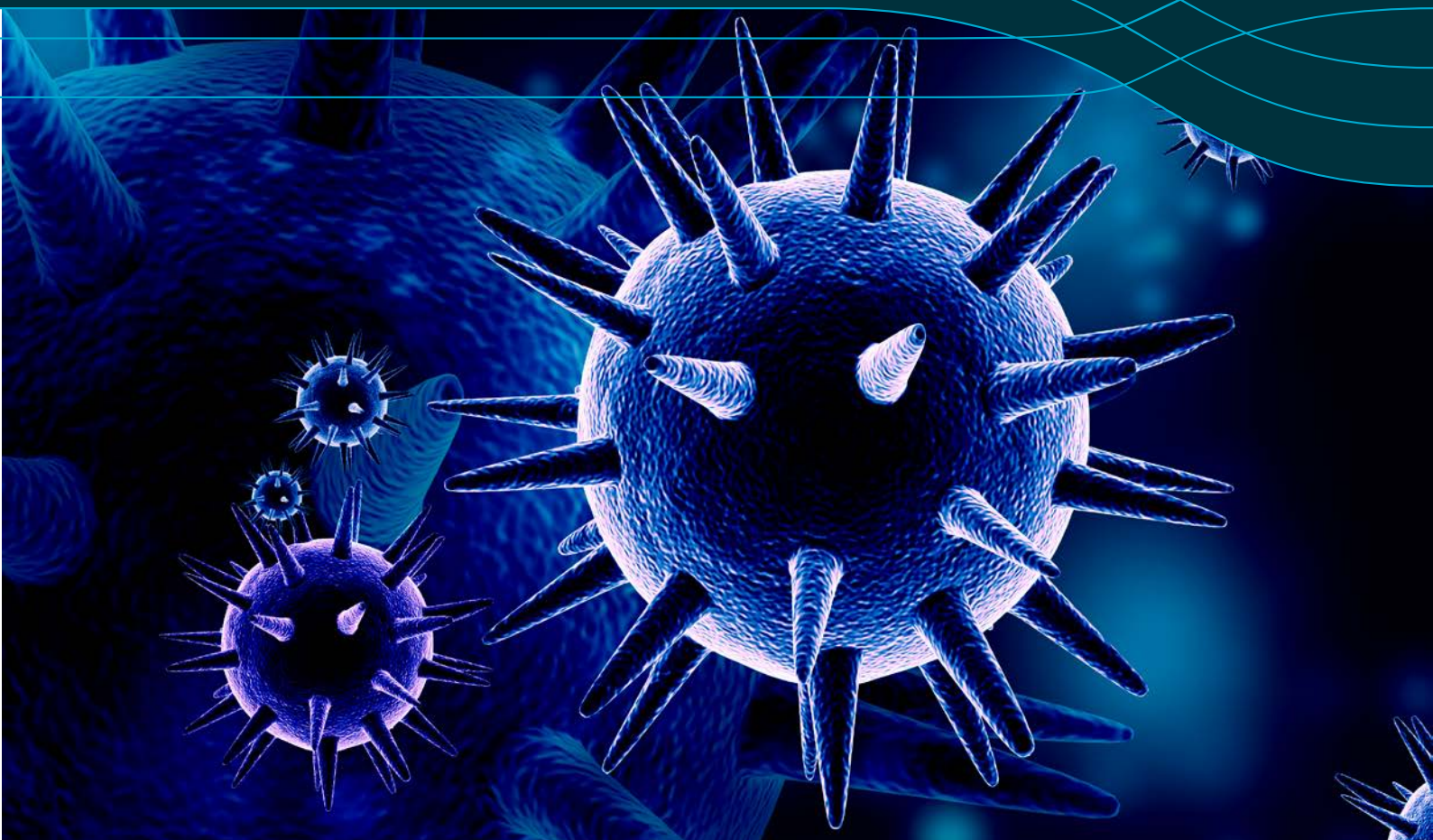


# CSIRO Science Leader

## Emerging Infectious Diseases

Information for applicants

At CSIRO, we solve the greatest challenges through innovative science and technology.



# Introduction

## CSIRO's Chief Executive

### *Larry Marshall*

I've spent a lifetime believing in the power of science to transform economies, countries and lives for the better, and there's no better place in Australia to see that in action than at CSIRO.

Our Science Leader program is a significant investment and commitment to solving today's challenges by imagining tomorrow's solutions.

As Australia's national science agency, we're also securing Australia's future by developing the next generation of STEM leaders, who will reinvent and create new industries for Australia and the world.

To solve the greatest challenges today and into the future, we recruit not only the best and brightest, but also those who are passionate, creative and driven to make a difference with their science and mentor the next generation.

We build teams of talented individuals whose diversity of experience, expertise and perspectives are the compass to guide us through the ambiguity of innovation.

At CSIRO, your knowledge, expertise, relationships and novel capabilities can develop the breakthrough science and cutting-edge technology platforms that will deliver unique value to Australia.

We look forward to welcoming you to the team.



## CSIRO's Chief Scientist

### *Cathy Foley*

Australia's future prosperity will be fuelled by science. Science that solves the greatest challenges while creating new industries, new jobs and shapes the minds and aspirations of our future leaders.

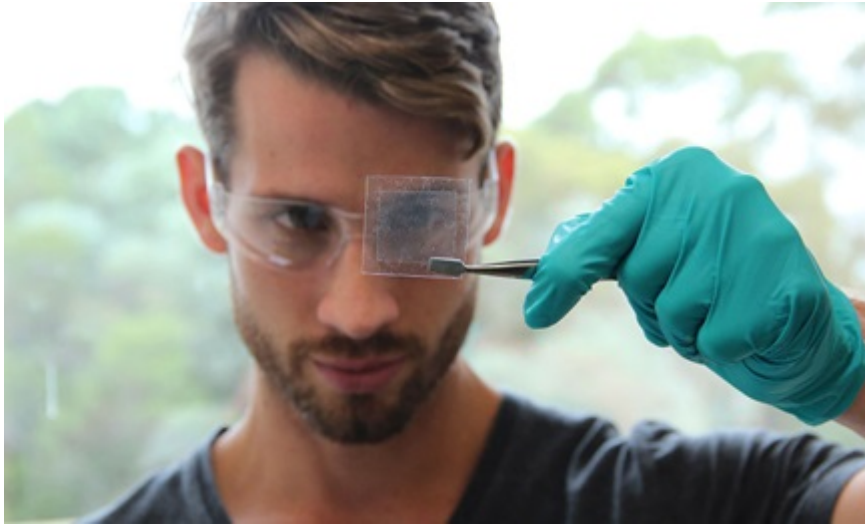
As Chief Scientist at CSIRO, I'm passionate about the brilliant science done by our world-class researchers, enabled by collaboration across disciplines and with industry, government and academia.

As a CSIRO Science Leader, you'll share my passion for developing new relationships and mentoring our future science leaders.

I'm excited to work with you on bringing new capability and expertise into CSIRO to further grow our culture of science excellence.



# Collaborate with talented people to solve the world's biggest challenges



**Our purpose:** At CSIRO we provide innovative science and technology solutions to national challenges and opportunities that benefit industry, the environment and the community.

You can make a real difference, in an environment where we spark off each other, learn from each other, trust each other and collaborate to achieve more than we could individually - in a supportive, rewarding, inclusive and truly flexible environment.

*Be proud of what you do - be part of a better tomorrow.*

Grow your skills. Apply your talent. Broaden your horizons.

## Join the CSIRO team

The Commonwealth Scientific and Industrial Research Organisation (CSIRO) is one of the world's largest and most successful publicly funded research and development organisations and is committed to complementing its world-class science and engineering capabilities with outcome-focused research that will generate economic, environmental and social benefits for Australia in a global context. We maximise the impact we deliver for the country by focusing on solving the greatest challenges.

As Australia's national science and engineering agency our innovation and excellence places us in the top ten applied research agencies in the world. We're the people behind Wi-Fi, soft contact lenses and the Hendra virus vaccine – and we're Australia's leading patent holder.

**Vision:** Australia's innovation catalyst, collaborating to boost Australia's innovation performance.

**Mission:** Create benefit for Australia through impactful science, engineering and innovation

## Our facilities and physical infrastructure

Doing excellent science and engineering, and delivering services to the benefit of Australia requires appropriate physical and cyber-physical infrastructure. We have over 50 locations Australia-wide in metropolitan and regional areas as well as internationally. We continue to explore advancements in technological solutions to improve operations.

# Our leaders and their careers



‘The things that we do (at CSIRO) are captivating and continue to amaze every day; the people are so passionate and are here for the right reasons and the Australian public want us to be here to do the things we do.’

‘We have everything you need to bring ideas to life.’

‘It is a place where you can dare to dream.’

## Benefits our staff value

- Continuous career development
- CSIRO specific experienced leadership skills development
- **Balance** in their lives via flexible work practices
- **Diversity** and inclusion of ideas, individuals and cultures
- Generous leave conditions

## Where are our staff?

We have more than 5,000 staff spread over 50 sites across Australia’s cities and regions and internationally.

## What do we do?

We do research from the bottom of the ocean to deep space, from a micro to a mega scale from agriculture to digital. And we are custodians of some of Australia’s most valuable facilities and collections.

The breadth of our research allows us to tackle issues from a multi-discipline perspective.



# CSIRO Science Leader Program

At CSIRO, we solve the greatest challenges through innovative science and technology by harnessing the incredible intellectual power and expertise of our people, collaborators and partners

The CSIRO Science Leader program attracts the best researchers from across the globe to deliver outstanding translational science and engineering impact. The purpose of the CSIRO Science Leader Program is to capture new capability and technology into areas which have been identified as strategic, and to assist our business units to manage and develop their capability for the future.

Over their five year appointment, CSIRO Science Leaders play an active role within and across business units and contribute to business goals through both scientific excellence and the translation of research outcomes into impact. They foster a culture of excellence in their teams and peers and have sufficient experience to supervise and mentor early-career researchers.

In addition to the Science Leader's salary, the Science Leader has generous operating funds, and support for two three-year Postdoctoral Fellowships and two three-year Postgraduate Students top-up scholarships.

Approved CSIRO science leader priority areas will be externally advertised as competitive positions on [CSIRO's Vacancies site](#) in consultation with the CSIRO Science Council and business unit.

## Eligibility and essential selection criteria

The program is directed towards mid-career researchers who have between 10 to 15 years of post-doctoral experience.

CSIRO Science Leaders need to:

- have established expertise and knowledge aligned to the strategic priority areas; and
- bring novel capability into CSIRO;

*Under policy, to be appointed to a position in CSIRO you must meet all the essential requirements.*

### Essential Criteria:

#### The Science Leader will:

- have experience in data integration and analytical technologies relevant to emerging infectious diseases in human/animal/interface in the field of surveillance, diagnostics, animal or human epidemiology;
- be recognised by their peers as making a significant contribution in their field of science or engineering;
- have a track record of translating scientific outcomes into impact;
- demonstrate the ability to collaborate at the intersection of disciplines;
- bring an extensive network which they will actively share across the whole organisation, engaging and satisfying multiple stakeholders;
- have the ability to mentor a team of talented postdoctoral fellows and postgraduate students and attract distinguished visiting researchers;
- hold an interest in exploring the development of autonomous technology supporting real time monitoring, analysis and reporting;
- Have a proven ability to work in resource poor settings and to build and lead high performing interdisciplinary teams;
- Have a demonstrated ability to manage complex projects involving multiple partners, countries and disciplines.

**Special Requirements:**

The successful candidate will be asked to obtain and provide a National Police Check or equivalent. Please note that individuals with criminal records are not automatically deemed ineligible. Information disclosed in a National Police Check will only be considered if it is relevant to the inherent requirements of the job.

A pre-employment medical examination is a requirement of this position.

Applicants who are not Australian Citizens or Permanent Residents, if successful, may be required to undergo additional security clearances, which may include medical examinations and an international standardised test of English language proficiency (i.e. IELTS test).- <https://ielts.com.au/>

## Priority area and duties

The science leader will be responsible for conducting innovative research in emerging infectious diseases (EID) leading to scientific achievements that are aligned with CSIRO's strategies. You may be engaged in scientific activity ranging from fundamental research to the investigation of specific industry or community problems. You will be expected to build and maintain networks, play a lead role in securing project funds, provide scientific leadership and pursue new ideas and approaches that create new concepts. Science Leaders are expected to foster a culture of excellence in their teams and peers and to supervise and be role models for our early-career researchers. The Science Leader role is further supported with funds to support two postdoctoral researchers and two PhD students.

The Science Leader will bring a unique combination of pathogens, technology and/or clinical expertise which can directly influence platform development and the types of networks the business unit can facilitate. The position will be based at our CSIRO laboratory in Townsville and will be a joint appointment with James Cook University (JCU). This will serve to more deeply embed CSIRO EID research in the human and animal health space and link our existing southern based focus at the Australian Animal Health Lab (AAHL, Geelong) with this new northern Australia focus. There is an explicit expectation that the successful candidate will establish strong research collaborations with researchers at JCU and AAHL as well as other institutions across Australia. It is expected that this will enable CSIRO to be more effective in working across the full One Health spectrum.

### Priority area:

The global incidence of zoonotic infectious disease outbreaks has increased from ~400 in the 1980s to >1200 in the period 2006-2010. The increase has been driven by a variety of factors including human encroachment into wildlife habitats, increasing urbanisation and climate change; Asia in particular is a global hotspot for zoonotic infectious disease emergence.

Australia is experiencing a surge of development activity, particularly in the North. This is linked to expanding agricultural development, expanding natural resource exploitation, growing trade and connectedness to south - east Asia and the world, expanding human populations and urbanisation and increased connection of indigenous communities. In the South, expanding cities and loss of native vegetation is seeing bats becoming increasingly urbanised and there is a considerable expansion in peri-urban livestock and poultry agriculture. In both the North and South the opportunities for the intersection of livestock/poultry, wildlife and humans has increased markedly over the past 20 years. All these factors change the risk profile for spillover events. These situations are known to result in disease outbreaks in Asia and Africa on an ever-increasing basis. Australia is at an increased risk for similar disease events occurring particularly in Northern Australia, increasing the risk of disease for troops and the wider population.

Our ambition is to establish a network of clinical and field-based research expertise in emerging infectious disease which is well integrated with health services and the Australian Animal Health Laboratory in Geelong and able to support active surveillance of disease threats. Current surveillance activities are labour intensive, patchy and opportunistic. We anticipate developing novel surveillance platforms that utilise autonomous technologies and analytical platforms that integrate across multiple sources of data.

Working in conjunction with the James Cook University Institute for Tropical Health and Medicine in Townsville/Cairns and local and regional health services, the Science leader will build a suite of well-trained researchers that are well integrated into our research teams elsewhere in Australia.

## Duties

Research Scientists at CSIRO conduct innovative research leading to scientific achievements that are aligned with CSIRO's strategies. You may be engaged in scientific activities ranging from fundamental research to the investigation of specific industry or community problems. You will have the opportunity to build and maintain networks, play a lead role in securing project funds, provide scientific leadership and pursue new ideas and approaches that create new concepts.

- Identify, develop and adapt new data integration and analytical technologies relevant to emerging infectious diseases in human/animal/interface in the field of surveillance, diagnostics, animal or human epidemiology.
- Act as a trusted advisor, based on knowledge of client's business and an understanding of their needs.
- Anticipate industry and/or community needs and market direction through client liaison/networking, and identify and adapt quickly to changes.
- Within broad guidelines, use professional expertise, knowledge of other disciplines and research experience/achievements to formulate, develop and complete an approved research program with general direction as to the aims of these activities.
- Communicate research results to clients and the scientific community through oral and written reports, which may include the preparation of documents for patent applications.
- Provide advice to policy makers and inform and transfer knowledge to non-scientific audiences.
- Lead and supervise staff to ensure that experiments are established in accordance with the research design and are completed within the agreed timeframes and budget.
- Undertake feasibility studies, demonstrating a considerable degree of originality, creativity and innovation in solving problems and introducing new directions and approaches.
- Communicate openly, effectively and respectfully with all staff, clients and suppliers in the interests of good business practice, collaboration and enhancement of CSIRO's reputation.
- Work collaboratively as part of a multi-disciplinary, regionally dispersed research team, and business unit to carry out tasks in support of CSIRO's scientific objectives.
- Adhere to the spirit and practice of CSIRO's Code of Conduct, Health, Safety and Environment plans and policies, Diversity initiatives and Zero Harm goals.
- In addition to the above duties, this role will involve:
  - Financial and asset management responsibilities, including financial delegations
  - Access to personal or other sensitive information
  - Access to commercially sensitive information of CSIRO and/or research or commercial partners
  - Access to hazardous materials
  - Operation of a vehicle or machinery requiring a licence
- Other duties as directed.



## Conditions of employment

**Leave:** Four weeks of annual recreation leave and 15 days of sick/carer's leave apply.

**Flexibility:** CSIRO's [Balance](#) initiative offers all employees the opportunity to balance their work and personal lives.

**Diversity:** We are working hard to recruit diverse people and ensure that all our people feel supported to do their best work and feel empowered to let their ideas flourish. [Diversity and Inclusion Strategy](#)

**Salary:** An attractive salary package will be offered.

**Reference Number:** 63160

**Tenure:** Indefinite with an initial five years specific science leader funding.

**Location(s):** Townsville, Queensland

Relocation and immigration assistance will be provided to the successful candidate where required.

## How to apply

Please apply online at <https://jobs.csiro.au> entering the reference number and uploading in Microsoft Word your CV/resume, and a cover letter outlining your relevant experience and your motivation for applying. Please ensure you address both the eligibility and selection criteria for the CSIRO Science Leader Program as well as any selection criteria listed for the specific priority area. In your CV please include the contact details of three referees. Referees will only be contacted after prior consultation with you at which time please ensure that your referees are willing to provide reports when contacted.

## Contacts

If you are considering applying for this position please contact Dr Paul De Barro, 07 3833 5720, [Paul.Debarro@csiro.au](mailto:Paul.Debarro@csiro.au) to discuss the priority area, role and expectations. Dr Rob Grenfell, 03 9662 7322, [Rob.Grenfell@csiro.au](mailto:Rob.Grenfell@csiro.au).

Please do not send your application directly to Dr De Barro or Dr Grenfell as your application may not be considered by the selection panel.

Should you have difficulty applying please contact [careersonline@csiro.au](mailto:careersonline@csiro.au) or call 1300 984 220 during Australian business hours.

*NB: As part of the selection process candidates may be asked to do abilities testing and/or a personality questionnaire and/or to give a presentation to staff.*

*On acceptance of an offer of a position with CSIRO the appointee will be need to provide proof of their identity, give permission for verification of their tertiary qualifications and apply for a security check or Australian Federal Police check.*

## CONTACT US

**t** 1300 984 220

**e** [careersonline@csiro.au](mailto:careersonline@csiro.au)

**w** [www.csiro.au](http://www.csiro.au)

## WE DO THE EXTRAORDINARY EVERY DAY

We innovate for tomorrow and help improve today – for our customers, all Australians and the world.

Our innovations contribute billions of dollars to the Australian economy every year. As the largest patent holder in the nation, our vast wealth of intellectual property has led to more than 150 spin-off companies.

With more than 5,000 experts and a burning desire to get things done, we are Australia's catalyst for innovation.

WE IMAGINE.

WE COLLABORATE.

WE INNOVATE.