To prosper, Australia needs to build an economy and a workforce able to face our future challenges. Science, technology, engineering and mathematics (STEM) underpin almost every aspect of societal advancement and are the foundation of our past, present and future successes. The future generation of STEM professionals in Australia need to be supported to help Australia prosper.

A high-quality STEM ecosystem must be supported by policies to develop, nurture and support early- and mid-career STEM professionals so that they can remain and thrive in the sector for the benefit of all Australians. Australia requires stable, predictable and strategic investment in STEM, and specifically in our EMCRs, to reap the benefits that flow from a high-functioning STEM ecosystem.

The EMCR Forum’s recommendations and shared commitments are as follows:

1. OUR SHARED COMMITMENT

   The EMCR Forum will endeavour to provide advice on policy that impacts EMCRs in the STEM sector—based on trust, respect and mutual obligation—for the benefit of the greater Australian community.

Recommendation 1: The EMCR Forum stands ready to provide advice to the Australian Academy of Science, parliamentarians and other policymakers on the issues relevant to early- and mid-career STEM professionals in Australia.

Recommendation 2: The EMCR Forum will participate in the development of an international engagement strategy for science, technology and innovation with long-term resourcing to develop a program for early- and mid-career researchers to establish partnerships with international leaders in their field, building networks that will benefit Australia and science globally.

2. SUPPORT FOR STEM TO BENEFIT AUSTRALIA

   Australians have a right to expect that the nation will draw value from its investment in science, including return for the investment in training EMCRs by supporting sustainable research and research careers.

Recommendation 3: The Australian Government develops, in consultation with the EMCR Forum, the Australian Academy of Science, and other learned academies, a best practice framework for responsible research and innovation to guide Australian research and innovation, including:

   a. guidance on the ethical pursuit and use of science and technology
   b. approaches to transparency and evaluation through open science and open data
   c. facilitation of a constant, direct and frank dialogue between EMCR researchers and the community.

Recommendation 4: The Australian Government comprehensively reviews the structure and evaluates the effectiveness of, research support and incentives to ensure maximum benefit is returned while ensuring stable and sustainable career pathways for EMCRs.
3. **NATIONAL CAPACITY BUILDING IN STEM THROUGH SUPPORT FOR EMCRS**

*Australia’s capacity in STEM requires breadth and depth to enable Australians to make rational decisions, and to make a valuable contribution in the search for effective solutions to society’s great global challenges.*

**Recommendation 5:** A strategy is developed that aims to:

a. double the present success rate of research proposals by Australia’s research councils from 20% by increasing investment in STEM
b. cover the full direct and indirect costs of research
c. provide longer-duration research grants, with a focus on providing five-year grants and fellowships to EMCRs enabling more ambitious research to be undertaken
d. enable diverse career paths and opportunities for EMCRs through programs that support transitions between academia, government and industry.

**Investment:** The EMCR Forum supports the Australian Academy of Science in strongly arguing that Australia should increase expenditure on research and development from all sources to 3% of GDP over the next decade.

**Recommendation 6:** Allow Australia to draw from all the talent available by:

a. supporting the national rollout of SAGE, and placing it on a self-sustaining footing within a 10-year period in partnership with the higher education and research sector
b. facilitating action for all EMCRs through the Women in STEM Decadal Plan
c. facilitating an Indigenous STEM Network to assist participation of Aboriginal and Torres Strait Islander EMCRs
d. focusing on professional development and support for EMCRs located in regional and remote areas of Australia
e. ensuring that investment in facilities are appropriate—and are used appropriately—for the teaching of science and mathematics so that it’s engaging, enlightening and contemporary.

**Investment:** The EMCR Forum supports the Australian Academy of Science in its call for investment from the Australian Government of:

- $18 million over 10 years for the SAGE pilot to be rolled out nationally and be self-sustaining by 2030
- $1 million per year to develop a culturally appropriate and targeted program to support Aboriginal and Torres Strait Islander people in STEM.

The EMCR Forum is the voice of Australia’s early- and mid-career researchers (EMCRs), championing improvement in the national research environment through advocacy.

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