CHAIN REACTION INNOVATIONS

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COHORT 5 INFORMATIONAL WEBINARS

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U.S. DEPARTMENT OF ENERGY | Office of ENERGY EFFICIENCY & RENEWABLE ENERGY
ADVANCED MANUFACTURING OFFICE

WHAT IS CRI?

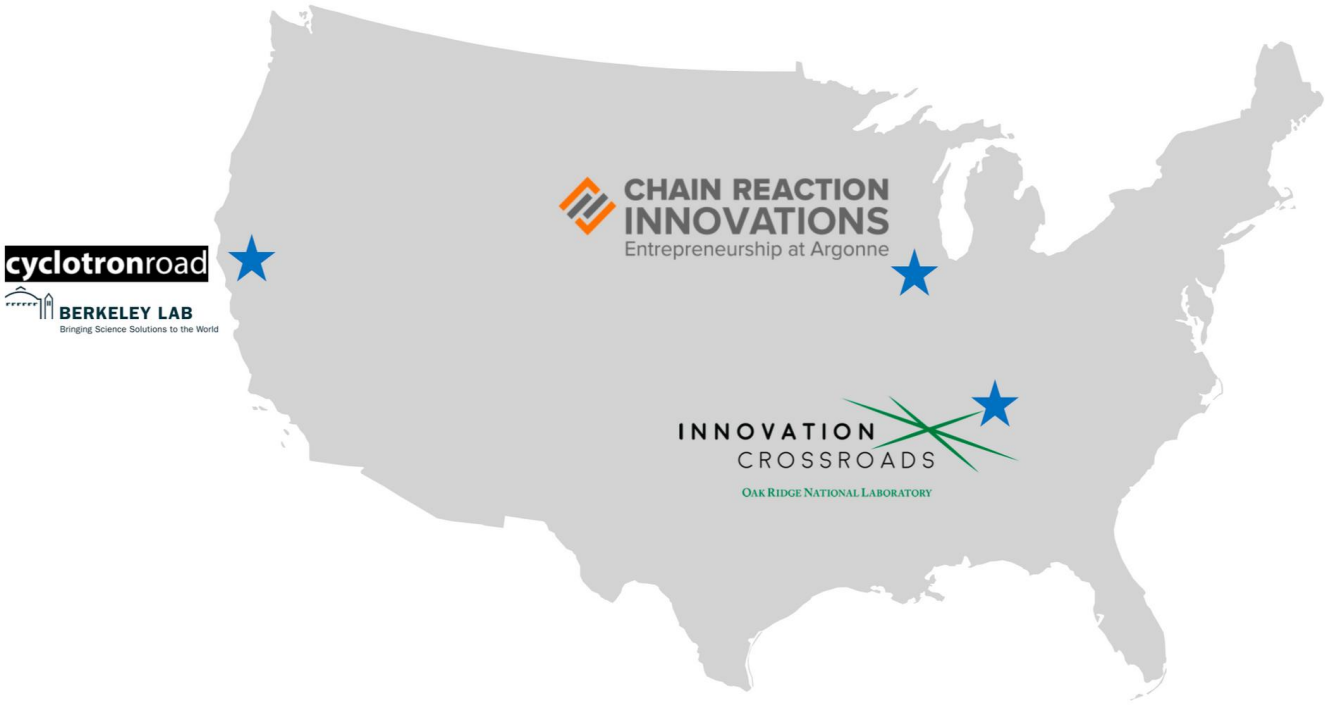
CRI HELPS YOU TRANSFORM YOUR SCIENCE INTO A PRODUCT THE WORLD CAN USE

WE FOCUS ON CLEAN ENERGY AND DEEP TECH INNOVATIONS

CRI IS A LAB-EMBEDDED ENTREPRENEURSHIP PROGRAM (LEEP)

SUPPORTED BY THE DEPARTMENT OF ENERGY AT ARGONNE NATIONAL LABORATORY

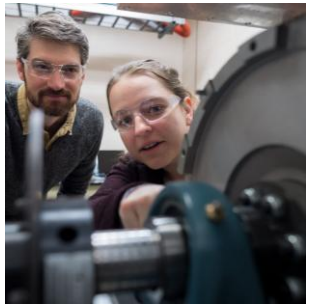
LEEP SPECIFICALLY SUPPORTS DEEP TECH INNOVATORS



THE LEVEL OF SUPPORT THAT LEEP PROGRAMS PROVIDE TO SCIENCE-BASED INNOVATORS IS UNPARALLELED

CRI GIVES INNOVATORS SPACE, TIME, AND FUNDS

INNOVATORS:



WORK WITH ARGONNE'S EXPERTS AND RESOURCES

RECEIVE A STIPEND, BENEFITS, AND TRAVEL ALLOWANCE

TAKE ADVANTAGE OF MENTORSHIP, PROGRAMMING, AND NETWORKING

TWO YEARS

OF SUPPORT

$220,000

FOR TECHNICAL WORK

CRI'S IMPACT

IN 4 YEARS OF OPERATION, CRI HAS DRIVEN:

$50M

$50M+ IN FOLLOW ON FUNDING

23

23 INNOVATORS AND 21 STARTUPS LAUNCHED

92

90+ JOBS CREATED TO BUILD TECHNOLOGIES

THE CRI TIMELINE

APPLICATIONS OPEN
SEPT 15—OCT 31

COHORT 5 FINALS
Feb 2021

COHORT 5 ANNOUNCED
April 2021

COHORT 5 BEGINS
June 2021

CRADAS EXECUTED
Between ANL + startups

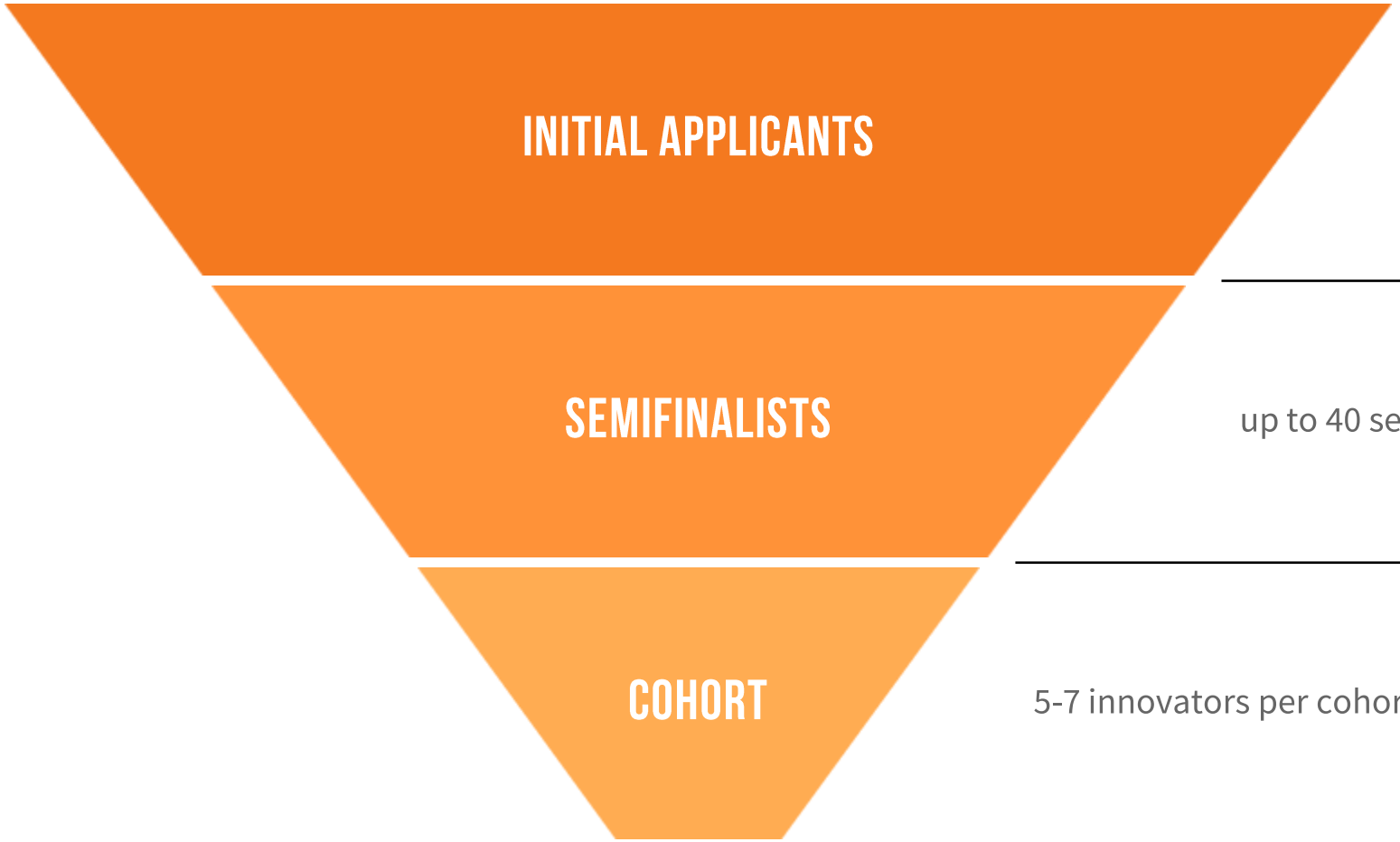
COHORT 5 DEMO DAY
Sept 20220

GRADUATION
JUNE 2022

BENEFITS OF GROWING YOUR COMPANY AT CRI V. OTHERS

	CRI	University	Incubator	Accelerator
Technical mentorship	✔	✔	✔	
Business mentorship	✔		✔	✔
Investor/Partner connections	✔			✔
Stipend	✔	✔		
Can you develop your own technology?	✔		✔	✔
Is the IP 100% yours?	✔		✔	✔
Do you retain your equity?	✔	✔		
Independent access to labs	✔		✔	
Access to world-class equipment	✔	✔		

COMPETITIVE, BUT REWARDING



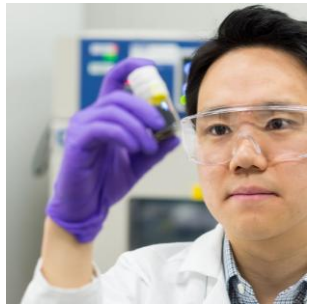
150+ applications each year

up to 40 semifinalists

5-7 innovators per cohort

WHAT'S UNIQUE ABOUT THE CRI LEEP NODE?

ARGONNE LEADS IN DISCOVERY AND INNOVATION

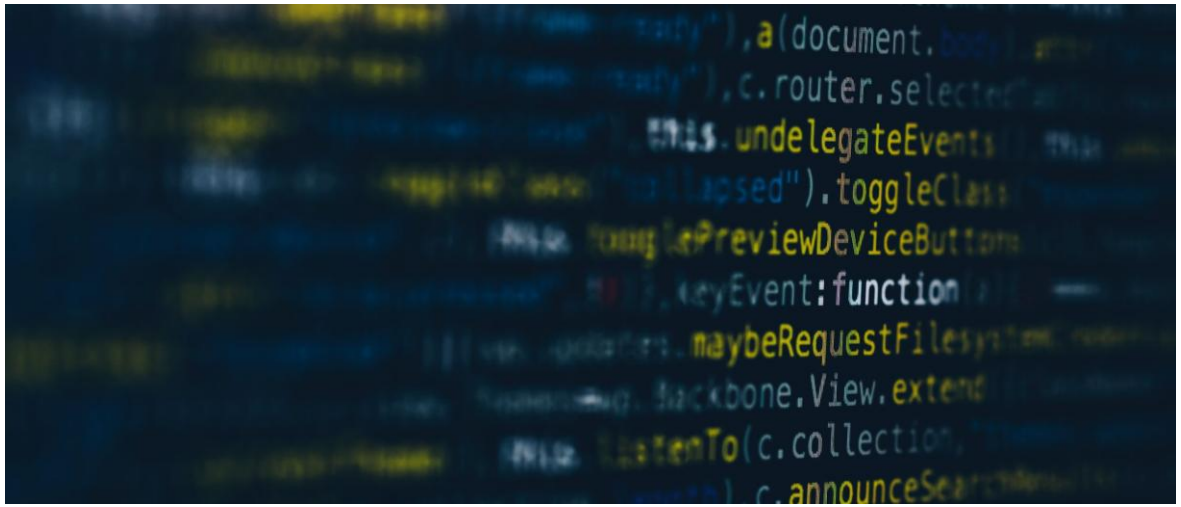


1600+ SCIENTISTS AND ENGINEERS

15 RESEARCH DIVISIONS AND 5 USER FACILITIES

CAPABILITIES SPANNING ALL SCIENTIFIC DISCIPLINES

CHICAGO IS AN IDEAL BUILDING GROUND FOR HARD TECH STARTUPS



ACCESS TO CRI'S PARTNERS

POLSKY CENTER FOR ENTREPRENEURSHIP

@ the University of Chicago

MHUB

KELLOGG AND FARLEY

@ Northwestern University

WE WANT YOU

WHO ARE CRI INNOVATORS?

1 TECHNICAL FLUENCY

2 NOT NECESSARILY AN ENTREPRENEUR YET…BUT DESIRE TO LEARN

3 PASSIONATE ABOUT CLEAN ENERGY AND MAKING AN IMPACT

SNAPSHOTS: CRI INNOVATORS

KARIN: RENEWCO2

CO2-to-plastics

PRANAV: SUPER.TECH

Full-stack architecture for quantum computing

ERIKA: ACCELERATE WIND

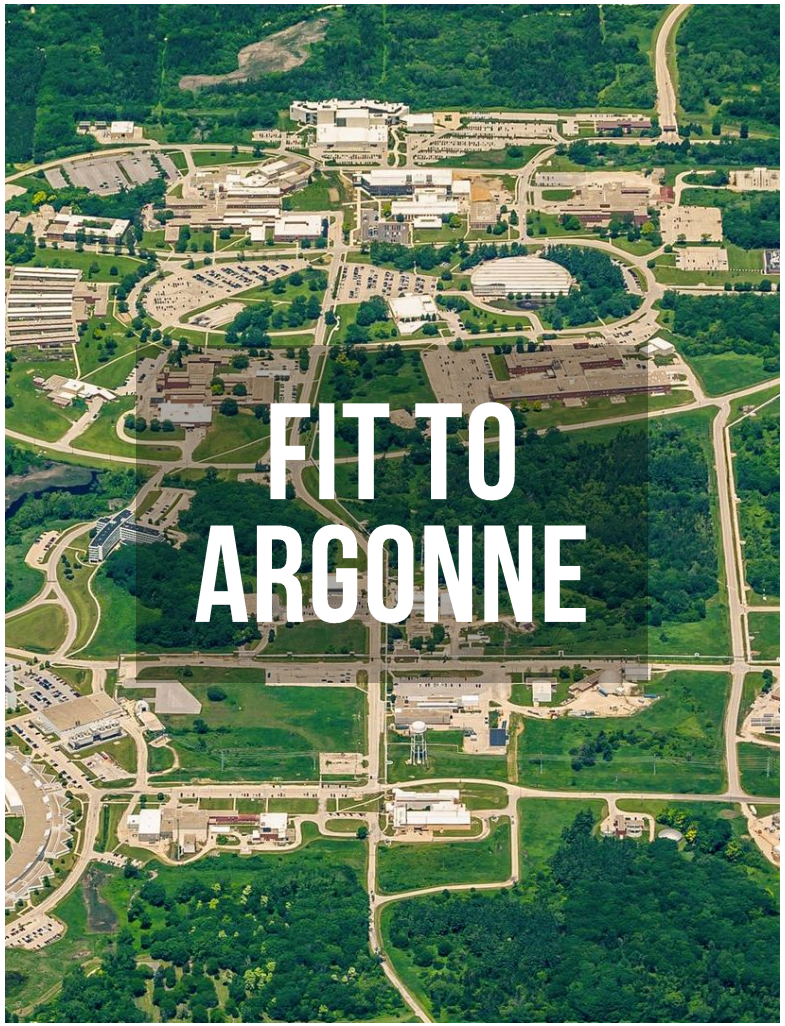
Edge-of-roof wind

YU: NANOPATTERN

Energy efficient displays

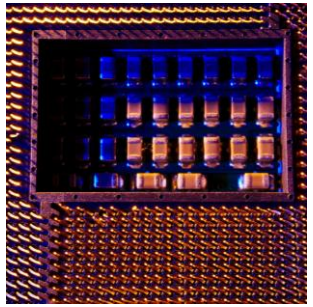
HOW TO BE COMPETITIVE

HOW WE JUDGE - WHAT MAKES YOU COMPETITIVE

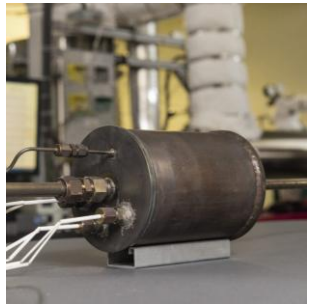


FIT TO ARGONNE AND CRI: THE LAB'S INTERESTS

BUILDING TECHNOLOGIES



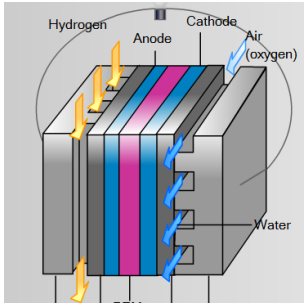
QUANTUM COMPUTING



ENERGY STORAGE

ADVANCED MANUFACTURING

WASTE REUSE AND PLASTICS RECYCLING



HYDROGEN AND FUEL CELLS

ANYTHING THAT EXCITES A RESEARCHER!

CORE FOCUS ON MANUFACTURING TECHNOLOGIES

Technologies that improve energy efficiency, material productivity, and competitiveness for manufacturers

ADVANCED MATERIALS MANUFACTURING

- Manufacturing process for advanced materials
- Advanced materials for reduced life cycle energy impacts

SUSTAINABLE + SECURE SUPPLY CHAINS

- Critical materials supply, substitution and reuse
- Water security
- Sustainable manufacturing

MANUFACTURING PROCESS INNOVATION

- Innovations for existing industries
- Manufacturing for emerging industries
- Additive manufacturing

ENERGY SYSTEMS

- Electricity generation
- Energy conversion & storage

MANUFACTURING ENTERPRISE

- Smart manufacturing systems
- Cybersecurity for manufacturing
- Flexible and adaptable manufacturing
- Industrial electrification

FOCUS ON BUILDING TECHNOLOGIES

COST EFFECTIVE TECHNOLOGIES AND TOOLS THAT SUPPORT BUILDING ENERGY EFFICIENCY

THERMAL ENERGY STORAGE SYSTEMS FOR BUILDINGS

AREAS OF PARTICULAR INTEREST INCLUDE:

1. **ADVANCED BUILDING RETROFITS**
   Such as both offsite and onsite envelope innovations
2. **ADVANCED BUILDING CONSTRUCTION**
3. **AIR SEALING AND DIAGNOSTICS**
4. **HIGH-R BUILDING INSULATION**
5. **ADVANCED THERMAL MANAGEMENT**
   For envelopes and HVAC
6. **ADVANCED METHODS FOR DETECTING AND ALERTING HOMEOWNERS/FACILITY MANAGERS OF FAULTS IN MAJOR ENERGY-USING SYSTEMS**
   Using usage data or other indicators

TECHNOLOGY POTENTIAL

WILL A MARKET WANT IT?

WHO IS YOUR FIRST CUSTOMER?

IS IT SUSTAINABLE *AND* COMPETITIVE?

INNOVATOR MERIT: WHAT THE "BEST OF THE BEST" MEANS

ELIGIBILITY

ELIGIBILITY: THE HARD AND FAST RULES

1. MINIMUM 5 YEARS DEEP TECH R&D EXPERIENCE
2. MUST BE EITHER A U.S. CITIZEN OR LEGAL PERMANENT RESIDENT*
3. HAS NOT RAISED >$2M IN PRIVATE, DILUTIVE FUNDING

ELIGIBILITY: WHERE WE CAN BE FLEXIBLE

1. SHOULD BE A TECHNICAL FOUNDER
2. SHOULD ALIGN WITH DOE'S MISSION
3. INDIVIDUALS OR TEAMS MAY APPLY*

DATES TO WRITE DOWN SOMEWHERE:

- SEPTEMBER 15: APPLICATION PERIOD OPENS
- OCTOBER 31: APPLICATION PERIODS CLOSES AT 5 P.M. CENTRAL TIME
- WEEK OF NOV 30: SEMIFINALIST NOTIFICATION
- DECEMBER: SEMIFINALIST INTERVIEWS
- FEBRUARY 2021: COHORT 5 FINALS
- MARCH-APRIL: AWARD NOTIFICATION AND ON-BOARDING
- JUNE 2021: COHORT 5 FELLOWSHIPS BEGIN

NEED MORE INFORMATION?

- **LEARN ABOUT CURRENT INNOVATORS AND CRI @**

  chainreaction.anl.gov

- **LEARN ABOUT ARGONNE AREAS OF INTEREST @**

  anl.gov

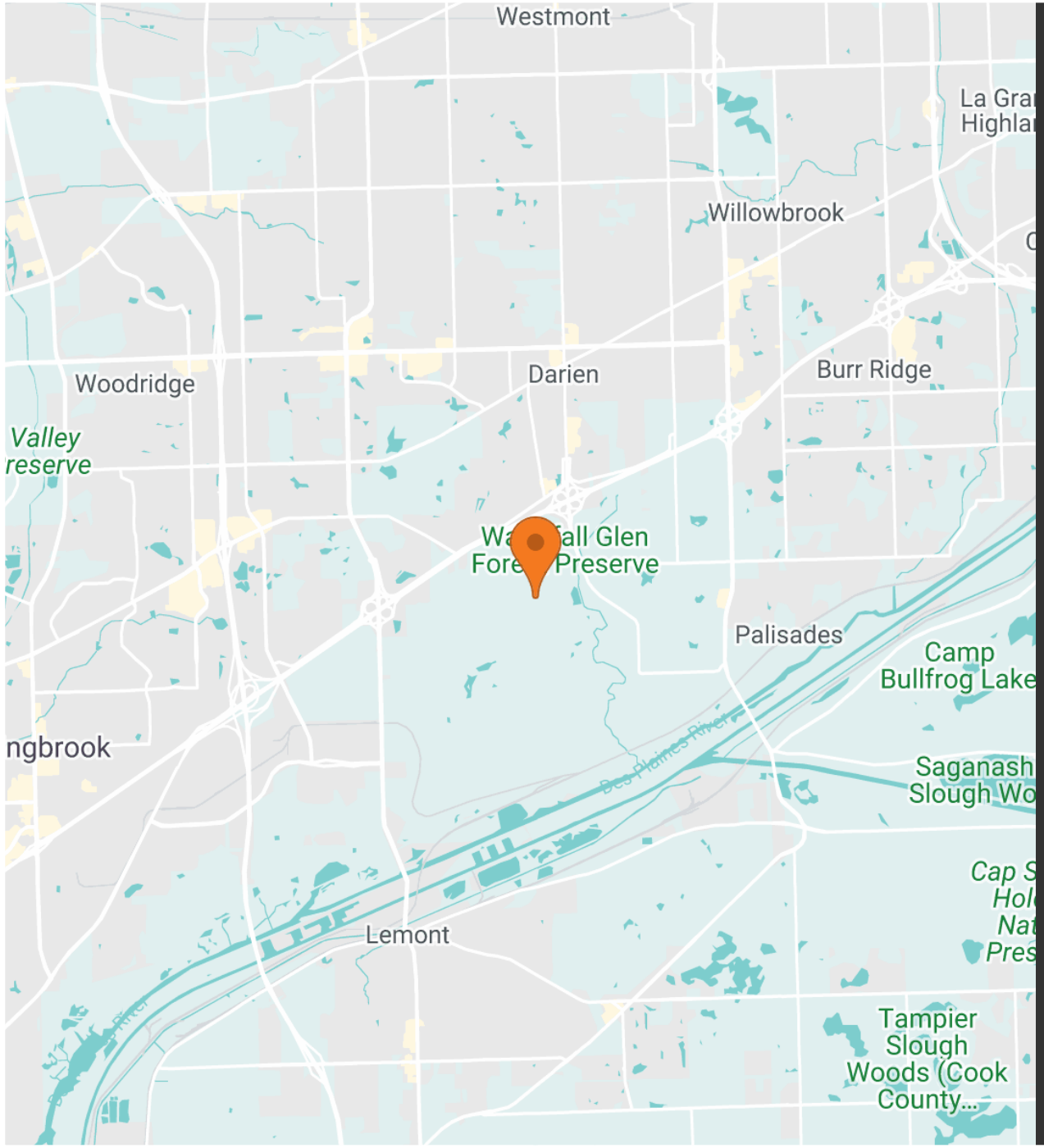
- **LEARN ABOUT DEPARTMENT OF ENERGY INTEREST AREAS @**

  energy.gov

- **OR GOOGLE**

  EERE + Advanced Manufacturing, Building Technologies, Hydrogen Technologies, or other topics

- **OR…**



CONTACT US

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linkedin.com/showcase/chain-reaction-innovations/

QUESTIONS?

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CRI Cohort 3