Voyageur Pharmaceuticals Strengthens Scientific Team by Adding Dr. Brian Mueller as Director of Chemistry and Secures Exclusive Ownership of Iodine Extraction Technology

written by Raj Shah | January 12, 2026

January 12, 2026 (Source) – Voyageur Pharmaceuticals Ltd. (TSXV:VM) (OTC Pink:VYYRF) ("Voyageur" or the "Company"), a Canadian developer of pharmaceutical-grade barium and iodine for medical imaging contrast media, is excited to announce a strategic advancement in its vertical integration strategy. The Company has secured 100% ownership to an innovative iodine extraction technology developed by Dr. Brian Mueller, PhD, who has been appointed as the Company's Director of Chemistry, effective immediately.

On January 11, 2026, Voyageur acquired (the "Acquisition") the intellectual property rights to Dr. Mueller's proprietary iodine-extraction technology, known as the "Mueller Process", granting the Company control over the intellectual property supporting its iodine strategy. Voyageur expects this will enable it to advance its iodine extraction projects with enhanced cost efficiency, operational flexibility, and long-term supply-chain security. As consideration for the Acquisition, the Company made a lump sum initial cash payment and will pay Dr. Mueller a running royalty on net sales of iodine products. The acquisition is an arm's length transaction.

Brine water from the Anadarko and West Texas Basins have been tested using the Mueller Process. Highlights from initial bench scale testing conducted by Dr. Mueller are as follows*:

- 90% yield from incoming brine to technical grade iodine (85% pure)
- Conversion to 99.5% pure iodine*.
- Environmentally Friendly: Closed process, no volatile organic compounds or hazardous emissions.
- Output brine is a “clean brine” useful for industrial use, hydraulic fracturing, desalination or further mineral extraction.

*Laboratory Iodometric (redox titration) using standard thiosulfate titrant test was used. All testing was completed by Dr. Brian Mueller, with third party evaluation of the process expected to occur in 2026. These results have not been independently verified.

Brent Willis, CEO & President of Voyageur, emphasized the strategic importance of securing exclusive rights to this proprietary technology, calling it a pivotal development for the Company. *“With provisional patent applications for the intellectual property acquired by Voyageur filed in 2025, we are on track to submit full utility patent applications in 2026. Our immediate focus is on iodine extraction in the Anadarko Basin, where we believe this technology will allow us to produce iodine flake efficiently”. Mr. Willis explained “More importantly, it may enable us to bypass the flake process entirely, directly creating iodine drugs through our proprietary Streamlined API process. This potential capability not only enhances our potential ability to produce high-quality, cost-effective iodine contrast agent, but is expected to allow Voyageur to achieve one of the lowest cost structures in the multi billion-dollar iodine*

contrast drug industry. In addition, the new technology opens the door to potential elemental mineral extraction from our ULI claim block in the Paradox Basin, Utah. The elemental minerals of interest are lithium, iodine, bromine, boron, magnesium, potassium and sodium."

Voyageur's Streamlined API process, created by Bradley Willis, P.Eng, Voyageur's COO, aims to set a new benchmark for the industry by simplifying the production of iodine contrast drugs by extracting directly from brine water and creating a closed loop manufacturing process. This has the potential to position Voyageur, through a wholly owned subsidiary, to become the first U.S. company to produce iodine drugs domestically, mitigating supply chain risks and setting a new standard for cost efficiency in the industry.

*The global contrast media market size was estimated at **USD 6.77 billion** in 2024 and is projected to reach USD 13.86 billion by 2033, growing at a CAGR of 8.3% from 2025 to 2033. The **North American** market for iodine contrast media is estimated at 39.07% of the global market, **$2.65 billion** per year of the global market share due to high imaging volumes.[1] https://www.grandviewresearch.com/industry-analysis/contrast-media-contrast-agents-market*

About Dr. Brian Mueller

Brian Mueller, Ph.D., is a scientist, inventor, and experienced professional with over 40 patents spanning water treatment, mineral extraction, and carbon capture technologies. With a career rooted in inorganic chemistry and advanced brine modeling, Dr. Mueller has consistently bridged fundamental science with industrial application. His expertise in produced water treatment, corrosion modeling, and flow assurance chemistry has enabled him to solve complex challenges in oil &

gas, geothermal, and desalination industries.

Drawing on decades of experience in thermodynamic brine chemistry and critical mineral recovery, Dr. Mueller recognized the untapped potential of iodine extraction from high-salinity streams. His ability to integrate electrochemical oxidation processes, advanced filtration, and scalable extraction methods allowed him to design a specialized, efficient, and economically viable iodine recovery technology. This innovation reflects his broader vision: transforming waste streams into valuable resources while advancing sustainable industrial practices.

Dr. Mueller possesses a valuable combination of deep technical knowledge, entrepreneurial leadership, and experience in developing profitable extraction technologies. The Mueller Process reflects his approach of turning scientific insight into practical solutions that address industrial challenges and promote environmental stewardship. His expertise is expected to support the integration of the Mueller Process with Voyageur's Streamline API process, which the Company believes will enhance its ability to produce high-quality, low-cost iodine drugs.

Dr. Mueller's appointment as Director of Chemistry at Voyageur reflects the Company's commitment to innovation and excellence. His track record in developing and commercializing advanced technologies is expected to support Voyageur's mission to become a leader in the radiology contrast media drug market. By leveraging Dr. Mueller's skills and technology, Voyageur aims to achieve its vision of vertical integration and cost leadership in the industry.

Update on collaboration with Altillion Inc.

Voyageur also announces that the Company has delivered a notice to Altillion Inc. ("Altillion") that it will be terminating the collaboration between the Company and Altillion, previously

announced on June 23, 2025. The Company appreciates the contributions made by Altillion during the term of the collaboration with Voyageur.

About Voyageur Pharmaceuticals Ltd.

Voyageur, a Canadian public company trading under the symbol VM on the on the TSX Venture Exchange, is in development of barium and iodine Active Pharmaceutical Ingredients (API) that offer high-performance and cost-effective imaging contrast agents. With a strategic focus on vertically integrating the barium and iodine contrast markets, Voyageur aims to become a key player by producing its own barium and iodine API's as well as supplying raw materials to major pharmaceutical manufacturers.

Voyageur's business plan is set to generate sales by partnering with established third-party GMP pharmaceutical manufacturers in Canada thereby ensuring the validation of its products by regulatory agencies worldwide. As Voyageur solidifies its presence in the market, it plans to transition into a high-margin domestic manufacturer of radiology drugs.

At the core of its operations, Voyageur has 100% interest in the Frances Creek barium sulphate (barite) project. Currently, the world's pharmaceutical barium sulphate is almost entirely synthetically produced resulting in a less effective imaging quality product. Voyageur's Frances Creek resource boasts a rare and exceptional grade mineral suitable for the pharmaceutical marketplace that Voyageur believes will replace the current synthetic products with higher quality imaging products.

Voyageur's ambitious vision is to become the first vertically integrated company in the radiology contrast media drug market. By controlling all primary input costs, from the sourcing of raw materials to final production, Voyageur believes it can enhance quality and cost efficiency. With its approach, it embodies the

motto of “**From the Earth to the Bottle**,” highlighting Voyageur’s commitment to responsible sourcing and manufacturing practices.

For Further Information:

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Cautionary Statement Regarding “Forward-Looking” Information

This news release may contain certain forward-looking information and statements, including without limitation, statements pertaining to: the Company’s expectation that acquiring intellectual property rights to the Mueller Process will enable it to advance its iodine extraction projects with enhanced cost efficiency, operational flexibility, and long-term supply-chain security; expected third-party testing to be conducted on the Meuller Process in 2026; the Company’s expectations with regards to achieving one of the lowest cost structures in the iodine contrast drug industry; the Company’s ability to bypass the flake process; potential multi elemental mineral extraction from the Company’s ULI claim block in the Paradox Basin, Utah; the Company’s aim to have the Streamlined API process set a new benchmark for the industry; the potential for the Company’s subsidiary to be positioned to become the first U.S. company to produce iodine drugs domestically; the expectation that Dr. Mueller’s expertise will support the integration of the Mueller Process with Voyageur’s Streamline API process, and the Company’s belief that this will enhance its

ability to produce high-quality, low-cost iodine drugs; the Company's expectation that Dr. Mueller will support its mission to become a leader in the radiology contrast media drug market; the Company's aim to achieve its vision of vertical integration and cost leadership in the industry; the Company's expectation regarding the benefits of its vertically integrated model; the Company's aim to become a key player in the barium and iodine contrast markets; the Company's plans to transition into a high-margin domestic manufacturer of radiology drugs; the Company's belief that the Frances Creek Project's mineral will replace the current synthetic products in the pharmaceutical marketplace with higher quality imaging products; and the Company's belief that it can ensure quality and cost efficiency by controlling all primary input costs. All statements included herein, other than statements of historical fact, are forward-looking information and such information involves various risks and uncertainties. There can be no assurance that such information will prove to be accurate, and actual results and future events "plan", "potential", "project", "assume", "contemplate", "believe", "shall", "scheduled", and similar terms. Forward-looking statements are not guarantees of future performance, actions, or developments and are based on expectations, assumptions, and other factors that management currently believes are relevant, reasonable, and appropriate in the circumstances. Although management believes that the forward-looking statements herein are reasonable, actual results could be substantially different due to the risks and uncertainties associated with and inherent to Voyageur's business. Additional material risks and uncertainties applicable to the forward-looking statements herein include, without limitation, the impact of general economic conditions, and unforeseen events and developments. This list is not exhaustive of the factors that may affect the Company's forward-looking statements. Many of these factors are beyond the control of

Voyageur. All forward-looking statements included in this press release are expressly qualified in their entirety by these cautionary statements. The forward-looking statements contained in this press release are made as at the date hereof, and Voyageur undertakes no obligation to update publicly or to revise any of the included forward-looking statements, whether as a result of new information, future events, or otherwise, except as may be required by applicable securities laws. Risks and uncertainties about the Company's business are more fully discussed under the heading "Risk Factors" in its most recent filings. They are otherwise disclosed in its filings with securities regulatory authorities available on SEDAR+ at www.sedarplus.ca.