# IMPACT REPORT

**NUCLEAR INNOVATION BOOTCAMP** 

2016-2025

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# INTRODUCTION

Since 2016, **The Nuclear Innovation Bootcamp (NIB)** has enhanced the careers of students and early-career professionals working or looking to work in the advanced nuclear energy sector. As the demand for experienced leadership, new ideas, and professional development in this field continues to grow, NIB will be an increasingly important recruitment pipeline for multi-disciplined, creative, and energetic young talent.

### Looking forward, NIB is embarking on the next phase of its development by focusing on three core initiatives:

- **Strengthening** its commitments to innovation education and increasing multi-disciplined talent in the nuclear energy sector
- Expanding its engagement with a broader range of communities and industries
- Recruiting talent from underrepresented disciplines and professions

NIB centers on the NIB participants and every year we continue to learn from our growing alumni network made up of the 196 participants of our eight Bootcamps. The information in this report is largely based on survey results and interviews from this group. We hope that you will find the information and stories below as motivating as we do.

#### Respectfully,

#### The NIB Organizers



**Judi Greenwald** Nuclear Innovation Alliance



Adrien Couet
University of
Wisconsin-Madison



**Devin Watts**Nuclear Innovation
Alliance



Mya Zepp Nuclear Innovation Alliance



Christine King GAIN



Rachel Slaybaugh



**Todd Allen** University of Michigan

## OUR MISSION

In 2016, Dr. Rachel Slaybaugh founded the Bootcamp to inspire and train a new generation of nuclear professionals. Innovation, and entrepreneurship have continued to be the program's core values in terms of NIB's guiding philosophy and how it structures its curriculum. NIB's multidisciplinary curriculum teaches essential skills that foster innovation and entrepreneurship, expanding the pool of talent and producing ideas for the advanced nuclear space to draw upon. By attracting qualified students and early career professionals from various backgrounds and

disciplines, the Bootcamp has become a pipeline for connecting new talent with career opportunities while enhancing the skills of those who are already working in the sector. With the exception of during the COVID-19 pandemic, the structure of the Nuclear Innovation Bootcamp is based each year on a 2-week intensive seminar-style workshop combined with group projects. Participants take courses in a wide range of topics and work together on team design projects that are pitched to a panel of expert judges on the last day.



# & CORE VALUES

In order to expose participants to a wide range of experiences, NIB brings together leaders from throughout the nuclear energy sphere, related communities in climate and energy, and other industries in order to expose young talent to the cross-cutting needs of clean energy development in the 21st century. Past participants have leveraged their experience to be impactful within various sectors including industry, academia, and government. Some have even gone on to secure their own funding and founded companies based on the ventures they

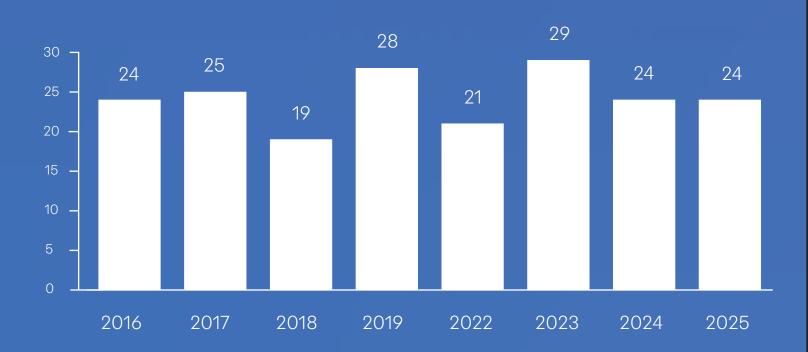
started at the Bootcamp. From the beginning, the Bootcamp has also been committed to removing barriers to cultivating a wide range of new and innovative ideas. To do this, NIB keeps costs very low for participants by funding lodging, meals, necessary supplies, transportation, and networking events throughout our 2-week program. Various levels of support are also offered to our presenters.



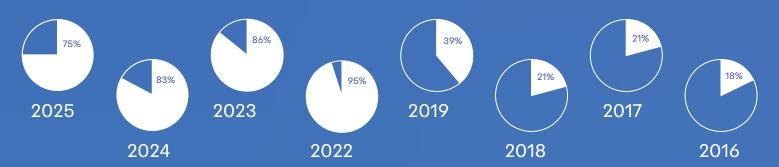
# BROADENING PERSPECTIVES

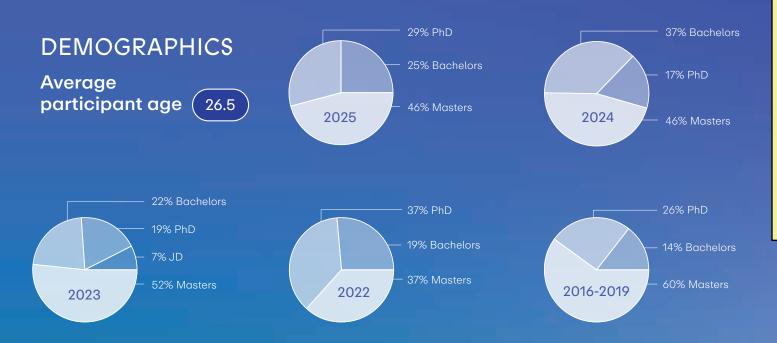
A central belief of NIB is that promoting a wider range of voices and perspectives in the nuclear energy sector is necessary to build a dynamic, competitive, and productive future workforce. Innovation and entrepreneurialism depend on the inclusion and consideration of fresh perspectives and new ideas. The Bootcamp not only broadens the minds of participants but actively broadens the traditional reach of the nuclear energy sector's candidate pool. We aim to continue fostering representation within NIB by striving to include a wide range of disciplines and communities in any and every way possible.

### **BOOTCAMP PARTICIPANTS**



### **SURVEY RESPONDENTS**

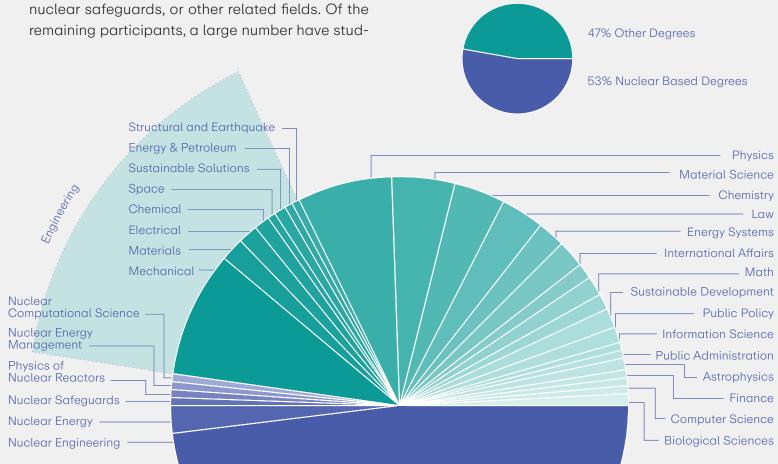




### **DEGREE DISCIPLINES**

The Nuclear Innovation Bootcamp welcomes a wide range of individuals with different backgrounds. Applicants must demonstrate a passion for nuclear energy; as a result, the majority of participants have studied nuclear energy in some capacity, whether through nuclear engineering, nuclear safeguards, or other related fields. Of the remaining participants, a large number have stud-

ied related fields such as mechanical engineering, physics, chemistry, or materials science. Those participants who did not study any STEM fields had focused on policy-related fields such as law, public policy, and international relations.



### WHERE ARE THEY COMING FROM?

American University

Air Force Institute of Technology

AGH University of Science and

Technology

Australian National University

**Bayero University** 

Cornell University

Cambridge University

CentraleSupélec

Delft University of Technology

**Duke University** 

Eth Zurich

École Polytechnique

École Polytechnique Fédérale de

Lausanne

Georgia Institute of Technology

George Washington University

Gadjah Mada Nucleargraduates

**Howard University** 

Hokkaido University

Imperial College London

Johns Hopkins University

Kano Brandeis

Kyushu University

Korea Advanced Institute of Science

and Technology

KTH Royal Institute of Technology

Kansas State University

Lancaster University

LAB University of Applied Sciences

Military Institute of Science and

Technology

Massachusetts Institute of

Technology

North Carolina State University

Northeastern University

Northwestern University

Osaka University

Oregon State University

The Ohio State University

Oxford University

Polytechnic University of Puerto

Rico

Purdue University

Pennsylvania State University

Politecnico di Milano Sapienza

**Rutgers University** 

Sorbonne University

Technical University of Berlin

San Jose State University

SDA Bocconi School of

Management

The Open University

Texas A&M

University Tecnológico de Monterrey

Tokyo Institute of Technology

University of Florida

Università di Roma Scheme

University of North Carolina,

Charlotte

University of Illinois

University of Tennessee, Knoxville

University of Cambridge

University Colorado School of Mines

Ulsan National Institute of Science

and Technology

University at Buffalo

University of Manchester

University of Chicago

University of Portsmouth

University of Liverpool

Université Paris-Est Créteil

University of Illinois Urbana-

Champaign

University of Ontario

Institute of Technology

University of Michigan

University of New South Wales

University of Sheffield

University of New Brunswick

University of Manchester

Universidad Politécnica de Madrid

University of Buenos Aires

Universitas Gadjah Mada

University of Missouri

University of Glasgow

University of Georgia

University Wisconsin-Madison

Universidad Nacional Autónoma de

Honduras

University of Sydney

University of Utah

University of West Bohemia

University of Wyoming

Virginia Commonwealth University

William and Mary University

Wellesley College

Yale University

### WHERE ARE THEY NOW?

NIB Alumni's current companies and organizations!

**AFRY** 

Alpha Nur

Argonne National Laboratory

Assystem (

**ASML** 

ATG Europe

Atlantic Council

Aquafil

BAE Systems

Belgian Federal Agency for Nuclear

Control

BG&E

Blixt Group

Breakthrough Energy

Breakthrough Institute (

**Bright Strategies** 

**CAELUS** 

Center on Global Energy Policy

Clearpath

Commonwealth Fusion Systems

**FPRI** 

entX Limited



EY - Parthenon

Framatome

Frame Cancer Therapeutics

GenH

Goodnews College

Good Energy Collective

Helixos

**Hummingbird Scientific** 

Idaho National Laboratory



International Atomic Energy Agency

Kairos (5



**Kyoto Fusioneering** 

**KPMG US** 

Lawrence Livermore National

Laboratory

Los Alamos National Laboratory

MIT ( 3

miHoYo

NASA

Nationale Genossenschaft für die

Lagerung radioaktiver Abfälle

National University of Mongolia

NAAREA

Naval Sea Systems Command

NextEra Energy Resources

North Carolina State University

nucleareurope

**Nuclear Decommissioning Authority** 

OECD Nuclear Energy Agency

Ofgem

**Ontario Power Generation** 

Oak Ridge National Laboratory

Philippine Nuclear Research

Institute

PwC(2

Radiant

Radical Energy and Material

RenU Fuel Solutions

RINA

Saramin

Subsea7

SPARK Alliance

Sandia National Laboratory

Siwabessy Initiative

**TerraPower** 

TAQA Group

**TRACTEBEL** 

Ultra Safe Nuclear

**United States Air Force** 

**United States Navy** 

**UK Atomic Energy Authority** 

University of Bristol

University of Sydney

University of Wisconsin-Madison

Ulsan National Institute of Science

and Technology

Urenco Capenhurst

Vantaan Energia Oy

**Vector Atomics** 

Ventures

Voltus

VTT

Washington Policy & Analysis

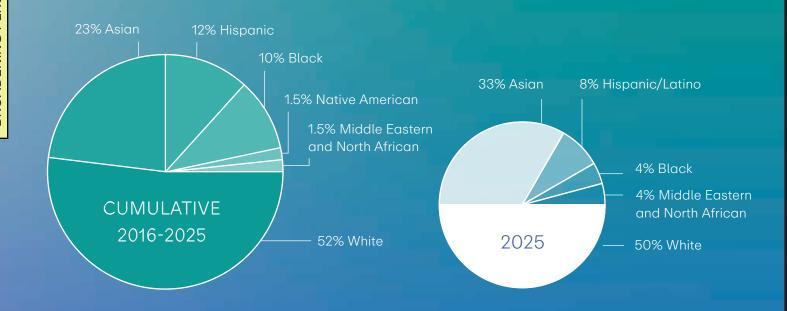
Westinghouse Electric

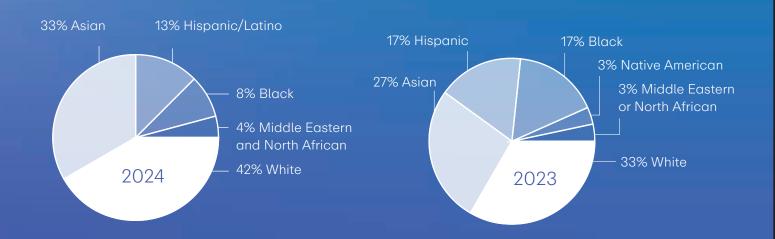


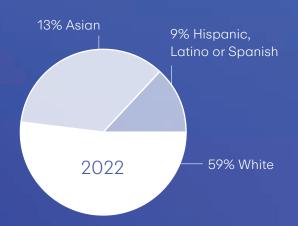
**WBUR** 

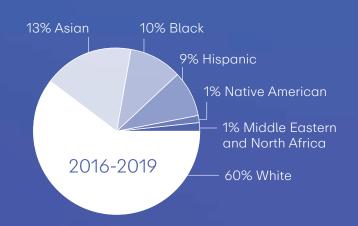
X - energy

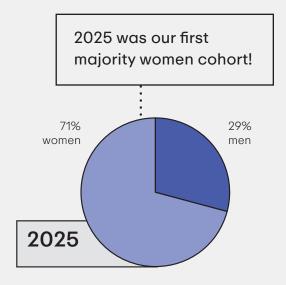
### **DEMOGRAPHICS**

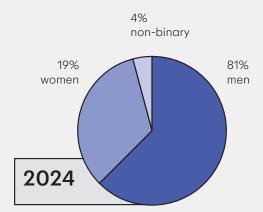


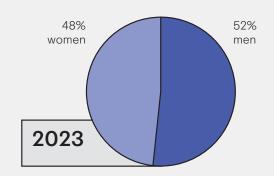


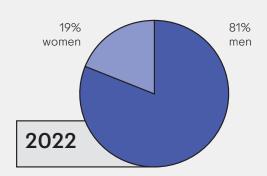


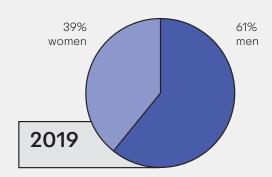


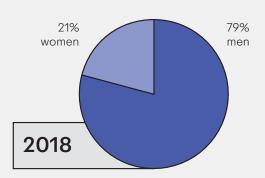


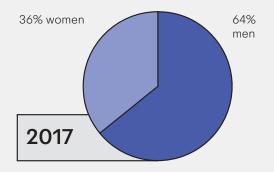


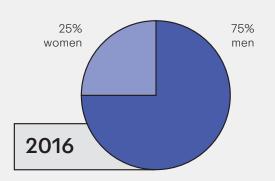












United Kingdom

**United States** 

Saudi Arabia

South Africa

Switzerland

Over the past 8 years, NIB has hosted participants from 69 countries around the globe!

Saudi Arabia

Vietnam

United Kingdom

### 2018

Austria China India **United Arab** Emirates **United Kingdom United States** 

### 2016

Canada China France India **United Kingdom United States** 

Zimbabwe

Poland

Spain

France

China

US

# OUR CROSS-CUTTING CURRICULUM

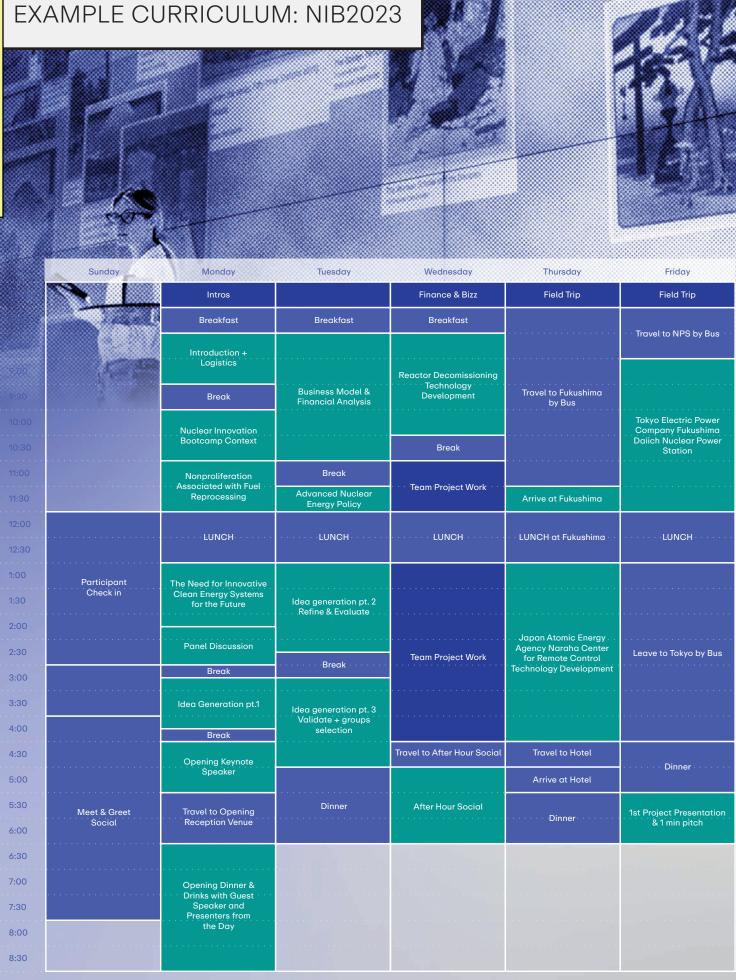
Our presenters come from a range of disciplines and the curriculum they deliver covers topics including:

- Venture fundamentals
- · Methods for idea generation and critique
- Cross-cutting needs in nuclear energy systems
- Product development and marketing
- Advanced reactor designs
- Community and stakeholder engagement
- Venture and institutional financing
- Climate change and environmental justice
- Challenges and opportunities for nuclear in the 21st century energy landscape

The Bootcamp's 2-week program is divided into two main activities:

A selection of interdisciplinary courses delivered each day by presenters from around the world who hold distinguished roles in various sectors including industry, academia, and government

The team design project in which participants form groups and build their own ventures, which on the last day of the Bootcamp they pitch to a panel of expert judges.





	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Theme						
8:00	Breakfast	Breakfast	Breakfast	Breakfast	Breakfast	
8:30			Innovative Nuclear			
9:00	Reflection, Discussion &	Robotics for Sensing and Decomissioning	Energy Systems Resilient to Natural			
9:30	Questions		' Disasters ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '			Particpant Check-out
10:00	Break	Break	Break	Speaking with Credibility / Final Pitch Practice	DRY RUN: Final Pitch Practice	
10:30						
11:00	Radioactive Waste Management	Speaking with Credibility	Community Engagement & Communications			
11:30						
12:00	· · · · · LUNCH · · · · · ·	···········LUNCH·······	· · · · · · LUNCH · · · · · ·	······LUNCH······	· · · · · · · · · · · · · · · · · · ·	
12:30						
1:00					Welcome	
1:30	Panel Discussion	Speaking with		Rachel S. AMA		
2:00		Credibility	Team Project	(ask me anything)	Pitches to Judges	
2:30	Break					
3:00	Our abia a saidh				· · · · Keynote Speaker · · · ·	
3:30	Speaking with Credibility (Intros to Tom)				no, noto opouno.	
4:00		Team Project		Team Project	Travel to Awards	
4:30	· · · · Team Project · · · · ·	· · · · · · · · · · · · · · · · · · ·	· · · · After Hour Social · · · ·		Reception	
5:00						
5:30	· · · · · · · · Dinner· · · · · · · ·	· · · · · · · · Dinner · · · · · · ·		· · · · · · · Dinner · · · · · ·	Closing Award	
6:00	5111101	Similer -		- Billiel	Reception	
6:30						
7:00						
7:30						
8:00						
8:30						



### **MENTORING**

The team design project constitutes a significant portion of the Nuclear Innovation Bootcamp. Throughout the two weeks, participants work in small groups on a venture that will have technical and non-technical components touching upon a wide range of topics. Team members do not have expertise in most of these areas, so our mentors are assigned to groups and serve as experts from across disciplines to be available and answer questions as needed. There are two forms this mentoring can take: continuous mentoring and spot mentoring.

Continuous Mentors are available as a resource throughout the program for a specific

team. One or two mentors will work with each team to provide consistency, perspective, and guidance over the full program. Past participants consider their Continuous Mentors as one of the most useful resources throughout the program and some groups have continued working with them after the Bootcamp ended.

Spot Mentors are available to one or several teams to provide feedback on a specific issue. Participation is largely virtual and mentors are free to set the parameters of their availability and interaction.



# DESIGN PROJECTS: LEARNING IN ACTION

The Bootcamp's team design projects make up one-half of the 2-week experience. They teach participants to work together through the process of identifying and designing creative solutions to issues facing the nuclear energy sector as well as broader energy and climate challenges. After building ventures that are then pitched to expert judges, many teams have gone on to win national and international innovation competitions as well as gain private funding to continue developing their ideas.



### 2025 - GammAway

Melody Ranger, Anne Moncuit, Lachlan Crawford, Hannah Azman, and Clayton Feng

GammAway utilises Cobalt 60 (Co-60) as a gamma ray emitter to eliminate spoilage and pathogen microbes of Australian produce within the original packaging provided to exporters. This sterilization process at higher doses upwards of 10 kGy inhibits bacteria and parasites' growth. This ensures transparency and quality assurance in accordance with Food Standards Australia and New Zealand (FSANZ) and Australian Radiation Protection and Nuclear Safety Agency (ARPANSA), whilst complying with approved regulatory bodies, including United Nations (UN). GammAway provides a service to irradiate and sterilize produce in preexisting packaging, enabling longer preservation times or meeting high-cost demands for coldtemperature transportation. This allows exportation of fresh produce to international markets via boat routes in larger volumes at a lower cost.

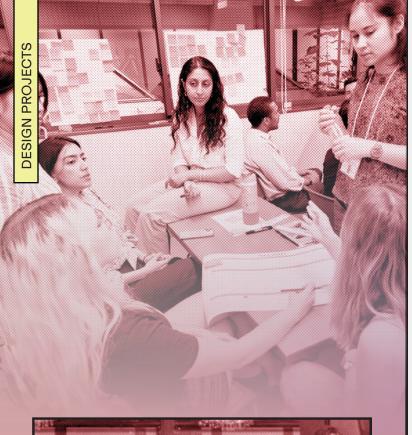


### 2024 - CritiCality

CJ Cruz, Dennis Rodriguez, Destiny Howell, Esther Ollennu, Nisa Rahnuma Aziz, Thomas Viscovich

Nuclear energy plays a key part in ensuring the sustainable future of energy and yet it remains shrouded in mystery and misconceptions. Most kids have very limited to no exposure to the peaceful usage of nuclear energy which in turn affects their choice of career paths and overall understanding of nuclear technologies. CritiCality aims to change this.

Set in the control room of a nuclear reactor, this role-playing game allows the player to safely bring the reactor to criticality and not only teaches them the process of how electricity is generated from the splitting of atoms but also its role in the reduction of greenhouse gas emissions.





### 2023 - Nucleus

Caroline Seyffert, Lewis Handy-Cardenas, Madeleine Lewis, Susannah Lea, Alessandra Totaro Villar

Nucleus is an innovative new contracting company integrating powerful nuclear microreactor technology to fuel the workforce in growing areas of demand—from manufacturing and construction to the clean energy transition. Our team of engineering and policy experts will mobilize and operate rapidly dispatchable carbon-free workforce housing and accessory power sources for industrial projects of all sizes and duration. Our business aims to provide logistics services in the form of temporary housing, connected to a microreactor for electricity and heat. Excess heat can also be harnessed for energy intensive operations, such as hydrogen production and desalination.



## 2022 - Resource Adaptations Solutions (RAS)

Diana Grandas, Paris Porter-Bradley, Cheng-Kai Tai, Natalie Houghtalen

Resource Adaptations Solutions (RAS) provides an innovative technology solution to optimize cooling water use so that nuclear power plants can continue to provide power to communities when they need it most. Our values are core to our operation – we bring Service, Quality, Safety, and Integrity to every customer we serve.

The impacts of climate change are already here, and the time to adapt to avoid the worst of human suffering is now. Rising temperatures and extreme heat waves have become more frequent and severe in recent years. Higher ambient air temperatures increase evaporation rates and decrease soil moisture, making future droughts stronger and longer lasting. Extreme heat threatens power generators, which were not designed with a rapidly changing climate landscape in mind, exposing communities to critical vulnerabilities. Power output is limited by rising temperatures and lack of availability of cooling water. An increase of 2°F in ambient temperatures results in a two percent decrease of total power output, preventing billions of homes from receiving power during the hottest days on record when air conditioning is most needed to prevent death due to heat exposure. Resource Adaptation Solutions is committed to producing an affordable, effective solution that is replicable at any thermal generation station. We Save Water to Save Lives

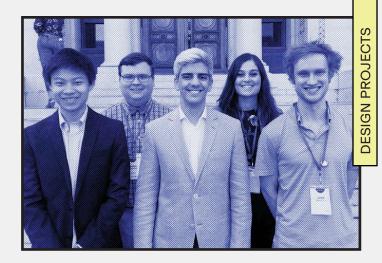




### 2019 - Glacial Melt Mitigation Services (GMMS)

Adnan Wisudhaputra, Ajit Bastola, Bianca Carpinelli, Dinara Ermakova, Jake Littlepage, Sara Ferry, Sree Harsha Bandaru, Viljami Yli-Hemminki

Glacial Melt Mitigation Services (GMMS) is a consulting company that helps national governments, NGOs, and nuclear vendors harness nuclear power to avoid the catastrophic consequences of climatechange induced glacial melt. There are many geoengineering proposals to prevent the melting of ice sheets and glaciers, but these technologies require massive amounts of energy. Advanced nuclear power is the cleanest and most cost-effective choice to meet these energy needs. GMMS works to identify the areas across the globe that are most at-risk from glacial melt, form coalitions across the private and public sectors to act, and advise on relevant matters of international climate and marine policy. We then leverage a deep network of nuclear and infrastructural vendors to design site-specific neuclear-powered glacial melt mitigation solutions.

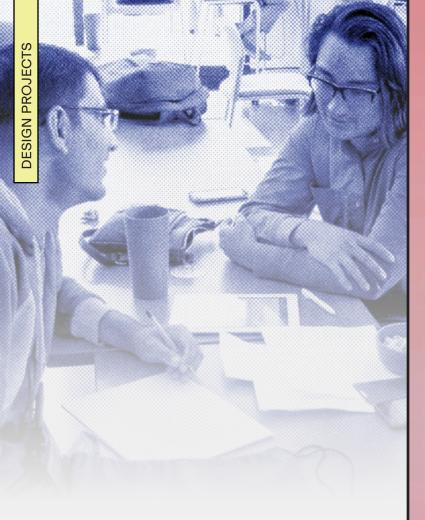


## 2018 - Testing and Irradiation of Materials (TIM)

Francisco Fidalgo, Charley Goodman, Jake Quincey, Brian Shen, Nicole Virgili

TIM is addressing the current backlog and inflexibility in testing of fuels and materials at test reactors around the world. TIM's idea is to take advantage of the untapped subcritical space in which companies like SHINE Medical Technologies operate by using a high flux neutron generator to irradiate a subcritical assembly. This technology will expedite the process of new fuel certification and allow nuclear startup companies focused on Gen IV reactors to mature their designs and reach licensing and commercialization much faster.







### 2017 - NuWorld

Dylan Addison, Dane de Wet, Mike Ford, Alyssa Hayes, Hassan Qarra, Logan Turk

NuWorld links modern manufacturing methods to advanced reactor technology. We solve a critical problem facing the future of clean energy. Our innovative solution accelerates the deployment of advanced nuclear reactors by an order of magnitude, cutting the costs by half. Our assembly-line solution for the next generation of nuclear power enables a new economic platform for development in the United States and around the world.



## 2016 - Auzel: Energy from Waste

Andrea Saltos, Aristidis (Aries) Loumis, Arun Khuttan, Ian Hamilton, Milos Atz, Nikhil Bharadwaj

Auzel sought to collect energy from nuclear waste heat through the use of photon up-scale converters and IR-photovoltaic cells. Our case study is based on the High-Level Vitrified Waste facility in Sellafield, UK, but our ideal is to apply this to all high-level waste and applications beyond.



### THE PEOPLE WHO MAKE IT POSSIBLE

## OUR SPONSORS

































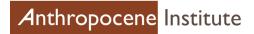








Morgan Lewis































Ross Koningstein and Patrisia Spezzaferro

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## OUR SPONSORS



**Morgan Lewis** 









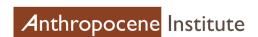
Ross Koningstein and Patrisia Spezzaferro































Ross Koningstein and Patrisia Spezzaferro





















Ross Koningstein and Patrisia Spezzaferro



Eric Gracyalny & Sama Bilbao y León



















































# THE PEOPLE WHO MAKE IT POSSIBLE OUR PARTICIPANTS



Anna Ghorbanpour

**Anne Moncuit** 

Anupreethi

Balajiranganathan

Artur Szymczak

**Clayton Feng** 

Eloi Batalla

Faith Tng

Hannah Azman

**Hugo Currie** 

Isabella Wood

Jan Ullmann

**Jedidiah Yuwanto** 

Jenna Jarvenpaa

**Joy Jiang** 

**Kay Song** 

**Lachlan Crawford** 

**Melody Ranger** 

Nomagugu Ndlovu

Sarah Cole

Sevval Findik

Sharmi Sujantha

Silvia Fiore

Spencer Toohill

Ursula Caturla Rodriguez



Abdulmajeed Aljasim

**Ahnaf Tahmid** Chowdhury

**Alexey Burbasov** 

Alberto Gil Cordero

**Amy Drake** 

Anh Nguyen

Cris Jericho Cruz

**Dennis Rodriguez** 

**Destiny Howell** 

Esther Ollennu

George Lea Booth

Ian Gilley

Jacob Kirby

**Jordan Giese** 

Julia Sweatman

Kinjal Dave

Maciei Sobczyk

**Om Jagtap** 

Rahnuma Aziz Nisa

Riccardo Villa

Simone Albanese

**Thomas Viscovich** 

**Turner Clarke** 

Yu Fujiwara



Alessandra Totaro Villar Hannah Harris

Alice Ding

**Aronne Travaglia** 

Caleb Roger

Camila Boix Mansilla

**Caroline Seyffert** 

**Emile Germonpre** 

Gengchen Li

Iva Recking

Jack Lanza

**Jasmine Mund** 

John Mobley IV

Juzel Lloyd

**Knight Yeboah** 

**Lewis Handy-Cardenas** 

**Madeleine Lewis** 

Malik Oliver

Marley Ottman

Jenifer Avellaneda Diaz Nicholas Mecham

Saleem Al Dajani

Samuel Garcia

Saskia Van Nieuwstadt

Susannah Lea

Tsendsuren Amarjargal

**Umar Ahmad** 

**Xiaoqing Huang** 

**Xucheng Zhao** 

Yang Zhang



Alessio Iuvara
Amy Kynman
Cheng-Kai Tai
Coleman Smith
Diana Grandas
Harun Ardiansyah

Jared Hoffman
Javier Pelegrina
Joseph Fustero
Kaivalya Lal
Kevin O'Sullivan
Mason Rodriguez Rand

Max Karous
Natalie Houghtalen
Paris Porter Bradley
Rakhmat Eko Saputro
Rama Thygaraju
Ponangi

Shirley Yong
Siddharth Pannir
Yanuar Ady Setiawan
Zachary Diermyer



Adnan Wisudhaputra
Ajit Bastola
Albert Houghton
Alexia Mercier
Anna Benarosch
Azusa Konno
Bianca Carpinelli
Charlyne Smith

Christos Sarafidis
Dinara Ermakova
Hadiza Mohammed
Hareth AlMaskari
Igor Gawron
Jake Littlepage
Jakub Damian
Kiira Kalmi

Pedro Morino Martinez
Pierre Clement Simon
Rodrigo de Oliveira
Ruaridh Macdonald
Sara Ferry
Shirley Eseigbe
Shono Fujiyama
Victor Richet

Vighnesh Candassamy Santhanamani Viljami Yli-Hemminki Yana Moysak



Ahmed Alshehhi

**Benjamin Lilley** 

**Brian Shen** 

**Charles Goodman** 

**Dylan Scallo** 

**Edward Chen** 

Francisco Fidalgo

**Jake Quincey** 

James Egelhoff

**Jordan Perrone** 

**Matthew Herald** 

Jeremiah Mbazor

Nicole Virgili

Priyarshini Ghosh

Richard Reyixiati

Repukaiti

**River Bennett** 

Shane Gallagher

**Valentin Pauly** 

Yuqiao (Joy) Fan



Adria Peterkin

Alyssa Hayes

Ari Krause

Calvin Parkin

Cliff Ghiglieri

**Courtney McLean** 

Dane de Wet

**Dylan Addison** 

Hassan Qarra

**Jonathan Gjemso** 

Julie George

Katie Mummah

Lenka Kollar

**Logan Smith** 

**Logan Turk** 

McKinleigh McCabe

Michael Ford

Mitch Negus

Mitchell Sinclair

**Monica Rodriguez** 

Nkiruka Menankiti

Pavel Velkovsky

Phillipe Larochelle

**Shirly Spath** 

**Efstathios (Stathis)** 

Vlassopoulos

Susan Hakimzadeh

Vivek Maradia

Xiaojun Zhang



Abdalla Abou Jaoude Andrea Saltos Andres Alvarez Aristidis (Aries) Loumis

Arun Khuttan Boris Hombourger

**Chris Poresky** 

Cindy Rodriguez
Garon Morgan
Ian Hamilton
James Kendrick

Jing Hu Kathryn Yates Kyle Brumback Mark Mawdsley Megan Casper Michael Martin

Modeste Tchakoua Tchouaso

Nikhil Bharadwaj

Milos Atz

Oscar Espinoza Richard Pearson Sarah Stevenson Shrey Satpathy Steve Clement

# THOSE WHO MAKE IT POSSIBLE OUR PRESENTERS

The Nuclear Innovation Bootcamp would not be possible without the time and energy devoted by its community of presenters. These individuals represent a wide range of backgrounds from both within and outside of the nuclear energy sector. The experience they provide helps our participants to learn lessons from a wide range of industries and disciplines.

By actively seeking out presenters from beyond the nuclear energy space, NIB is becoming a forum with the demonstrated ability to host cross-cutting conversations and build bridges to other climate-and innovation-focused communities.





**Aleshia Duncan,** United States Department of Energy

Alex Borovskis, Helixos

**Dan Gregg,** Australia's Nuclear Science and Technology Organisation

David Waite, University of New South Wales

**Edward Obbard,** University of New South Wales

**Flora Mansour,** Australia's Nuclear Science and Technology Organisation

**Francois Ladouceur,** University of New South Wales

Helen Cook, GNE Advisory Pty Ltd

Imogen Speer, ISpeer Consulting

**Jenny Stansby,** University of New South Wales

Jeffrey Brown, Stanford University

Jasmin Diab, Women in Nuclear

Kenneth Kahn, Old Dominion University

**Kevin Jackson** 

Leslie Dewan, Neutronic Designs

Lenka Kollar, Helixos

Matt Brand, University of New South Wales

Matthew Kearnes, University of New South Wales

Michelle Zietlow-Miller, Idaho National Laboratory

Patrick Burr, University of New South Wales

Patrick White, Clean Air Task Force

Rita Henderson, University of New South Wales

**Stephan Bayer,** Australian Safety and Non-Proliferation Office

Stephen Wilson, University of Queensland

Steve Tighe, University of New South Wales

Warren McKenzie, HB11 Energy



Alex Gebben, University of Wyoming

Brad Williams, Idaho National Lab

Charles Nye, University of Wyoming

Christine King, GAIN

Christi Bell, Business Enterprise Institute

**Don Burkhart,** Wyoming House of Representatives

**Drew DeWalt, Rhumbix** 

Elizabeth Helvey, North Wind Services

Fred Yapuncich, Terrapower

**Greyson Buckingham,** Disa Technologies

Holly Krutka, University of Wyoming

Hope Morrow, Idaho National Lab

Jason Hansen, Idaho National Lab

Jessica Lovering, Good Energy Collective

Joe Miller, BWXT

Judi Greenwald, Nuclear Innovation Alliance

Karen Kim-Stevens, EPRI

Ken Kahn, Old Dominion University

**Kevin Jackson** 

Kiley Ingersoll, Wyoming Business Council

Leslie Dewan, Criticality Capital

Mary Throne, Wyoming Public Service Commission

Maria Jenks, University of Wyoming

Melanie Armstrong, Ruckelshaus Institute

Natalie Houghtalen, ClearPath

Nick Touran, TerraPower

Olu Omotowa, TerraPower

Patrick White, Nuclear Innovation Alliance

Rachel Slaybaugh, DCVC

Rita Meyer, TerraPower

**Rudy Murgo** 

Sean Schaub, Wyoming Energy Authority

Selena Gerace, University of Wyoming

Sharon Fain, PacificCorp

Scott Melbye, Uranium Energy Corp

**Spencer Garland,** Tristate generation

Tara Righetti, University of Wyoming

Todd Ansemli, Idaho National Lab

**Todd Allen,** University of Michigan

Travis Deti, Wyoming Mining Association



**Adrien Couet,** University of Wisconsin Madison **Braden Goddard,** Virginia Commonwealth University

**Christine King,** Gateway for Accelerated Innovation in Nuclear

Elizabeth Helvey, North Wind Services, LLC

Gen Endo, Tokyo institute of Technology

Hidemasa Yamano, Japan Atomic Energy Agency

Hideki Kamide, Japan Atomic Energy Agency

Hiroshige Kikura, Tokyo Institute of Technology

Hideharu Takahashi, Tokyo Institute of Technology

Hirofumi Okada, Tepco

Judi Greenwald, Nuclear Innovation Alliance

Kazuaki Kito, Hitachi

Kazuhito Asano, Toshiba

Ken Kahn, Old Dominion University

Kuniaki Kawabata, Japan Atomic Energy Agency

Lenka Kollar, Helixos

Leslie Dewan, Radiant Nano

Matt Thompson, Zap Energy

Michael Short, MIT

Mitsuru Uesaka, Japan Atomic Energy

Commission

**Naoaki Okuzum,** International Research Institute for Nuclear Decommissioning

To Trace at December 19

Rachel Slaybaugh, DCVC

Rudy Murgo, Nuscale

Satoshi Okada, Hitachi

Naoto lizuka, TEPCO

Satoru Kamohara, Mitsubishi Industries

Shinichi Koyama, Japan Atomic Energy Agency

Teruki Fukumatsu, Toshiba

**Thomas Rusert,** Tor House Foundation

**Takehiko Tsukahara,** Tokyo Institute of Technology

Tatsuya Katabuch, Tokyo Institute of Technology

**Toru Obara,** Tokyo Institute of Technology

Tomohiko Arai, Research and Development

Bureau

Yasuhiro Yuguchi, Toshiba Corporation

Yoshikazu Koma, Japan Atomic Energy Agency

Aditi Verma, University of Michigan

Alexia Mercier, OECD Nuclear Energy Agency

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Ben Lindley, Realta Fusion

**Bianca Carpinelli,** International Atomic Energy Agency

Carly Anderson, Prelude Ventures

**Catherine Clark,** DOE Office of Clean Energy Demonstrations

Caroline Cochran, Oklo

Chris Ritter, Idaho National Laboratory

Cindy Vestergaard, RKVST, Inc.

Chantell Murphy, Y-12 National Security Complex

**Christine King, Idaho National Laboratory** 

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Emma Wong, OECD Nuclear Energy Agency

Grace Stanke, Miss America

Jessica Bufford, Nuclear Threat Initiative

Jessica Chow, Katapult

Harsh Desai, Zeno Power

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Kim Macharia, Space Prize Foundation

Leslie Dewan, Radiant Nano

Lenka Kollar, Helixos

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Michael Mazur, Department of Energy

Nick Touran, Terra Power

Patrick White, Nuclear Innovation Alliance

Paul Wilson, University of Wisconsin-Madison

Richard Pearson, The Journal Of Fusion Energy

Ross Radel, SHINE

Ray Rothrock, FiftySix Investments

Rebeka Seemann, Entergy

Rachel Slaybaugh, DCVC

Robert Braun, ARC

Thomas Rusert, Tor-House Foundation

Tyler Bernstein, Zeno Power

**Uuganbayar Otgonbaatar, C**onstellation

Zainub Dungarwalla, Narrative Shift

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Gaël Patton, Garage 2067

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Hakima Qrichi-Aniba, CEA Saclay

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John Parsons, MIT

Ken Kahn, Virginia Commonwealth University

Kirsty Gogan, Lucid Catalyst

Kirsty Hewitson, National Nuclear Laboratory

Manuele Aufiero, Milano Multiphysics

Marc Boucker, EDF

Maria Isabel Machado, Assystem

Martín Gamizo, Nuclearis

Martin Thai, euRHasi

Mathieu Saint-Louis, ANDRA

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Mireille Martini, OECD

Nathalie Collignon, Orano

Nathan Paterson, Foratom

Paul Evans, ENEA Consulting

Rebecca Sands, Sciences Po

Rebecca Tedesse, OECD NEA

Roger Garbil, European Commission

Sama Bilbao y León, OECD-NEA

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Ségolène Perin, ELSAN

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Sylvestre Pivet, CEA Saclay

Troels Schönfeldt, Seaborg Technologies

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Nucléaire

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Gigi Wang, UC Berkeley

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Jacob DeWitte, Oklo

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Jit Bhattacharya, Fenix International

Joel Fetter, Booz Allen

John Park, VC Taskforce

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Koroush Shirvan, MIT

Lara Pierpoint, Exelon

Lenka Kollar, NuScale

Levon Keusseyan, GE

Lucas McCann, Macalester College

Maria Millan, CIRM

Marilyn Waite, Hewlett Foundation

Melanie Warrick, Google

Michael Corradini, University of Wisconsin

Madison

Nick Touran, TerraPower

Phil Larochelle, Breakthrough Energy Ventures

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Raluca Scarlat, University of Wisconsin Madison

Ray Rothrock, RedSeal, Inc.

Richard Meyer, Kairos Power

Richard Muller, Deep Isolation

Ron King, Electric Power Research Institute

Shelby Williamson, barrettSF

Suzanne Gaulocher, Plymouth State University

Suzy Baker, Third Way

Sydney G. Roberts, Commonwealth Center for

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**Joe Kowalczyk**, Southern Company Information Technology Organization

John Carlisle, Chain Reaction Innovations

Jose Reyes, NuScale

Josh Walter, TerraPower

Kat Manalac, Y Combinator

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Koroush Shirvan, MIT

Marilyn Waite, Village Capital

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Max Fratoni, UC Berkeley

Mike Laufer, Kairos Power

Milos Atz, UC Berkeley

Paul Lorenzini, NuScale

Pete Moran, DCM Ventures

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Ravi Prasher, lawrence Berkeley National

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Rita Baranwal, Gateway for Accelerated

Innovation in Nuclear

Ron King, Electric Power Research Institute

Sam Shaner, Yellowstone Energy, Inc.

Sama Bilbao y León, Virginia Commonwealth

University

Sara Harmon, UC Berkeley

Spencer Nelson, ClearPath

**Todd Allen**, Third Way



No.

Adam Scheider, Advanced Reactor Solutions LLC

Alex Cheung, Tri Alpha Energy

Alex Polonsky, Morgan Lewis & Bockius

Andy Klein, Oregon State University

Bala Ramamurthy, Positron Dynamics, Inc.,

Behnam Taebi, Delft University of Technology

**Benjamin Reinke**, U.S. Senate Committee on Energy and Natural Resources

Beth Zotter, Cyclotron Road

Brenden Heidrich, Idaho National Laboratory

Canon Bryan, Terrestrial Energy

Chris Comfort, Southern Nuclear

David Charpie, Dun & Bradstreet

David B. Matthews, Nuclear Regulatory Commission

Dennis Hussey, Electric Power Research Institute

Doug Crawford, Oak Ridge National Laboratory

Ed Blandford, University of New Mexico

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Jared Friedman, Y Combinator

Jeremy Conrad, Lemnos Labs

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John Jackson, Idaho National Laboratory

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Linda Pouliot, Neato Robotics

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Michael Van Loy, Mintz Levin Ferris Cohn Glovsky &

Popeo PC

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Samuel Brinton, Bipartisan Policy Center

SC Moatti, Products That Count

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Simon Irish, SWH Capital LLC

Suzy Baker, Third Way

Timothy Crook, Texas A&M University

Todd Allen, Third Way

Wendolyn Holland, Holland Consulting LLC

Walter Howes, Verdigris Capital, LLC

## THOSE WHO MAKE IT POSSIBLE OUR ORGANIZERS

Present and past organizers and advisors of the Nuclear Innovation Bootcamp represent a broad array of expertise across multiple disciplines in the global nuclear energy space

#### CURRENT ORGANIZERS \(\neg \)



**Todd Allen**University of
Wichigan - NERS



Adrien Couet
University of
Visconsin-Madison



Judi Greenwald Nuclear Innovation Alliance



Christine King
GAIN Gateway for Accelerated
Innovation in Nuclear



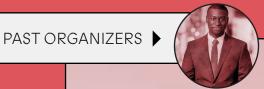
Rachel Slaybaugh



**Devin Watts**Nuclear Innovation
Alliance



Mya Zepp
Nuclear Innovation



Rasheed Auguste
UC Berkeley



**Milos Atz**UC Berkeley



**Dr. Rita Baranwal**U.S. Department of
Energy



**Karl van Bibber** UC Berkeley



**Dr. Sama Bilbao y Leon**World Nuclear
Association



River Bennett
Radiant



**Dr. Alan Bolind**UC Berkeley



Canon Bryan Industry Liaison Terrestrial Energy



**Mikhaila Calice**University of Wisconsin Madison



Christina Castellanos
UC Berkeley



Jessica Chow
UC Berkeley / Deep
Isolation



**Dinara Ermakova** Kairos



Tim Crook

MCR Performance

Solutions



**Dr. Ashley Finan**National Reactor
Innovation Center, INL



Shono Fujiyama Mitsubishi Research Institute



Andrew Greenop
US Department of
Veteran Affairs



Sara Harmon UC Berkeley



Caroline Hughes
National Renewable
Energy Laboratory



Tim Jensen
University of Wisconsin Madison



Joey Kabel
UC Berkeley



James Kendrick
UC Berkeley / Kairos
Power



Elsa Lemaitre-Xavier
ANDRA Agence nationale
pour la gestion des déchets
radioactifs



**Lydia Liu**UC Berkeley



Hanna Lorica
UC Berkeley



Michael Martin UC San Francisco



Andrea Morales
NowThen



Katie Mummah
University of Wisconsin
- Madison



Mitch Negus
UC Berkeley



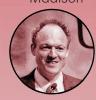
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Sara Norman
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Malisol Ohirko
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**Brett Rampal** Clean Air Task Force



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**Dr. Jordi Roglans-Ribas**Argonne National
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Papa Sally
AXONE / TechnipFMC



Kathy Shield UC Berkeley



**Dr. Koroush Shirvan**Massachusetts Institute
of Technology



**Kiyoteru Suzuki** Mitsubishi Research Institute



**Dr. Pavel Tsvetkov**Texas A&M University



**Richard Vasques**Ohio State University



**Gigi Wang**UC Berkeley, LUMICKS,
MG-Team LLC



**Yishu Qiu** UC Berkeley

# OUR LASTING IMPACT



The success of advanced nuclear energy will undoubtedly depend on the development of groundbreaking technologies. However, this will require more than just investing in scientific research; it will come from investing in the people and expertise-building that brings about widespread, rapid innovation.

Our definition of "experienced leadership" must adapt to meet the new challenges of this century. A career built on advanced degrees and traditional industry experience alone will not provide the insight needed for nuclear energy to find the spaces and applications where it will thrive. The Bootcamp is proud to continue identifying and enhancing the careers of a new class of leaders, ready to meaningfully contribute to the urgent environmental, climate, and energy challenges of this century.

#### **TESTIMONIALS**

"NIB was an amazing experience. It is hard to describe without resorting to cliche. I feel blessed to have been chosen. I feel like I learned more in the two weeks than I did in undergrad in a semester."

- Lea Booth '24

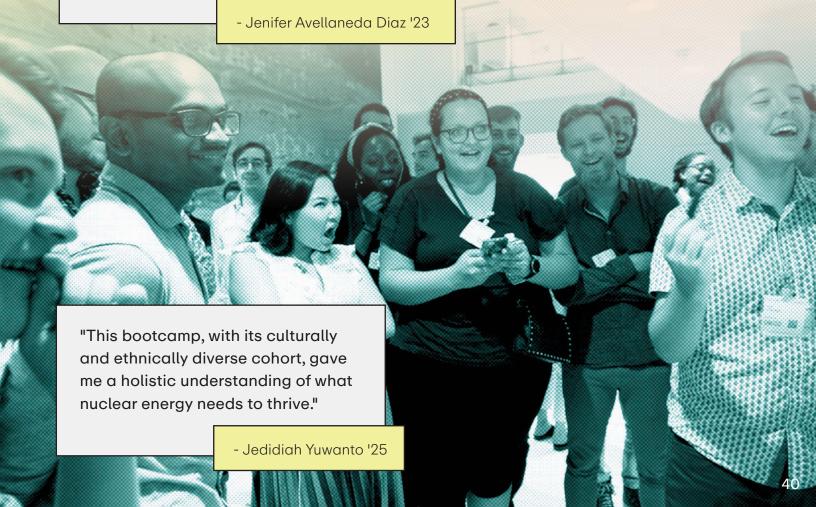
"I am so grateful for the opportunity to learn and connect with other earlycareer nuclear professionals"

- Jenna Järvenpää '25

"I think it truly helped me find people on the same wavelength as me"

- Destiny Howell '24

"I appreciate everything that the organizers did to make this happen, it was an incredible experience and I will forever be grateful to have been considered."



### **TESTIMONIALS**

"No words can describe how grateful I am to have attended NIB for 2 full weeks."

- Yanuar Ady Setiawan '22

"Overall I'm really happy with the program since it provided a lot of perspective I don't get as a reactor physicist. A lot of policy, finances, and speaking lessons that were overdue for me to learn."

"If I could sign up again, I would in a heartbeat"

- Aronne Travaglia '23

- Samuel Garcia '23



"This was an extremely interesting and insightful conference, I am grateful for this opportunity and will definitely take the learning forward to initiate a change in mindset on operations within my company.

Thank you everyone for a terrific 2 weeks!"

- Hareth AlMaskari '19

"The people chosen to attend the Bootcamp were absolutely perfect. Such a diverse range of people from all over and from many different backgrounds. Usually, when I attend these things I feel like such the odd one out. The only black person in the room, the only person of a different religion, the only woman, the only immigrant, the only person with a non-conventional work history. But at the bootcamp it was different and I felt 100 percent comfortable and relaxed and at home with the mix of people present."

- Hadiza Mohammed '19

"Best 2 weeks. First time I loved sleepless nights"

- Vighnesh Candassamy Santhanamani '19

#### **COMPANY SPOTLIGHTS**



Initially an idea born at the Nuclear Innovation Bootcamp in 2022, CAELUS S.R.L, led by NIB Alum Alessio Iuvara, has since become a realworld company with a bright future. CAELUS is the first and only software company that aims to ensure a reduction in the time and costs related to the licensing of new nuclear technologies. This is all possible thanks to the insights, knowledge, and hard work of a team close-knit and determined to shake up the nuclear power industry. CAELUS intends to distribute cuttingedge software available to companies in the nuclear industry. To do that, they developed a fully integrated, AI-powered modular environment. This will allow engineers to standardize their workflow and automatically produce licensing documents required for the industrial deployment of new nuclear technologies, focusing on S.M.R. reactors. CAELUS's goal is to reduce costly and time-consuming mistakes that an engineer may commit in carrying out complex and iterative projects that must follow strict and copious regulations. Their mission is to enable nuclear energy by putting a revolutionary tool in the hands of engineers. Their vision is to foster the path toward a rightful energy transition.



Though not initially thought up at Bootcamp, both founders of Alpha Nur (Kevin O'Sullivan and Mason Rodriguez Rand) attended the Nuclear Innovation Bootcamp in 2022 and, according to co-founder and CEO Kevin O'Sullivan, "so much of what I am has been refined and defined by my time at NIB." Alpha Nur's mission is to build the country's safe, clean, affordable, and secure energy future with modernized nuclear energy. To do so, Alpha Nur is working to fuel tomorrow's reactors with sustainably sourced nuclear fuels. Their values include early and continuous engagement with host locality stakeholders. Alpha Nur is one example of how the skills obtained from NIB can be used to create innovative ideas and businesses.

#### **COMPANY SPOTLIGHTS**



#### **Anubis**

ANUBIS was founded in the fall of 2024 by three UC Berkeley engineers. Our goal is to build a platform that allows nuclear designers, developers, and builders to better source NQA-1 components for cheaper. While not founded directly out of NIB, my time there certainly energized me to pursue entrepreneurship in nuclear and excited me to find practical solutions to the real problems the nuclear industry is facing.

One of the strongest aspects of NIB, for me, was having real industry experts and innovators come in and discuss present issues in nuclear, talk about their work in relation to them, and present future pathways for attendees. The concentration of our collective experience is in supply chain, and as it happens, robust supply chains are a keystone issue new nuclear is facing right now. The main value proposition is that our platform will broaden the components pool available to design engineers and builders, thereby lowering design and construction costs. We are excited not only about new nuclear but the growing needs of the current fleet, and are confident the supply chain needs of the industry will continue to grow.



#### RenU Fuel

RenU Fuel Solutions was created at the 2024 Nuclear Innovation Bootcamp, where its multinational team came together around a shared vision: transforming spent nuclear fuel from a costly liability into a clean energy asset. By harnessing residual radiation to produce zero-emission hydrogen, RenU is redefining how the nuclear industry approaches long-term fuel management. Today, the company is expanding its reach and actively competing for contests and grants in both the United States and Europe. The experience proved so valuable that RenU now nominates and supports early-career teammates for upcoming Nuclear Innovation Bootcamp cohorts.

