



New Zealand
MICROBIOLOGICAL
Society, Inc.

Professor Ray Geor
Pro-Vice-Chancellor College of Sciences
Massey University
Manawatu Campus
Palmerston North

25 February 2018

Dear Professor Geor

Re: proposal to restructure the Massey University BSc programme

This letter is a submission, on behalf of the New Zealand Microbiological Society (NZMS), on the proposal to restructure the Massey University BSc programme. The NZMS believes that the proposal to abolish the BSc major in microbiology is both shortsighted and misguided. Our opinion is based on several factors, including the increasing importance of microorganisms in human health and well-being, in animal and plant diseases, and in many industries of importance to New Zealand. Therefore we strongly believe there will be an increasing demand for people trained in microbiology.

There are approximately ten times more microbial cells on our bodies than human cells and it is becoming increasingly apparent that the plethora of microorganisms within microbiomes contribute significantly to human health and development. Human health is also threatened, however, by the emergence of microorganisms resistant to multiple antibiotics, and the possible emergence of pandemic strains of viruses such as 'bird-flu' and zika virus. Water-borne and food-borne microorganisms continually pose risks to human health. Humans are also threatened by microbial diseases of plants that could disrupt food supply to a growing global population. Microorganisms contribute significantly to the New Zealand economy through several industries such as the dairy, forestry, and wine industries. In the future there is huge potential for the manufacture of materials by synthetic biology using microorganisms. The combatting of microbial pathogens and the harnessing of microbial cell factories requires an advanced understanding of microorganisms and microbiology.

There is likely, therefore, to be an increasing need for scientists **trained primarily in microbiology**. As President of the New Zealand Microbiological Society I can attest to the fact that there is a vibrant community of microbiologists in New Zealand that requires a pipeline of new graduates to meet employment needs in New Zealand.

Finally, the proposal to abolish the BSc major in Microbiology is contrary to the strength Massey University has in Microbiology: it has an impressive number of highly qualified and accomplished microbiologists amongst its staff. Indeed the past president of the NZMS is from Massey University, as are the 2015 and 2016 recipients of the highest NZMS (Orator) Award.

The NZMS hopes that Massey University has the wisdom to listen to its stakeholders, to reconsider, and to reject the proposal to abolish the BSc major in Microbiology.

Sincerely,

Professor Richard D Cannon MA PhD

President
New Zealand Microbiological Society

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