

# Aaron VanDevender, PhD

CEO, Methid Inc.

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## Education

2001 S. B. Physics, Massachusetts Institute of Technology

2007 Ph. D. Physics, University of Illinois at Urbana-Champaign

## Recent Publications

1. VanDevender, J. Pace, Buchenauer, C. Jerald, Cai, Chunpei, VanDevender, Aaron P. and Ulmen, Benjamin A. Radio frequency emissions from dark-matter-candidate magnetized quark nuggets interacting with matter. *Sci Rep* **10**, 13756 (2020).

2. VanDevender, J. P., Shoemaker, I., Sloan T., VanDevender, Aaron P., Ulmen, B.A. Mass distribution of magnetized quark-nugget dark matter and comparison with requirements and direct measurements. Submitted to *Sci. Reps.* Available at <https://arxiv.org/abs/2004.12272> (2020). (Date of access: 10/05/2020).

3. VanDevender, J. Pace, VanDevender, Aaron P., Sloan, T., Swaim, Criss, Wilson, Peter, Schmitt, Robert. G., Zakirov, Rinat, Blum, Josh, Cross Sr, James L. and McGinley, Niall Detection of magnetized quark nuggets, a candidate for dark matter. *Sci. Rep.* **7**, 8758 (2017). [www.nature.com/articles/s41598-017-09087-3](http://www.nature.com/articles/s41598-017-09087-3)

4. VanDevender. J. Pace, Schmitt, Robert G., McGinley, Niall, Duggan, David G., McGinty, Seamus, VanDevender, Aaron P., Wilson, Peter, Dixon, Deborah, Auer, Helen, McRae, Jacquelyn. Results of search of magnetized quark-nugget dark matter from radial impacts on Earth. Available at <https://arxiv.org/abs/2007.04826> (2020).

5. Dimitris V. Manatakis, Aaron VanDevender, Elias S. Manolakos. An information-theoretic approach for measuring the distance of organ tissue samples using their transcriptomic signatures. *Bioinformatics* btaa654 (2020)

## Work Experience

August 2020 to Present: CEO, Methid

July 2005 to Present: CSO, VanDevender Enterprises

October 2012-August 2020: Chief Scientist, The Founders Fund

Conduct technical diligence on start-up companies that solve hard research problems. Survey academic and government research frontiers to anticipate emerging trends in nano- and bio-technology, energy, and computation. Lead investments in quantum computing, photonics, synthetic biology, and pharmaceuticals.

October 2010-March 2012: Physicist, Halcyon Molecular.

Led research team that developed high-resolution electron-microscopy instruments, techniques, and software algorithms for high-speed gene sequencing and nanoscale imaging.

October 2007-September 2010: Physicist, NIST, Boulder, CO.

Designed, fabricated, and tested Be<sup>+</sup> and Mg<sup>+</sup> ion traps for quantum information purposes.