Countries need to work together to ensure Antarctic research continues and key questions on the region are answered, researchers say.

In an article published in *Nature* this week, 75 scientists along with policy makers in 22 countries have outlined what they see as the major priorities for Antarctic research over the next 20 years and beyond.

In it they outline six priorities for Antarctic science – the most important scientific questions to be addressed in the region, as well as what they think is needed to achieve them.

One of the report's lead authors, Monash University Professor Steven
Chown, said key areas for scientific research in the region over the next two decades included looking at human impact on the region, understanding the evolution of Antarctic life, looking at the region's history, and the impact of climate change in the area.

"In order to address these scientific areas, researchers and governments must work together, and we must have greater international collaboration," Professor Chown said.

"There also needs to be enhanced investment in science in the region, better environmental stewardship, and more communication around the significance of the region to the public.

"Antarctica's environmental protection measures must be strengthened, as more scientists visit the region and tourist numbers continue to increase."

Professor Chown, School of Biological Sciences, said if environmental protection was not improved the very values that attracted both scientists and tourists to the region would be compromised.

"Tourists value pristine, wilderness landscapes, while scientists rely on unaltered patterns of biodiversity to understand the evolution of life in the Antarctic."

Professor Chown said the paper was timely as Australia was developing its 20-year strategic plan for Antarctica. The terms of reference for the plan include strategies for enhancing globally significant science and the influence Australia has on Antarctica.

"There are worrying signs about the long-term future of Australia's science leadership in the region, for example the number of science projects being supported by the Australian Antarctic Programme has
declined from 142 in 1997/98 to just 62 in 2014."

"Declining support is hugely concerning, and this paper outlines that with a lack of support some Antarctic researchers choose to leave the field. This jeopardises the recruitment and retention of the next generation of researchers."

Professor Chown said Antarctic science was globally important and countries needed to work together to address the issues facing the region.

"Australia has a clear interest in Antarctica and it also has the capability to show leadership globally in the science, environment and policy arenas. An opportunity exists now to grow that leadership to the benefit of Australians and to society globally."