Pioneering the Future of Medicine

Marshall and StemExpress partner to advance life-saving medical research

Medical advances and breakthroughs are happening today at a breakneck pace, and the hub of it all is biomedical research. One local firm is on that leading edge. StemExpress is a multi-million dollar company headquartered in Placerville, which procures and isolates blood and tissue samples for bio medical research around the world.

Founded in 2010 by CEO Cate Dyer, is has national reach and global impact. It's now working with Marshall Medical on a number of important initiatives that will change and save lives. Already the partnership is delivering better care to some of Marshall's patients through specific tests and procedures Stem Express has provided access to. Much more is on the horizon, says StemExpress' Cate Dyer. "Today we're focusing on two fronts, the first is what we can do now to advance medicine and provide better care, yet equally important is the future research and ongoing breakthroughs our work can be a critical part of."

Cate points to several programs now underway that are already seeing success with Marshall. For pregnant women who are older. the recommended amniocentesis screening for genetic defects can be a source of terrible trauma, with a miscarriage and complication rate that is more than a blip. Now, with an

introduction from StemExpress, Marshall patients are able to receive instead a test called Maternit21 by Sequenom, Inc., which is a simple blood test that virtually replaces the more invasive and dangerous screening.

Also in the realm of maternity offerings, Marshall supplies StemExpress with all-important umbilical cord blood from moms who agree to provide it and who aren't going to bank it themselves. "This free service to patients is a huge win for

moms who want their cord blood to make a difference in the world but who aren't able to bank it themselves due to the high cost of the service." Cate explains that cord blood donations have a major impact on medical research that is already improving and benefitting human life.

A bonus to the relationship between StemExpress and Marshall is that Marshall's lab is now receiving from StemExpress blood samples sent to StemExpress from

> hospitals and universities nationwide, and is completing the necessary screening for infectious disease that the samples must go through. Marshall CEO James Whipple says being able to provide the services demanded by this type of medical work is highly rewarding. "I think some people still think of Marshall as a little, basic hospital in the woods, but our work with Stem Express and the confidence they have placed in our capabilities speaks to the high quality medical services we can and do provide the community."

On the horizon for Marshall and StemExpress is an exciting and revolutionary cancer related treatment known as leukapheresis. Currently, the closest facility this is available at is Stanford: efforts to bring it to Marshall are occurring. When a patient is to undergo chemotherapy, this FDA-approved procedure takes a "leukopak", or collection of the patient's blood cells before they are affected by the chemo drug. The white cells and stem cells are stored and then re-transfused back to the patient following treatment to help restore the healthy blood cells that chemo destroys, thus improving the patient's health and immune system. Cate says, "This is a significant advancement in cancer treatment and we hope to bring it to Marshall's cancer patients as soon as is feasible." Advancements in prostate

cancer treatment are also being explored.

StemExpress and Marshall share a collective sense of purpose and optimism about the work they are currently doing together, as well as what the future holds.

"Stem cells and regenerative medicine are the future of medicine, and we're doing that together, right here in El Dorado County," Cate says.



Give a Little, Get a Little: StemExpress seeks donors

All this exciting and groundbreaking medical research requires blood and tissue samples. StemExpress believes in keeping things local too, so they have a special offer for residents who have been diagnosed with cancer (all stages), auto-immune and rheumatoid conditions like arthritis and lupus, and Crohn's disease. For a simple blood or bone marrow donation to Stem Express, you can receive up to \$250 for the donation. In 2014 StemExpress provided over \$150,000 in gift cards to donors in El Dorado County. These donations advance life-saving research around the world and are not possible without donors. For more information or to make an appointment, contact Stem Express at 530-303-3804 or visit stemexpress.com/get-involved.