have much better alternate protein production to replace traditional animal protein, and “green” fertilizer. And taste will far exceed that of traditional cows!



#11: from the practice to the science of medicine

We will be capable of providing precision care based on patients' -omics, as well as AI models for each individual enabling N=1 personalized simulation, therapeutics, drug dosage



mag 貝	mode	HV	spot	WD	
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Intravascular CAR-T cell in a Vivodyne solid tumor model.

#12: carbon will have solutions, if we have time

Carbon emissions could be a smaller issue because we will get entrepreneurs to develop & scale better technologies for cement, steel, agriculture, transportation, power production, DAC, etc. Most such efforts will fail but enough will succeed to solve the problem of carbon emissions in the critical areas, well before 2050!

A few entrepreneurs, aided by policy to prevent short termism, can make this future happen

... things that might slow down predictions

- **Incumbent resistance**
- **Politicians capitalizing on fear for personal / populist gain**
- **Tech failures or delays**
- **Financial market conditions may kill a good idea (fall in chasm of a bridge too far)**
- **Anti- tech sentiment (naysayers and tech haters)**
- **Luddites hijacking the would-be advocate**
- **A few bad AI-related outcomes that get sensationalized and taint the water**
- **Left field events**
- **Instigators/entrepreneurs may not show up to make it happen**

Abundant, awesome, technology-based, “possible tomorrows” are likely if we allow them to happen

