



Biomedical Engineering

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Oregon State Legislature
House Committee on Education

John L. Muschler, PhD
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Re: Public University Venture Development Fund (HB 2441)

Chair Alonso Leon, Vice Chairs Neron and Weber, and members of the committee:

I write today to ask for your support of HB 2441 to renew the University Venture Development Fund (UVDF) tax credit program, which supports promising university discoveries in moving out of the lab and into Oregon's economy.

UVDF funding enabled my laboratory to develop new technology with a broad range of commercial applications in biomedicine and biotechnology. Specifically, we developed unique biological tools that are capable of efficiently delivering foreign materials (e.g. drugs or nanoparticles) to the interior of cells. The applications of this technology range from new methods of drug delivery into cancer cells, to better methods of modifying immune cell behavior, to better methods of delivering genetic material into cells of the body (e.g. for targeted gene therapy or mRNA vaccine delivery).

Like many innovations, ours was a risky idea that needed some investment for early validation. If not for the accessibility of UVDF funding, we may not have been able to actualize our idea. UVDF funding enabled us to not only complete early validations, but also create the proprietary biomolecular tools that form the core of this technology. Our biomolecules are currently being patented at OHSU for multiple biomedical applications. Their use in cancer therapy has been the subject of licensing negotiations and collaboration discussions with biotechnology companies. Separate collaborations are in progress to develop this technology for nanoparticle delivery of genetic material and targeted gene therapy, leading to biomedical and biotechnology products. Applications for Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) grants are imminent, and company formation is a likely outcome.

UVDF is essential to filling the funding gaps that exist between basic research discoveries and commercialization. Without programs that support early-stage commercialization out of Oregon's universities, the state will be less able to contribute and compete in the global innovation economy. I support extending the UVDF program and urge your support as well.

Please feel free to contact me with any questions

Sincerely,

John L. Muschler, PhD.