

November 4, 2010



Stellar Biotechnologies Announces US \$488,985 Award in U.S. IRS Therapeutic Discovery Grants

PORT HUENEME, CA -- (MARKET WIRE) -- 11/04/10 -- Stellar Biotechnologies, Inc. (the "Company" or "Stellar") (TSX-V: KLH) (PINKSHEETS: SBOTF) is pleased to announce that its California subsidiary received news this week that it has been awarded two grants under the Therapeutic Discovery Project Program administered by the U.S. Internal Revenue Service for a total grant award of US \$488,985. The grants are for "Diagnostic Immune Status Monitoring in Patients with Immunodeficiency" and "Enabling ICH-S8 Immunotoxicity Testing with Keyhole Limpet Hemocyanin." The awards are granted immediately and provide supplemental funding for the Company's diagnostic development and Stellar KLH/IMG platforms.

Stellar CEO, Frank Oakes said, "These awards demonstrate the significance of the Company's product development activities, and are important and beneficial to Stellar because they provide funding for our commercial development activities. The funds directly supplement Stellar's use of capital for projects that are expected to directly translate into commercial products and revenues. This will allow the company to accelerate key new hires, including a marketing executive, to support the Company's new product launch scheduled for 2011."

About Stellar Biotechnologies, Inc.

Stellar's (TSX-V: KLH) (PINKSHEETS: SBOTF) product, KLH, is a potent immuno-stimulatory protein with an exceptional record of safety and non-toxicity in humans that is being used in medicines known as conjugate therapeutic vaccines and in other biomedical products. Already a world leader in the production of KLH, Stellar plans to further monetize its KLH production platform and maximize the commercial impact of its intellectual property portfolio through the physical sourcing, purification and supply of medical-grade KLH. KLH is exclusively sourced from the blood of the rare keyhole limpet and Stellar has technology for the maintenance of that animal, as well as a non-lethal extraction method of the critical molecule and refinement process for KLH that it currently sells into growing academic, research, pharmaceutical markets.

www.StellarBiotechnologies.com

Forward-looking statements are subject to all of the risks and uncertainties inherent in the Company's business. There can be no assurance that such forward-looking statements will prove to be accurate, as actual results and future events could differ materially from

those anticipated in such statements. Readers should not place undue reliance on such statements. Except in accordance with applicable securities laws, the Company expressly disclaims any obligation to update any forward-looking statements or forward-looking statements that are incorporated by reference herein. This news release does not constitute an offer to sell, or a solicitation of an offer to buy any of the Company's securities set out herein in the United States, or to, or for the benefit or account of, a U.S. Person or person in the United States. Neither TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of these releases.

Contact:

Darrell Brookstein
Executive VP
dbrookstein@stellarbiotech.com