



The Honorable Marc Korman
Chair, Environment and
Transportation Committee
The Honorable Michele Guyton
Vice-chair, Environment and
Transportation Committee
251 Taylor House Office Building
Annapolis, Maryland 21401

Date: 02/16/26

Re: Requesting Favorable Report for House Bill 666

Dear Chair Korman, Vice-chair Guyton and honorable members of the Environment and Transportation Committee,

I'm writing on behalf of Emulate, Inc. requesting a favorable report for SB HB 666, the Animal Research Modernization and Best Practices Act of 2026. Animal studies and reductionist models have severe limitations because they are not based on integrated human biology. By leveraging 21st century technologies, we can overcome these limitations with living human *in vitro* models that empower researchers to explore the biological mechanisms of health and disease. These microphysiological systems (MPS), commonly known as Organ-Chips, are setting a new standard for how we study biology and develop drugs, therapies, and cures for those who need them most.

The Organ-Chips provide a window into the inner workings of human biology and disease, offering researchers an innovative technology designed to predict human response with greater precision and detail than conventional cell culture or animal-based experimental testing. Pioneered at the Wyss Institute for Biologically Inspired Engineering at Harvard University and backed by Northpond Ventures, Nano Dimension, and Qiming Ventures, Organ-on-a-Chip technology assists researchers across academia, pharma, and government industries through its predictive power and ability to recreate true-to-life human biology.

HB 666 represents an important step forward in aligning Maryland's research ecosystem with modern scientific capabilities. By encouraging the adoption of advanced non-animal methodologies, this legislation will help accelerate innovation while improving translational relevance and research efficiency. Policies that support scientifically validated alternatives to animal testing not only strengthen public confidence in biomedical research, but also help reduce costs, shorten development timelines, and enhance patient safety.

Maryland is home to a vibrant life sciences community and world-class research institutions. By advancing HB 666, the General Assembly can position the state as a national leader in modern, human-relevant biomedical research. This bill supports a science-driven approach that prioritizes predictive, ethical, and technologically advanced methods that better reflect human physiology and disease.

We respectfully urge the Committee to give HB 666 a favorable report to help ensure that Maryland remains at the forefront of innovation while advancing the adoption of modern, human-relevant research practices.

Sincerely,

A handwritten signature in blue ink, appearing to read "Lorna Ewart".

emulate

Lorna Ewart, BSc. DSc. PhD

Chief Scientific Officer

Emulate, Inc.

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