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**Vaccine Breakthrough Published in *Nature Communications*  
Highlights Research of St. Louis Bioscience Startup VaxNewMo**  
*BioGenerator-supported startup noted for its ‘promising process’  
to more quickly and affordably bring vaccines to market*

ST. LOUIS – St. Louis bioscience startup [VaxNewMo](#) is developing broader and more affordable vaccines faster with its patented technology. The company’s breakthrough research is currently featured in [Nature Communications](#).

Publication in this major peer-reviewed journal validates VaxNewMo’s technology and highlights its findings in [the article](#), “A platform for glycoengineering a polyvalent pneumococcal bioconjugate vaccine using *E. coli* as a host.”

“VaxNewMo is developing more affordable pneumococcal conjugate vaccines that provide broader protection against more strains of bacteria that cause pneumococcal pneumonia,” said Dr. Mario Feldman, VaxNewMo Co-Founder and Associate Professor of Molecular Microbiology at Washington University School of Medicine in St. Louis. “Additionally, our technology platform allows for a straightforward, more affordable method of developing other next-generation vaccines to protect against human and livestock infectious diseases.”

With its patented bioconjugation technology, VaxNewMo uses lab-safe *E. coli* to bypasses the dependency on the synthetic chemistry techniques previously required to manufacture conjugate vaccines. For its current study, VaxNewMo collaborated experiments with groups in Canada, Australia, and the U.S. VaxNewMo is a BioGenerator Labs tenant.

“We are proud to share our research and meet the high-quality threshold to be published in *Nature Communications*,” said Christian Harding, VaxNewMo CEO and Co-Founder. “The St. Louis bioscience ecosystem has significantly propelled our research and development to reach this point. Specifically, BioGenerator equipped us with funding and technical, business, and regulatory acumen, and Arch Grants also provided funding and pro bono support services.”

BioGenerator, the investment arm of BioSTL, has provided VaxNewMo with non-dilutive grant funding and business coaching for complex license negotiations, team building, and business strategy. Through its [Grants-2-Business](#) program, which coaches entrepreneurs through the process of submitting strong grant applications, BioGenerator has helped VaxNewMo win two federal grants totaling more than \$500,000, as well as a \$50,000 Arch Grant.

“VaxNewMo’s breakthrough approach to developing glycoconjugate vaccines holds out the promise of accelerating new and much more effective vaccines to market much faster than with



traditional approaches,” said Harry Arader, Director of Entrepreneur Development at BioGenerator and VaxNewMo Business Coach. “BioGenerator is proud to support Dr. Feldman and Dr. Harding to help them demonstrate that their technology will work and make a big difference protecting the most vulnerable among us.”

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The following is from *Nature Communications*’ Note from the Editor:

*“Bioconjugation is a promising process to manufacture conjugate vaccines, but currently employed enzymes cannot generate the full spectrum of bacterial glycoproteins. Here, the authors use an O-linking oligosaccharyltransferase to generate a polyvalent pneumococcal bioconjugate vaccine with polysaccharides containing glucose at their reducing end.”*

VaxNewMo’s entire research paper is available to the public as an open-access file [here](#) or by searching the number 10.1038/s41467-019-08869-9 online at [Nature Communications](#).

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### **About VaxNewMo**

[VaxNewMo](#) is an early-stage biotechnological company that develops next-generation conjugate vaccines against infectious diseases using its proprietary *in vivo* conjugating technology. VaxNewMo employs its proprietary conjugating enzyme technology to covalently attach a target bacterial polysaccharide to an acceptor protein all within the lab-safe *E. coli* bacterium. This approach bypasses the dependency on synthetic chemistry to manufacture conjugate vaccines, streamlining their production. Currently VaxNewMo is developing a pneumococcal conjugate vaccine and a *Klebsiella pneumoniae* conjugate vaccine. VaxNewMo is headquartered in St. Louis.

### **About BioGenerator**

BioGenerator, the investment arm of BioSTL, produces a sustained pipeline of successful bioscience companies and entrepreneurs in St. Louis by creating, growing and investing in promising new enterprises. Visit [www.BioGenerator.org](http://www.BioGenerator.org) for additional information, and follow us on LinkedIn [linkedin.com/company/BioGenerator](https://www.linkedin.com/company/BioGenerator) and Twitter [@BioGeneratorSTL](https://twitter.com/BioGeneratorSTL).

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### **CONTACT**

**Maggie Crane | 314.422.6783 | [mcrane@biostl.org](mailto:mcrane@biostl.org)**