Speech by NUS President Professor Tan Eng Chye at the Launch of the NUS-Agilent Hub for Translation & Capture Monday, 19 August 2019, 2 pm, University Hall Auditorium

Associate Professor Benjamin Ong, Director of Medical Services, Ministry of Health

Mr Mike McMullen, President and Chief Executive Officer, Agilent Technologies

Associate Professor Eugene Liu, Chief Executive Officer, National University Hospital

Distinguished guests, colleagues, ladies and gentlemen

1. A very warm welcome to NUS! Thank you for joining us on this happy occasion to celebrate the launch of the NUS-Agilent Hub for Translation & Capture.

2. NUS is privileged to partner Agilent, a trusted leading industry player in the life sciences, diagnostics and applied markets, providing laboratories worldwide with instruments, services, consumables, applications and expertise. Agilent's mission is to 'improve the human condition'; this resonates with NUS, as we too, seek to shape the future, impacting and improving lives through transformative education and innovative research.

3. I sincerely hope that Agilent will find a worthy partner in NUS. Over the years, NUS has progressed rapidly to become one of the world's leading universities, and amongst the top universities in Asia. NUS is a large and comprehensive university, with considerable research strengths across a wide range of disciplines; from the sciences, medicine and engineering, to the humanities and social sciences.

4. In translational research, NUS has been actively collaborating with industry in diverse areas of research. Many of these partnerships leverage the research strengths and expertise of NUS as well as that of our industry partners, to find solutions to problems that are important and relevant to our industry partners, as well as to Singapore. The NUS-Agilent Hub that we are launching today is the latest of such partnerships with industry.

5. The NUS-Agilent Hub is a unique model of tightly-integrated academic-clinical-industry collaboration that taps on the biomedical R&D at NUS, clinical expertise at NUH and advanced mass spectrometry technology at Agilent. The Hub will carry out collaborative research that will lead to the development of innovative mass spectrometry-based clinical assays. These assays can potentially help to improve the speed and accuracy of diagnosis for diseases that are prevalent in Singapore and are a major burden on our population.

6. NUS is delighted to have the opportunity to deepen and augment our work with Agilent through the NUS-Agilent Hub. The partnership between NUS and Agilent has spanned many areas from chemical sciences, to environmental sciences and engineering, and biomedical sciences, and has grown from strength to strength.

7. In particular, Agilent and NUS have enjoyed a long-standing relationship in the biomedical field. Agilent has collaborated with the Singapore Lipidomics Incubator on lipids research for more than eight years now. With Agilent's specialised systems, software and mass spectrometry technology, our researchers have been able to deepen

their understanding of the complex interactions between lipids and proteins, as well as the natural variation of lipids in healthy individuals. These insights can help in the discovery of disease biomarkers.

8. The research at the NUS-Agilent Hub will build on the capabilities that have been developed at NUS through the Singapore Lipidomics Incubator, to identify novel biomarkers, which are biomolecules that can reveal the state of health or disease in individuals, using Agilent's mass spectrometry technology. The huge amount of experimental data generated from this study will be processed, analysed and validated by a multidisciplinary team of researchers, engineers and clinicians who will take these new clinical assays from concept to working applications.

9. In addition, Agilent is also collaborating with NUS in cardiovascular disease research. It is a key partner in the NUS Synthetic Biology for Clinical and Technological Innovation, an NUS-led consortium to advance research on novel biological and biologically-based systems with clinical and industrial applications.

10. Biomedical science and translational medicine is one of the key focus areas of research at NUS. With the continued support of industry partners like Agilent as well as our clinical partners in NUH, our researchers are able to carry out cutting-edge bench-to-bedside translational research that may someday, produce new drugs, diagnostics and devices for the prevention and treatment of diseases, especially those that are particularly important to our local population and other Asian communities.

11. I would also like to take this opportunity to also acknowledge Agilent's strong support in developing and training our students. Agilent participates regularly in career workshops and sharing sessions, providing students with insights into trends, challenges and opportunities in their industry. Our students have benefitted greatly from these industry sessions. Likewise, I hope that through these sessions, Agilent has been able to source talents from among NUS students to meet your recruitment needs.

12. Agilent and NUS have jointly trained a number of PhD students under the EDB-Industrial Postgraduate Programme, which aims to develop a pool of postgraduate manpower with the relevant R&D skillsets for roles in the industry. I am pleased to note that as part of their support for the NUS-Agilent Hub, Agilent will be contributing $500,000 towards training PhD students in NUS.

13. In closing, I would like to express my appreciation to everyone involved in making the NUS-Agilent Hub a reality. A big thank you to the researchers and staff from NUS, Agilent and NUH who have worked tirelessly on all aspects of the NUS-Agilent Hub. I would also like to thank A*STAR, EDB and NRF for the guidance and support that you have extended to the project team.

14. The NUS-Agilent Hub today, is established on a strong and solid footing. NUS looks forward to a fruitful partnership with Agilent and together, we will scale greater heights. On this note, I wish the NUS-Agilent Hub every success. Thank you.