

IMPACT REPORT 2023



WHO WE ARE

Charlie Bass founded the Centre for Entrepreneurial Research and Innovation (CERI) as a charitable organisation.

CERI provides our high-knowledge individuals with an entrepreneurial mindset so that they can empower themselves, challenge the status quo and move their research into high-knowledge, high-value, export-oriented startups that will create the sustainable industries of the future.

These industries will far outlive our resources and provide a bright future for our grandchildren and beyond.

By empowering our researchers to move their research out of the labs and into startup companies, and other potential entrepreneurs to move their ideas out of their heads and into real effect, it will be these people that will solve the climate, energy, health, food and water issues that we all face.

CERI offers a wide variety of services from the Entrepreneurial Mindset Bootcamp, to the tools required by startups, to mentoring, to the provision of office space, and the potential for small financing.

CERI is largely funded by The Bass Family Foundation.



Sam, Sylvia, Charlie and Matt Bass

MESSAGE FROM THE CEO

2023 has been an exciting year for CERI as we continue to evolve with WA's maturing innovation ecosystem.

I completed my first full year in the role and have enjoyed welcoming and working with a new CERI team - Executive Officer Liz Blaxell, Programs and Digital Executive David Smith and Events and Programs Coordinator Mollie Clement.

Programs and Events

We have delivered a comprehensive suite of programs and events this year, with 14 programs including our Entrepreneurial Mindset Bootcamp, Concept to Creation course and Customer Development Masterclass. In addition, we hosted approx 15 events including the CERI Speaker Series and Concept to Creation Finales.

Partners

We were thrilled to partner with numerous internationally-recognised organisations, most notably through the Massachusetts Institute of Technology - Regional Entrepreneurship Acceleration Program, (MIT-REAP) which came to Perth in June after months of preparation and anticipation. Team WA was funded by Woodside and Rio Tinto.

This initiative by MIT Sloan School of Management, empowers communities worldwide to strengthen their entrepreneurial ecosystems.

As part of our involvement with MIT-REAP, CERI hosted a group of guests on the Perth Medical Innovation Tour. Several CERI startups had the opportunity to pitch to guests during the visit. I was fortunate to visit Boston and MIT before the program came to WA, where I met and learned from many people working in this thriving innovation hub, some who became remote guests in CERI's Speaker Series.

We continued to partner with many other valued long-term and new partners who support CERI's mission and startups - we are very grateful to The Malka Foundation, Mannkal Economic Education Foundation, Lotterywest IdeaStarter, part of

Spacecubed's Innovative Society Initiative and Fund, The Torresan Group, Edith Cowan University, Murdoch University, Forrest Research Foundation, Curtin University and The University of Western Australia.

We are always open to exploring new relationships, please contact us if you would like to work with CERI.

WA Senior Australian of the Year

Congratulations to CERI Founder and Executive Chairman Charlie Bass who was recognised, in part for his work with CERI, as 2024 WA Senior Australian of the Year.

Through Charlie's mission to see greater economic diversification in Western Australia, CERI has given hundreds of startups the opportunity to access invaluable resources to support them on their journeys. This is very well-deserved recognition for Charlie's contribution to the WA community.

We hope you enjoy reading more about CERI's achievements in this report. I look forward to continuing to share CERI's successes in the future.



Toby Swingler
Chief Executive Officer
Centre for Entrepreneurial Research and Innovation



CERI Executive Chairman Charlie Bass and Chief Executive Toby Swingler

BOARD OF DIRECTORS



Charlie Bass

Founder and Executive Chairman

Originally from the United States, Charlie has called Perth home for more than four decades. His love of Western Australia has led to his passion for creating a sustainable and diverse economic ecosystem by encouraging WA researchers to develop an entrepreneurial mindset and fostering a startup culture in high-knowledge and high-value industries in WA.



Brett Rowe

Director

Brett has more than 20 years' experience in the financial services industry. He is the Chief Executive of The Bass Group and Director of The Bass Family Foundation. Brett is responsible for managing the global financial interests of the Bass family and the Foundation's ongoing support of education and health in disadvantaged children and youth in regional WA.



Larry Lopez

Director

Larry has spent more than 30 years involved in projects that enable innovation. Over this time, he has been involved in funding over 1,000 early-stage companies in the US, Israel, Europe and Australia. Larry has worked with start-ups, and held executive roles in banking, venture capital fund management, investment banking and government agencies. He is currently a General Partner at AC Ventures. Larry is also a non-executive director of several not-for-profit organisations.

STAFF



Toby Swingler

Chief Executive Officer

Toby has more than 20 years' experience across the telecommunications, information technology and energy sectors. He spent seven years as an investment analyst for the Bass Group before joining CERI as CEO where he helps founders to commercialise high-knowledge, high-value ideas.



Elizabeth Blaxell

Executive Officer

Liz works across a range of CERI's operations including the mentoring program, partnerships, funding rounds and communications. She works closely with CERI's resident startups to understand the support they need to achieve success.



David Smith

Programs & Digital Executive

David manages the CERI courses ensuring the speakers, content and participants are aligned to CERI's mission of empowering the innovations of the future. He is responsible for building out and maintaining CERI's digital infrastructure to ensure the digital processes are simple and efficient.



Jennifer Halton

Director

Jennifer is Associate Dean (International) at the Western Australian Academy of Performing Arts. Her interests in entrepreneurship lie at the convergence of STEM and the creative arts, and how multidisciplinary research and commercial collaboration can enhance innovation and entrepreneurship skills.



Mollie Clement

Events & Programs Coordinator
Admin Assistant

Mollie facilitates innovative entrepreneurial programs and events for researchers, academics, and students. She uses her expertise in tourism, events, and hospitality to ensure smooth operations and strong stakeholder relationships.

CERI AT A GLANCE IN 2023



\$1.85M+
RAISED BY CERI
RESIDENTS



129+
PROGRAM GRADUATES



8
RESIDENT COMPANIES
AT YEAR END



26
INTERNS ENGAGED BY
STARTUPS



34
MENTORING PROGRAM
PARTICIPANTS

PROGRAMS

ENTREPRENEURIAL MINDSET BOOTCAMP

The CERI Entrepreneurial Mindset Bootcamp is a two-day training program, focusing on the heart, head and hand, to give a well-rounded understanding of the entrepreneurial journey. It equips participants with foundational entrepreneurial skills and a problem-solving mindset. Through experiential learning and interactive activities, the course offers hands-on experiences and introduces various techniques to proactively address real-world problems.

The program was updated for 2023 to better align with the participants and provide a simple framework of purpose, mindset and tools derived from internationally renowned entrepreneurial programs, including those offered by MIT and Stanford University.

The lessons and activities were interspersed with insights from resident company founders and videos from former CERI guest entrepreneurs. This provided participants with relatable anecdotes on a variety of topics and what it takes to become a successful startup founder.

With **44.7% of participants either completing or having a post-graduate degree or higher**, the program continues to align with CERI's goal of empowering deep knowledge innovators to create the future industries of Western Australia.

"I highly recommend this course for every entrepreneur who wants to develop a growth mindset and unleash his or her potential. CERI bootcamp experience is transformational and will make sure you're on track for success. I thought being an entrepreneur was like walking a lonely path only until I attended the bootcamp."

Neetha Lakshaman, Nutrition Startup Founder



July 2023 Bootcamp participants

PROGRAMS

CONCEPT TO CREATION



Anna Faber

“It has been an absolutely fantastic journey in the CERi Concept to Creation Program. I have gained invaluable insights into myself as an innovation driver, a challenger of the status quo, and a potential future entrepreneur. Additionally, I have deepened my understanding of using the heart and mind in the business world.”

Anna Faber, Forrest Research Scholar & PhD Synthetic Biology at UWA

The Concept to Creation 11-week Course is a comprehensive program led by industry experts that equips participants with essential entrepreneurial skills, whether they are launching a startup or contributing to an existing team. Designed to unlock the commercial potential of research or startup ideas, it fosters a deep understanding of key business skills.

The top three participants from the first cohort of 2023, judged through a competitive pitching process, were awarded \$10k, \$6k, and \$4k respectively thanks to Lotterywest IdeaStarter, part of Spacecubed's Innovative Society Initiative and Fund.

Through generous support from The Malka Foundation, the top three pitches for the second 2023 cohort will each be awarded \$5,000 grants to help them deliver their innovative solution.

First Cohort Finale Pitch Winners

First Place: Causal Dynamics - Max van Someren, Ashkan Rafiee and Nitin Repalle

Using artificial intelligence to bring confidence to investors backing renewable energy projects required to achieve net zero by 2050.

Second Place and People's Choice Award: Vernico Pharmaceuticals - Andrew Currie and Tobias Strunk

Developing evidence-based treatments using ethically and sustainably sourced coconut oil to prevent skin damage and infections in high-risk infants and children.

Third Place: FritzLab - Anna Faber

Tackling marine plastic pollution by producing the fastest plastic-degrading enzymes with the fastest-growing, marine bacterium in the world.

PROGRAMS

CUSTOMER DEVELOPMENT MASTERCLASS

“It was a hell of a ride and made so enjoyable with a wonderful cohort and great mentor. There was so much learning through real life/time examples and informal chats. The networking and support you receive from your cohort is the cherry on top. So grateful.”

Debbie Staub, Startup Founder & Education Consultant

The Customer Development Masterclass, led by Andy Lamb, is an 11-week program designed to help startup founders find and validate their market, and create a business model that delivers value to customers.

The 2023 course, made possible by The Malka Foundation, taught participants from two cohorts how to test their ideas with real customers using a structured framework, enabling them to de-risk and find innovative startup strategies in a customer-centric approach.

The course covered the essentials of validating customer problem/solution fit, developing and adjusting business models, and launching businesses in the real world.



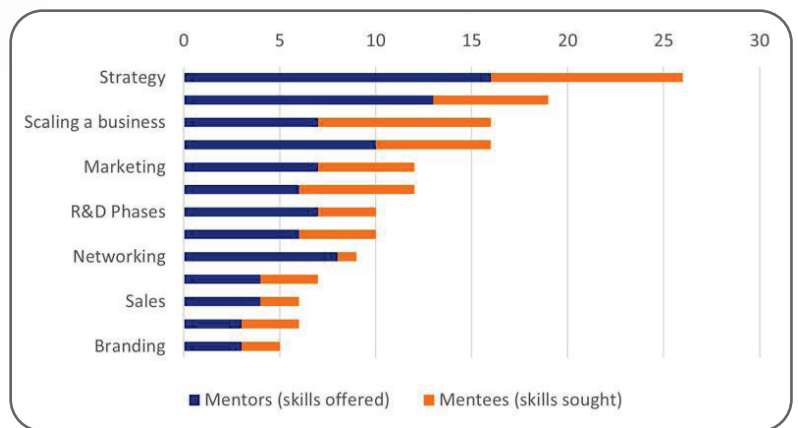
Debbie Staub and Abbey Piggott

PROGRAMS

MENTORING



CERI Mentoring Program participants



Mentoring skills sought after in CERI's 2023 program

CERI's mentoring program was originally based on the MIT Venture Mentor Program, when it began around seven years ago.

Considerations were made for specific circumstances that CERI Alumni faced within the Western Australian startup ecosystem, and the program catered for startups at all levels of their development.

In 2023, CERI had 34 participants in the program. They utilised the MentorLoop platform to connect, meet and learn from each other. They also had the option to meet offline.

The most sought after skills from mentees were strategy, scaling a business, capital raising, business model and product development.

Thank you to each of the mentors who brought a range of industry and innovation experience to support the mentees.

All mentees are CERI Alumni members, while mentors are required to have five years work experience in their profession.

Please direct expressions of interest as a mentor or a mentee to:
Liz Blaxell: liz@ceri.org.au

“My mentor is a good match for the specific points that I'd like to discuss with someone including business development and managing an early stage team. He is a knowledgeable person who was easy to get along with. I look forward to our ongoing discussions.”

2023 CERI Mentee

PROGRAMS

RESIDENCY

In 2023 CERI welcomed three new resident companies:

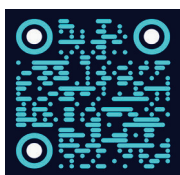
- Ucarbon - sustainability accounting and disclosure
- Novolo - functional ingredients from coffee waste
- Causal Dynamics - AI for the energy transition

During the year, residents Triphasic Heart Pump and Exodus Space Systems graduated from CERI.

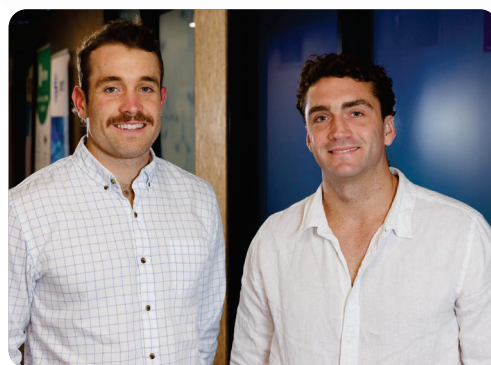
At year's end CERI had eight resident startups who were focusing on a range of disciplines including health, advanced industry - AI, food + agriculture, and climate + energy.

CERI Residency is a competitive and selective program for eligible CERI alumni with a registered startup.

Residents gain access to a centrally located office space for 12 months for a minimal amenity fee, payable monthly. There is an option to extend occupancy, subject to demonstrable company growth, community collaboration and market demand.



Learn more about
CERI's Startups



Ucarbon - Will Godwin and Brodie Stewart



Causal Dynamics -
Max van Someren, Nitin Repalle and Ashkan Rafiee



Novolo - Hugh Nguyen and Chirag Desai

MIT REAP



Toby Swingler
presenting at MIT REAP

The West Australian innovation and entrepreneurship community, including CERI had an incredible opportunity to be part of the MIT REAP - Regional Entrepreneurship Acceleration Program when it came to Perth in June. This initiative by MIT Sloan School of Management, empowers communities worldwide to strengthen their entrepreneurial ecosystems.

Team WA, funded by Woodside and Rio Tinto won the right to host the third workshop series and associated events. 90 global participants from MIT's two-year REAP program, including WA, Hungary, Brazil, the Dominican Republic, and four US capital cities were in Perth for the workshop. The program included 17 events and 1,000 event participants.

As part of CERI's collaboration with the program, a group of guests on the Perth Medical Innovation Tour visited the CERI offices. Several resident medtech startups showcased some of the impressive work being done in WA with a series of mini-pitches by Lixa, Isopogen, Triphasic and U-CAN.

ENGINEERS AUSTRALIA



Innovative Mindset Masterclass participants

Inspiration, fear, timing, and importantly "What not to do" were some of the many topics that were explored in the Innovative Mindset Masterclass in partnership with Engineers Australia held in August.

Facilitated by Andy Lamb, participants were also joined by CERI alumni guest speakers Nader Issa – Terra15, Rasoul Hejazi - digitAiS and Justin Chong – Triphasic Heart Pump who shared their journeys and the important lessons they have learned along the way. CERI Founder and Executive Chairman Charlie Bass also shared the inspiration behind CERI.

Many thanks to Engineers Australia's Susan Kreemer Pickford and Susie Watterston who made the event possible.

EVENTS

SPEAKER SERIES

This year, CERI embarked on a Speaker Series to bring some of the leading voices in the Western Australian and international startup ecosystems to the CERI community.

There was a wide array of companies represented including:

Purpose Ventures - a Perth-based venture capital fund backing the next generation of entrepreneurs and innovators.

Birchal - a crowd-sourced funding intermediary which boasts around a 75% share of the Australian crowd-funding industry.

Future Green Solutions - a biotech research company revolutionising the way we think about waste by upcycling low-value organic materials into high-value products through innovative technology, utilising the black soldier fly.

CERI also hosted special guest and personal brand expert Jung Park. Thank you Jung for the energy and authenticity you brought to your workshops.

CERI is very grateful to all speakers for sharing their expertise, learnings and time. The following speakers also presented to the CERI community.



Zvi Guterman
Founder Cloudshare

Zvi Guterman shared his journey, a true lesson in persistence and the determination required to build a successful business and gain venture capital funding.

“The first 48 (VCs) said ‘no’.”

The audience was enthralled by Zvi’s rollercoaster journey at CloudShare which saw a capital raise through various rounds totalling \$26m.

Later, with the company on the verge of collapse, Zvi bought it back from investors for \$4 and transformed it into a \$100m+ company.



Dr Kath Giles
Chief Executive OncoRes Medical

Dr Kath Giles gave us a wonderful insight into her career journey and many of her learnings along the way.

OncoRes Medical is developing an intraoperative imaging technology to provide surgeons with real-time assessment of tissue microstructure.

Kath gave a very personal take on her ‘why’ and how the sacrifices that her father made in giving up his career to move the family to Australia had influenced her career decisions.

She also highlighted the importance of having strong values within an organisation. She discussed how these values allowed her team to grow from 18 to 38 in a short amount of time, while still retaining a strong culture.

EVENTS

SPEAKER SERIES



Sorin Grama

Founder Greentown Labs

Sorin Grama provided an inspiring overview of the work he has done developing the largest climatetech incubator in the US, in a livestream to CERI from Boston.

His company Promethean Power Systems was also a founding company of Greentown Labs.

Sorin's discussion focused on the long startup journey, customer proximity, multi-generational leadership, and the importance of communities - highlighting that there is a role for targeted and collaborative climatetech incubation in Western Australia.



Hayden McFarlane

Sales Operations Manager MIT
The Engine

CERI hosted an enlightening session with Hayden McFarlane from The Engine built by Massachusetts Institute of Technology (MIT).

Hayden discussed the philosophy behind Boston positioning itself as a "Tough Technology" Hub. He talked through some of the projects their residents are working on with everything from needle-less vaccines, flour made from mushrooms to fusion energy reactors.

With a focus on climate change, human health and advanced systems, The Engine is deploying patient capital with an 18-year time horizon to help address urgent global problems.



Professor George Foster

Stanford University Graduate School of
Business Professor

Stanford University Graduate School of Business Professor George Foster shared his findings from his research project, which explores the highs and lows experienced by new ventures at different stages of their journey.

George said:

"Make original mistakes."

This perfectly captured the essence of innovation and learning from the challenges that startups face. This mindset is crucial for new ventures striving for success.

PARTNERS

CERI works closely with several valued partners. This has created a collaborative community that is ideal for connecting business partners to startup entrepreneurs - Western Australia's future business leaders.

These partnerships are integral to transforming early-stage business concepts and helping to shape the face of future industries.

CERI is very grateful to each of these partners. Many support CERI through directing participants to CERI's programs and also providing financial support to CERI and its startups.



THE TORRESAN GROUP



PARTNERSHIPS

ECU

Integrated Business Innovation Challenge

This year, CERI partnered with Edith Cowan University's (ECU) School of Business and Law, teaming CERI startups with groups of Postgraduate Business School students for the Integrated Business Innovation Challenge Unit.

Coordinated by Professor Pi-Shen Seet, four CERI startups and 16 ECU students, split across the startups, worked together.

There were two main components to the project:

- Conducting a comprehensive market research study to better understand the potential market and identify the market opportunities for the firm's product or service.
- Based on the market research, the teams developed a market-entry or strategic development plan, including implementation recommendations that could include financial analysis.

Each student group presented their findings to their startup, with some impressive outcomes. These included discovering a new primary target market for one startup and providing critical data to another.

“The students provided excellent data which highlights key information that fed into Ucarbon’s overall strategy and provided clarity on the future. The marketing students demonstrated a high level of competence once direct, regular contact was made.”

Brodie Stewart, Ucarbon Co-Founder

STARTUPS

ACHIEVEMENTS

Awards and Funding

Gene-S CERI Resident and Mentee

CERI resident Gene-S received investment from Purpose Ventures to take them to the next stage of developing a DNA test to ensure that patients receive the right medication, at the right dose, at the right time.

Terra15 CERI Alumni

Terra15 secured \$1.473 million in funding from Invest & Trade Western Australia as part of the Investment Attraction Fund. They were one of 40 recipients from more than 200 applicants.

Triphasic Heart Pump CERI Alumni

Triphasic was awarded a Local Capability Fund: Health and Medical Life Sciences Industry grant. Triphasic was also one of seven WA-based health and medical life sciences companies to gain internationally-recognised quality standards required to supply products to markets in Australia and overseas.

Laconik CERI Alumni

Laconik was one of 43 recipients of 2023's WA Government Innovation Booster Grants. Laconik focuses on developing disruptive agricultural technologies that benefit growers and the industry. This grant will help to improve data collection and analysis of on-farm trials, bringing advantages to farmers and reducing environmental impact.

Conifr CERI Alumni and Mentee

Conifr was named Startup of the Year winner for the 2023 INCITE Awards for its Emissions Management Software.



CERI resident Gene-S - Svetlana Baltic and team

FUNDING

THE MALKA FOUNDATION

The Malka Foundation generously supports entrepreneurship education, innovation and leadership in Western Australia. This generosity extends to supporting several CERI programs and activities.

In 2023, The Malka Foundation's funding supported two cohorts of CERI's Customer Development Masterclass.

CERI startups also benefitted from this support through a funding round offering \$5,000 Startup Support Packages.

Applications for the funding round were judged by an independent panel and nine startups each received a grant to assist with product development, R&D and early-stage commercialisation.

Following are The Malka Foundation Funding Round 2023 recipients.



CAUSAL DYNAMICS

Causal Dynamics is developing an AI-enabled application platform for energy optimisation to accelerate the usage of renewable energy at utility scale.



GENE-S

Gene-S is developing a genetic test that enables doctors to prescribe the right medication, at the right dose for their patients. The Gene-S kit will provide information on medications used in anaesthesia, to manage mental health conditions, pain, and cardiac conditions.



LIXA

Lixa aims to solve Antimicrobial Resistance (AMR) for anyone, anything, anywhere. It is a biotech company aiming to develop superior and scalable AMR solutions.



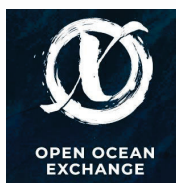
MYCBOO

Bio-based toys aim to transform the way children understand play in a plastic-free society. Mycboo is working on an innovative plastic-free solution that is first in the market: magnetic construction/balance mycelium and bamboo playkit.



NITRONIC

Nitronic is developing technology to empower farmers to produce zero-carbon fertilisers. Nitronic's technology does not require fossil fuels, hydrogen generation and can be developed in modular systems scalable to demand.



OPEN OCEAN EXCHANGE

Open Ocean Exchange (OOX) is focused on the digitisation of the live seafood export trade to help facilitate improved efficiency and accessibility of the market for users. OOX is an independent and secure B2B digital market exchange to enable vetted buyers, sellers and their agents to communicate, negotiate and discover price across multiple platforms, anywhere in the world.



TRIPHASIC HEART PUMP

Triphasic has developed a pulsatile pump to accurately replicate physiological pulse profiles of varying arteries for use in experimental research, drug discovery and device testing.



U-CAN OSTOMY SYSTEMS

U-CAN OSTOMY SYSTEMS has developed a biodegradable, impermeable and flushable film (BIFF) that enables the manufacture of the world's first fully flushable non-plastic stoma bags, sanitary pads and incontinence pads which can meet global flushing standards.



YOLK SPF

Yolk SPF is an innovative mineral-based sunscreen, revolutionising sun protection. Its unique formula utilises 50% less zinc than competitors, providing a lightweight, gentle solution for sensitive skin and eyes, while enhancing overall skin appearance.



FUNDING

LOTTERYWEST IDEASTARTER FUNDING

Lotterywest IdeaStarter, part of Spacecubed's Innovative Society Initiative and Fund exists to build a stronger culture of innovation and entrepreneurship in Western Australia. It offers grants to eligible WA organisations of up to \$15,000 for each participant in their program.

The funding can be used toward any eligible expenses that support the existing accelerator or incubation program or service to develop innovation 'mind-sets', 'skill-sets', or 'tool-sets' by testing, validating or progressing an 'early stage' innovative idea.

CERI awarded funding to the winners of three cohorts of the Concept to Creation course.

The recipients were:

Causal Dynamics

digitAiS

FritzLab

Mycboo

Novolo

RITRUT

Ucarbon

Vernico Pharmaceuticals

FUNDING

CERI START

CERI Start is intended to provide eligible CERI alumni with micro-seed funding to assist with product development, R&D and early-stage commercialisation support.

The Torresan Group and Charlie Bass generously support the CERI Start program. CERI's permanent DGR1 status allows the fund to grow through high-impact philanthropic donations.

The program offers SAFE Notes, to eligible startups through a competitive process.

CERI is very pleased to report that in 2023, a previous CERI Start recipient converted their SAFE Notes to equity.

Congratulations to this startup.

2024

Goals for 2024

CERI is looking forward to consolidating the work it has done in 2023 as it moves into 2024.

It will continue to adapt its offering to align with prospective program participants’ requirements, as well as WA’s evolving innovation ecosystem to provide more bespoke programs, on a broader range of topics.

CERI plans to expand its scope to focus on the whole startup journey, rather than just early-stage education. This focus will extend to working with high-knowledge, high-value people who might be more advanced in their innovation journey. We welcome discussions with interested participants.

Opportunities to sponsor and engage with CERI

CERI has a range of opportunities for individuals and organisations to engage, including through its programs and events.

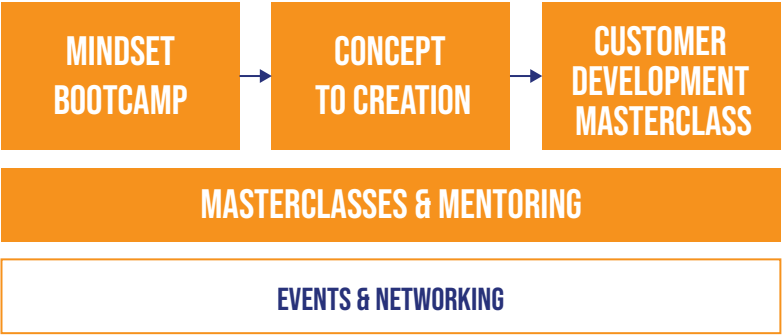
For more information on CERI’s programs, events or sponsorship opportunities visit:

ceri.org.au
or email Liz Blaxell: liz@ceri.org.au

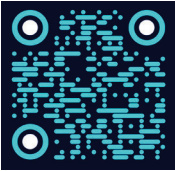
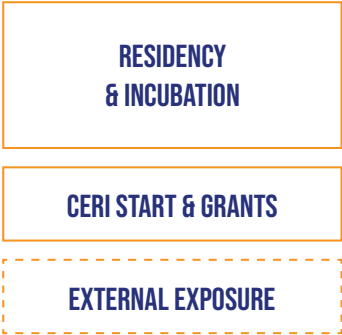
Upcoming Programs 2024

Program	Date
Entrepreneurial Mindset Bootcamp	Mon & Tues 12 - 13 February
Concept to Creation	Thurs 14 March (weekly for 11 weeks)
Customer Development Masterclass	Tues 19 March (weekly for 11 weeks)
Demo Day	Tues 11 June

CERI PROGRAMS



FURTHER ASSISTANCE



Learn more about
CERI's programs

WE'D LOVE TO HEAR FROM YOU

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