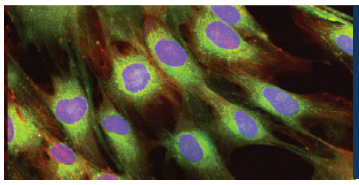

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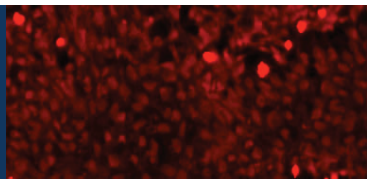

March 2023 Newsletter

2023 "Campaign for Cures" Research Goal and Request for Support

Dear Friend:

The John Paul II Medical Research Institute's 2023 "Campaign for Cures" initiative seeks to raise $1 million to help advance research in our core therapeutic priority areas of neurodegenerative diseases, cancer, rare diseases and chronic diseases receptive to stem cell therapy, along with our vaccine development efforts. To learn more about the impact that your donations are having on our efforts, please read about our significant research progress and future goals below. I am once again asking each of you to please consider making a meaningful donation to help JP2MRI meet this year's fundraising goal and keep us on track for completing our research milestones. As always, I also encourage each of you to share this newsletter with others in your network who care about supporting ethical medical research.

iPSC Research Advances and Goals

Induced pluripotent stem cells (iPSC) represent a promising cell replacement therapy for unmet diseases ranging from neurodegenerative diseases (such as Parkinson's, Spinal Cord Injury and Amyotrophic Lateral Sclerosis), alveolar failure, connective tissue and orthopedic disorders, macular degeneration, juvenile diabetes and cancer. iPSC therapy is a major research priority for the Institute. However, there are critical hurdles that must be overcome before iPSC replacement therapies can be fully realized. JP2MRI has made a huge leap in addressing and resolving these deficiencies by developing next generation immortalized human cells. As a result, these immortalized cell lines will be better able to improve the efficacy of iPSC therapies. This novel approach and technology developed by JP2MRI is currently protected by a Patent Cooperation Treaty (PCT) provisional patent application filed by the Institute with the United States Patent and Trademark Office. JP2MRI has granted Cellular Engineering Technologies, Inc. (CET), an Iowa biotechnology company specializing in cell manufacturing and contract research services, an exclusive license to its pipeline of immortalized human stem cells that are designed for the bio-production of vaccines, allogeneic cell therapies (including CAR-T and CAR-NK cells), biologics and gene therapy vectors, which when utilized together provide principled and scientific advantages over the current state of the art. The Institute believes that this license will enable CET to solve the aforementioned scientific and financial challenges of iPSC-dependent cell replacement therapy and assist it in creating better and ethical therapies.

Neurodegenerative Research Progress and Aims

Millions of individuals around the world are living with Parkinson's, Spinal Cord Injury (SCI) and Amyotrophic Lateral Sclerosis (ALS). There are no cures for these neurodegenerative conditions and current treatments have significant shortcomings. While these conditions present with different clinical features, these diseases share a common denominator characterized by a loss of specialized neurons. As a result, stem cells represent a potential cell replacement therapy for these diseases. However, there are critical hurdles which remain before stem cell replacement therapies can be realized. First, the site of disease poses a hostile inflammatory environment for successful cell therapy. Second, stem cell therapies are controversial because some of these approaches rely on aborted fetal or embryonic tissue. Finally, notwithstanding the ethical controversy, there is a lack of quality control and reproducibility when it comes to using fetal tissue. Consequently, a movement towards using pluripotent stem cells as a cell replacement therapy has been of increased interest in order to create more uniform and reproducible dopaminergic neural cells for Parkinson's disease, and motor neurons for SCI and ALS. Presently, human embryonic stem cells (HESC) make up the only pluripotent stem cell line which is currently being utilized in clinical trials for treating Parkinson's disease. Besides the ethical controversy posed by HESC, there are significant concerns with regard to their safety and efficacy for not only Parkinson's disease but also for SCI and ALS. First, there is a risk that HESC could produce tumors. Second, using HESC requires co-administration of anti-rejection drugs to suppress immunity since there is a mismatch between the immune status of the donor and the recipient. These anti-rejection medications pose an additional risk by increasing the chance of infections and other complications. Third, there is a risk that the transplanted cells could soon become non-viable from the hostile inflammatory environment that led to the destruction of

the patient's own neurons in the first place. Lastly, developing effective cell therapy has been hindered by the lack of available high-end, neural growth factors necessary to differentiate pluripotent stem cells into dopaminergic neurons and motor neurons. Unfortunately, the projected cost for producing high-end neural growth factors to develop prototypic cell therapies could range from $250,000 to over 3 million dollars per experiment, which is not financially feasible in medical research. Before a cell replacement therapy can be realized for these neurodegenerative conditions, these ethical, scientific and especially the aforementioned financial limitations will need to be solved.

JP2MRI is uniquely positioned to solve the challenges referenced above. The Institute has co-developed and has a royalty-free license to use the first and best-in-class iPSC technology. This novel technology has a significantly lower risk of causing cancer than HESC and any prior iPSC technology. JP2MRI also utilizes proprietary adult stem cells which should not require administration of anti-rejection medications. We have developed a genetic technology with the potential to modify these stem cells to resist the hostile inflammatory environment in the central nervous system. Lastly, JP2MRI has recently developed the required technology and made capital investments in new equipment, consisting of a bioreactor and an automated protein purifier, to manufacture the necessary high-end human neural growth factors. This has enabled JP2MRI to create the largest library of high-end human neural growth factors and helped eliminate an important financial bottleneck in cell therapy research for Parkinson's, SGI and ALS.

Request for Support

Your continued financial support will enable us to keep fighting to ensure that immoral cell lines are permanently replaced by ethical options that are safer and more effective and which will lead to new treatments and cures. JP2MRI provides regular updates on our research progress on our website (jp2mri.org) and on Facebook, Rumble.com and Gab.com. Thank you very much for your support.

Kind regards and God Bless,

Jay M. Kamath, J.D. / CEO
John Paul II Medical Research Institute

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