

Transform Valuable
Foresight into Actionable
Insight with a Custom
Signals Horizon Scan

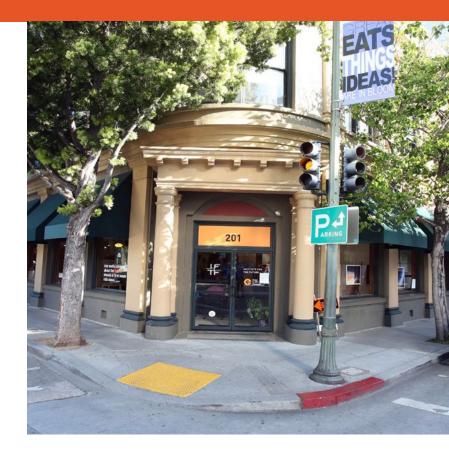
Rod Falcon, Director, IFTF Advisory Services rfalcon@iftf.org

**Owen Laviano**, Partner Success Manager olaviano@iftf.org



#### Who We Are

- IFTF is an independent, public interest education and research organization founded in 1968, based in Silicon Valley
- Our mission is to help people, communities, leaders, and organizations become future-ready
- We provide practical tools, research, and programs that turn foresight into critical new insights that ultimately lead to transformative action





#### Partner with IFTF

## TRAINING IFTF Foresight Essentials

Supercharge foresight skills for individuals, teams, and organizations



### MEMBERSHIP IFTF Vantage

Build foresight as a core capability for your team



## RESEARCH IFTF Advisory Services

Anticipate the future with a project and avoid being blindsided by change





Strategic foresight is a set of tools, processes, and mindsets for anticipating the future and making decisions under conditions of uncertainty.



# Strategic foresight is about imagination and being able to see transformative possibility



#### **Quick Poll**

### Is your organization future-ready?

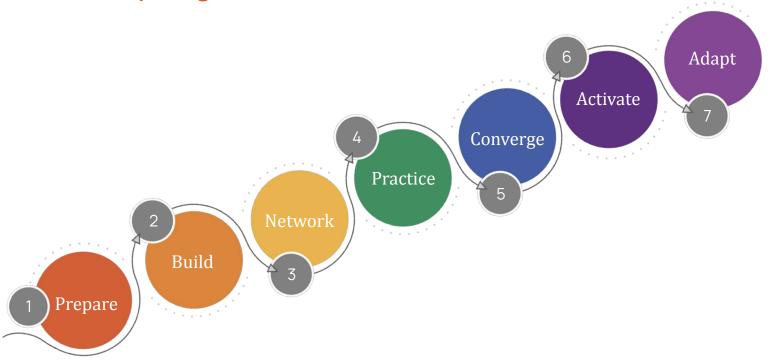
Pick the statement on the following slide that best describes your organization



#### **Quick Poll**

- A. We are **RESISTING** change and have not moved beyond short-term thinking.
- B. We are **REACTING** to changes on a longer-term horizon but are often blindsided by change.
- C. We are ANTICIPATING the future but strategic foresight remains a limited capability and is not evenly distributed.
- D. We are **READY** for the future! Strategic foresight is a core organizational capability and we are manifesting our preferred future.

## 7 Steps Toward Becoming a Future-Ready Organization



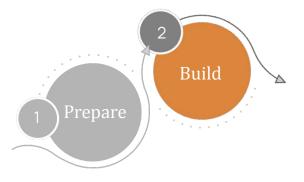




#### **Assess Your Future Readiness**

- Take Stock and Unlock Latent Capacity
- Map Resource Networks
- Plan and Design Anticipatory Systems

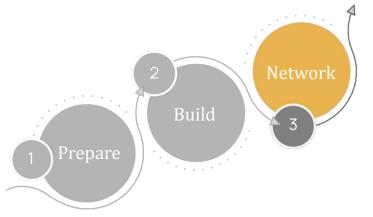




### Invest in Strategic Foresight as an Organizational Capability

- Build a Team Dedicated to Anticipating the Future
- Learn Foresight Essentials Terminology and Tools: Signals, Drivers, Forecasts
- Adopt a Disciplined Approach to Strategic Foresight: Foresight-Insight-Action

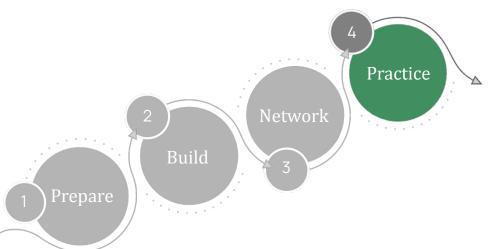




### Communicate the Value of Long-Term Thinking Throughout Your Organization

- Communicate the Risks of Not Thinking Long-Term
- Build Community for Participatory Forecasting
- Extend the Reach of your Anticipatory System

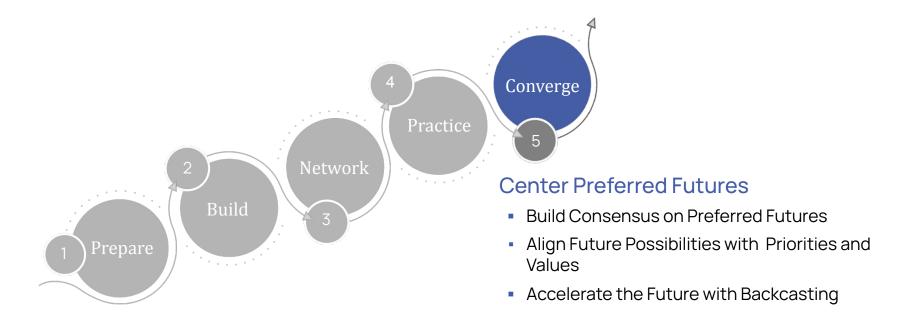




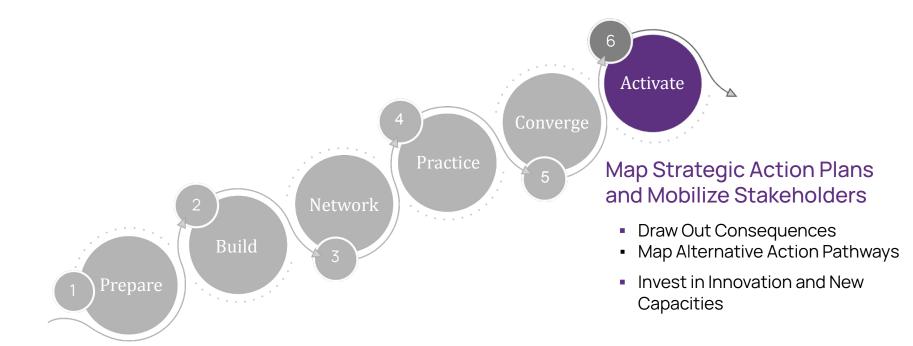
#### Anticipate the Future Across Multiple Time Horizons

- Identify Drivers and Impact Zones
- Look for the Future in the Present by Collecting Signals of Change
- Harness Imagination with Scenarios

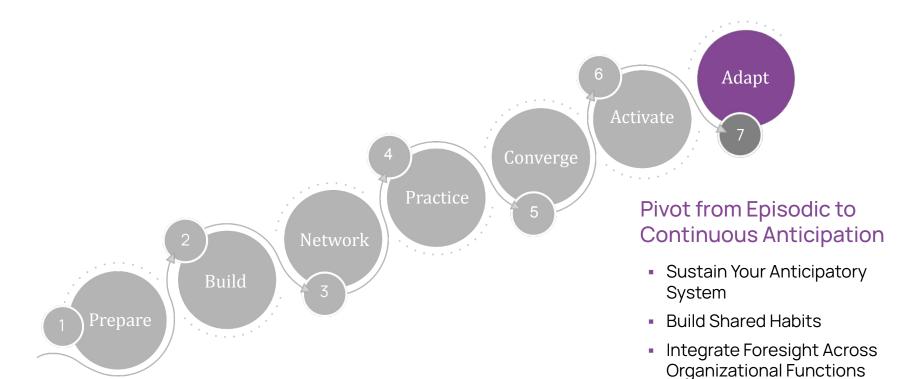










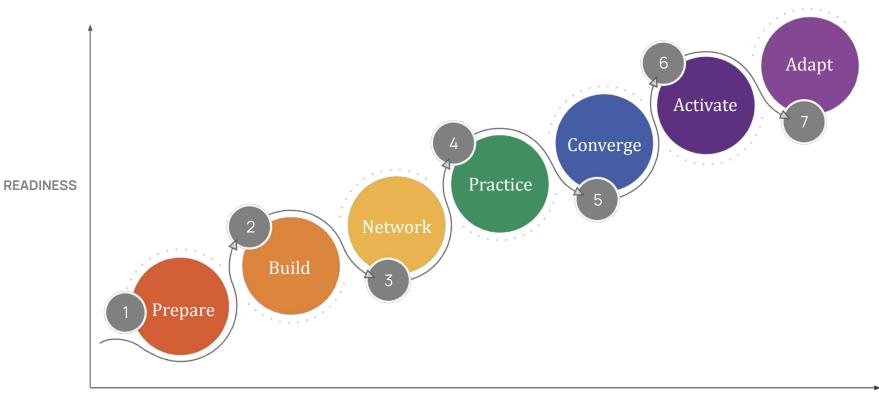




#### **Build Different Orders of Future Readiness**









#### How Do You Sustain Future-Readiness?

To sustain future-readiness, organizations need to learn and practice 3 essential capacities:

- 1. **Detect** systemic shifts in the external environment and understand their long-term impacts.
- 2. Respond to alternative futures and put foresight into action to pursue preferred futures.
- 3. Adapt to anticipated change and invest in strategic foresight as an organizational capability.



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## PROJECT Signal Horizon Scan

Look for the future in the present

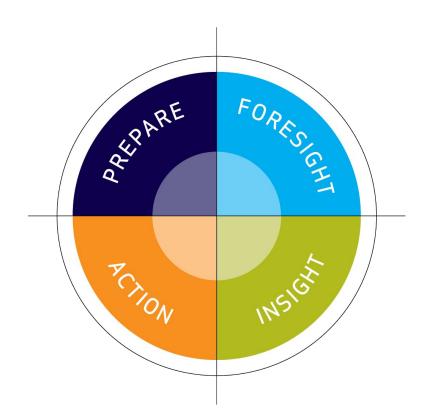




#### Systematically Thinking about the Future

**Gather evidence**, frame futures questions, collect signals, prepare your mind.

Based on your insights, frame and prioritize possible actions.

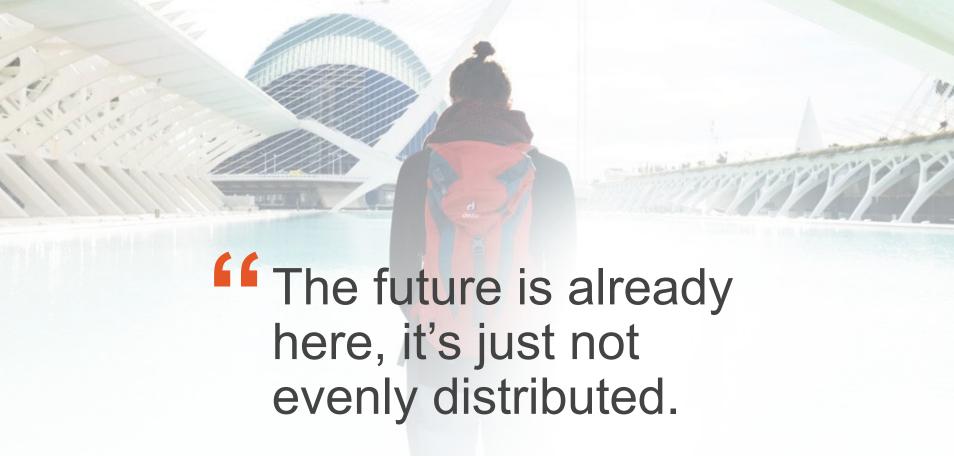


Using your prepared evidence, develop plausible, provocative visions (not predictions) of multiple futures.

Use your foresight to provoke meaningful implications.







-William Gibson, science fiction author

### **Signals of Change** are vivid, eye-opening, real examples about how the world is changing, today

- Small, local innovations with the potential to disrupt the status quo.
- Provide vivid detail about new and unexpected experiences, uses of technology, social interactions, shifting values, business models, etc.
- Along with drivers, act as evidence and data points for plausible, provocative forecasts and visions of the future.





#### Criteria for a Signal

- Is it CONCRETE?
- Does it CHALLENGE an existing assumption that you have?
- Is it CURRENT (last 18 months or so)?



#### Signal: An Example

### **Getting Things Done: Hacking Productivity**

#### WHAT

Flow Club, a subscription service that helps home-based workers stay on task and be more productive by quietly working in tandem with strangers.

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### The New Trick to Getting Work Done: Have a Stranger Watch You

'Body doubling' is this summer's work-from-home hack to battle procrastination



Source:https://www.wsj.com/articles/need-to-quit-procrastinating-hire-a-body-double-eb deefc8



#### How to Interpret a Signal

- Consider the types of shifts this signal represents: What are we moving from and what are we moving towards?
- Imagine this signal has become the norm in the future, creating new ways of doing things and challenging our basic assumptions: What does that look like? What happens? To whom?
- Now think about the "so whats": What are the larger implications? What happens as a result of these changes?



#### Signal: An Example, Cont.

### **Getting Things Done: Hacking Productivity**

#### WHAT

Flow Club, a subscription service that helps home-based workers stay on task and be more productive by quietly working in tandem with strangers.

#### SO WHAT

Workers take productivity into their own hands turning "peer pressure" to their advantage. Expect virtual and hybrid work models to be challenged by so-called tradeoffs in productivity, collaboration, and efficiency. Workers will respond with hacks to keep working in ways that suit their needs, lifestyles, and preferences. Some of these hacks will get productized. Expect to see the emergence of an entire ecosystem of services to support the remote virtual and hybrid worker.

MANAGEMENT | MANAGING YOUR CAREER

### The New Trick to Getting Work Done: Have a Stranger Watch You

'Body doubling' is this summer's work-from-home hack to battle procrastination



Source:https://www.wsj.com/articles/need-to-quit-procrastinating-hire-a-body-double-ebdeefc8



#### Signals Horizon Scan: Process Steps

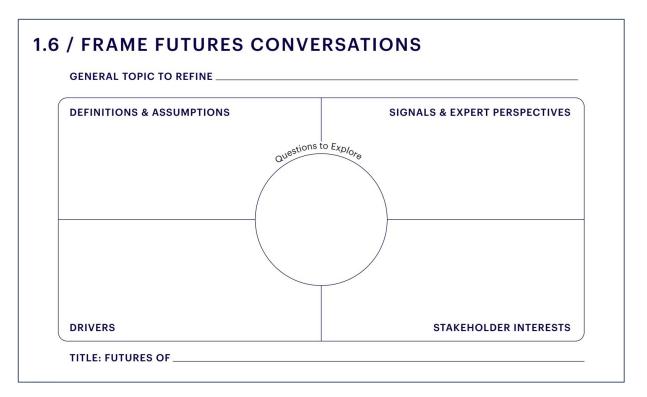
#### Looking for the Future in the Present

- Step 1: Define a Futures Topic or Domain
- Step 2: Apply a Futures Framework to Expand Possibilities
- Step 3: Identify Signals and Collectively Forecast the Future
- Step 4: Apply Combinatorial Thinking to Uncover Unexpected Possibilities
- Step 5: Score Possibilities (e.g., emerging, sustaining, peaking, or declining)
- Step 6: Apply Future-Back Thinking to Identify Actionable Implications
- Step 7: Synthesize into a Report



### Signals Horizon Scan

#### **Step 1: Define a Futures Topic or Domain**





#### Signals Horizon Scan: Process Steps

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#### Step 2: Apply a Futures Framework to Expand Possibilities

- STEEP: Social Technological, Economic, Environmental, Political
- Alternative Futures: Growth, Constraint, Collapse, Transformation
- Dissident Futures: Utopian, Pragmatic, Speculative
- Scales: People, Organizations, Cities, Planetary
- Specific to a Discipline: Health Ecosystem Bodies, Networks, Environments



#### Signals Horizon Scan: Process Steps

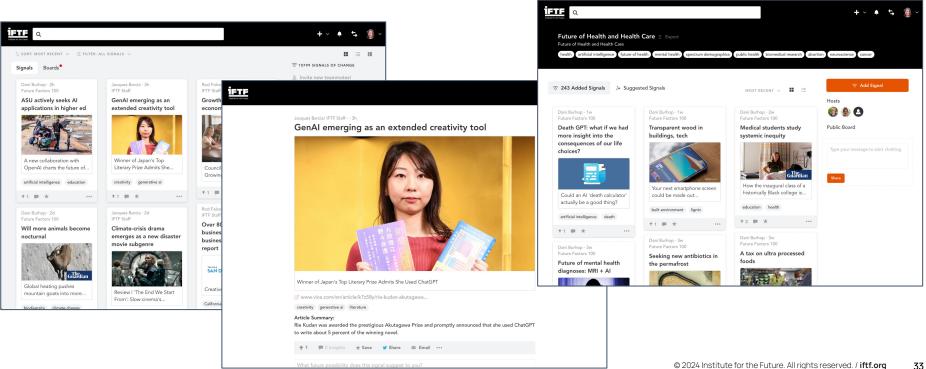
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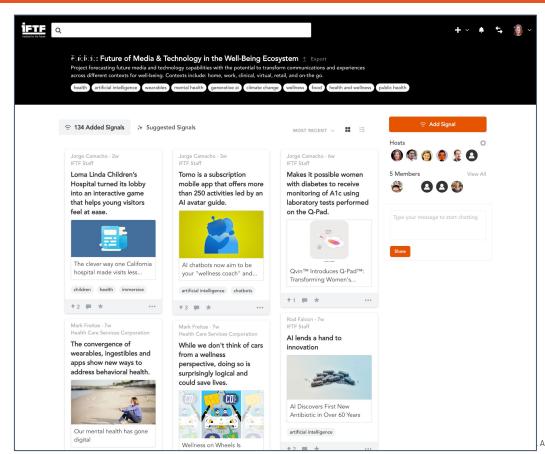
#### Share Signals & Collaboratively Forecast the Future

#### **IFTF Future Factors**



#### Share Signals & Collaboratively Forecast the Future

### **Custom Project Signals Board**



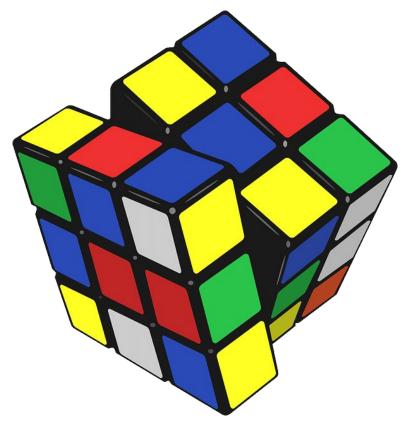
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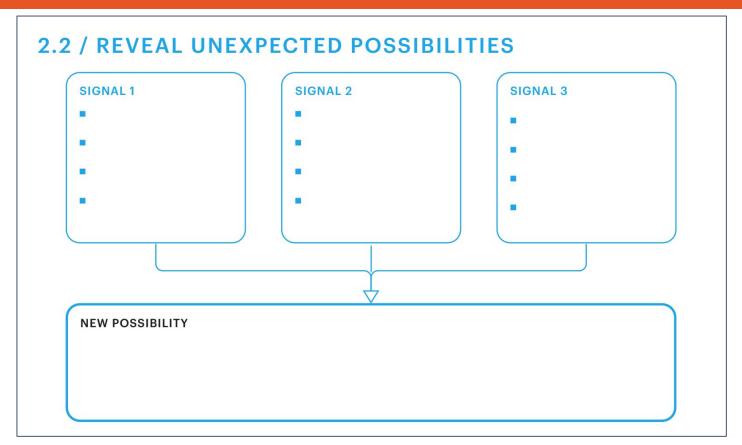


#### Step 4: Apply Combinatorial Thinking to Uncover Unexpected Possibilities





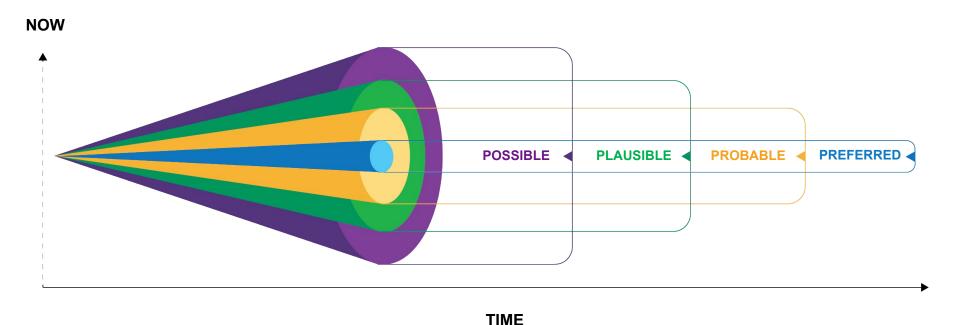
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#### Step 4: Apply Combinatorial Thinking to Uncover Unexpected Possibilities

#### Wide Range of Future Possibilities





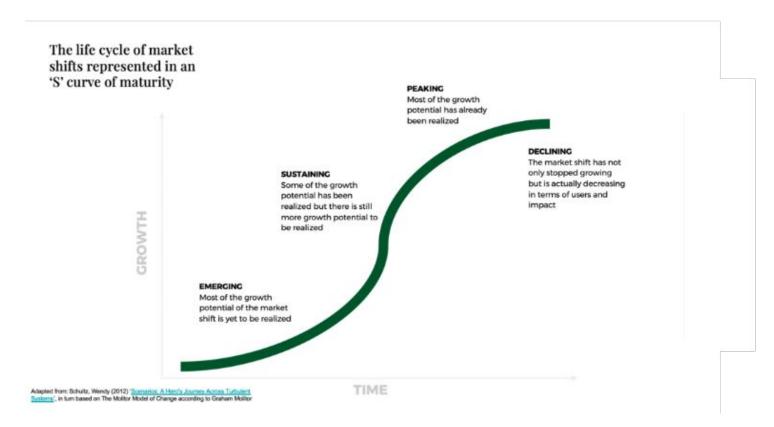
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#### Step 5: Score Possibilities





#### Signals Horizon Scan: Process Steps

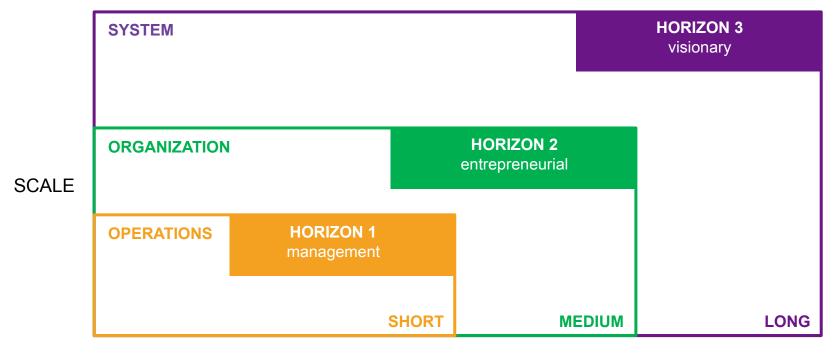
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### Step 6: Apply Future-Back Thinking to Identify Actionable Implications

#### Future-Back Thinking & Temporal Gymnastics





#### Signals Horizon Scan: Process Steps

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# EATING OUR WAY OUT OF THE CLIMATE CRISIS

How Rethinking Our Food Systems Can Balance the Biosphere





## Overview

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# SIMULATING THE FOODSCAPE

#### Toward modeled environments

One of the biggest challenges in building truly resilient and regenerative foodscapes is that we lack a systems-level model of the complex interactions that occur from soil to stomachs, and every step in-between. Decisions that we make about food consumption, farming practices, policy design, and product development are all made with limited information about their true impact on the food system as a whole. With such a limited perspective, we are forced to navigate unintended consequences from our actions after they emerge and we overlook potential opportunities to mitigate climate impacts because we have no way of seeing them.

Over the next decade, computational modeling platforms that draw from distributed and open databases will converge with ambient sensing technologies embedded in homes, farms, manufacturing facilities, and retail to create the necessary conditions for modeling foodscapes. Machine learning systems and high-resolution satellite

"Identifying and modeling the intrinsic properties of the food system [...] will help organizations and governmental institutions to track progress towards sustainability."

> —Thomas Allen & Paolo Prosperi, agricultural researchers<sup>15</sup>

imagery will combine to create a dynamic map of food production. Our ability to simulate whole plant growth and on-farm growing systems in computer models will accelerate and be paired with advanced weather projections to inform what should be grown where and when. We will test and learn with great precision before implementing anything.

With such holistic models, policy makers, food companies, and eaters will simulate possible decisions they are faced with making—about where to deploy an inspector, how to design more sustainable supply chains, or which climate-friendly ingredients should be incorporated into a diet. The models will provide data-driven insights about climate-positive decisions. We will also see real-world spillover effects as individuals change their own behavior by running these simulations themselves, since the process of modeling itself can change how one acts.



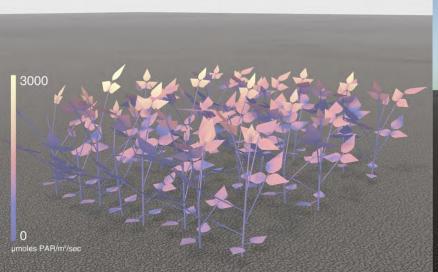
## Growing crops in silico

#### WHAT

The Foundation for Food and Agriculture Research (FFAR) has given a \$5 million grant to researchers at the Institute for Sustainability, Energy, and Environment at the University of Illinois at Urbana-Champaign to continue their work building a computational platform that provides a virtual model of whole plant growth. The simulation incorporates multiple models ranging in scale from cells to ecosystems.<sup>16</sup>

#### SO WHAT

Research and development to drive climate-smart crops, which will have complex interactions with their changing ecosystems, can be accelerated by the computational ability to create digital twins of whole plants rapidly "grown" in models as opposed to slow growth in soil.







## Q&A



### Become Future-Ready with IFTF

- Commission a Custom Signals Horizon Scan
- Take a Foresight Essentials training
- Partner with IFTF Vantage
- Join Urgent Optimists community platform
- Participate in our webinars
- Subscribe to our newsletters
- Visit us in Palo Alto, California, USA





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