

**MEMORANDUM OF UNDERSTANDING**

**THIS MEMORANDUM OF UNDERSTANDING** (this "Memorandum") is executed this 26 day of August, 2013, by and between The Children's Mercy Hospital ("CMH"), the University of Missouri – Kansas City ("UMKC"), Saint Luke's Health System ("SLHS"), the Kansas City Area Life Sciences Institute ("KCALSI"), and Jackson County, Missouri.

**WHEREAS**, the Civic Council of Greater Kansas City and the KCALSI have identified the area of translational medical research as a key opportunity for the Kansas City Region;

**WHEREAS**, translational medical research is the critical phase of the discovery and development of disease cures that occurs between the microscope and the marketplace, or that follows the birth of a basic scientific discovery made in the laboratory but precedes the clinical trial phase of a new therapy;

**WHEREAS**, an investment in translational research translational medicine can lead to cures for rare and known diseases and result in economic development and job opportunities for citizens of Jackson County and the region;

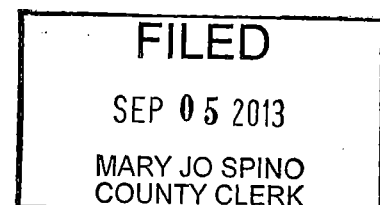
**WHEREAS**, the Greater Kansas City Chamber of Commerce, through an extensive community process, identified translational medicine as one of the Big 5 areas that would improve the long-term outlook for the region and its citizens;

**WHEREAS**, the Kansas City region occupies a key national position with world class expertise in basic research, one of the nation's strongest clinical trials sectors, and existing strengths in translational medical research at the University of Missouri-Kansas City, The Children's Mercy Hospital and Saint Luke's Health System (the "Research Organizations");

**WHEREAS**, the County Executive of Jackson County, Missouri, has indicated his support to place before the voters of Jackson County a proposal to implement a one half cent sales tax (the "Sales Tax Proposal") as authorized by Missouri statute exclusively to support the development of translational medicine in the county through the activities of the Jackson County based Research Organizations;

**WHEREAS**, the activities contemplated in the Jackson County Translational Medicine Operational and Governance Overview ("Overview") attached hereto and made a part hereof will cause economic development and job opportunity in the County;

**WHEREAS**, as described in the Overview the revenue from the sales tax will be used solely for the purposes outlined in the Overview, and shall be segregated from all other county funds;



**WHEREAS**, the discoveries which occur as a result of these research activities will result in commercialized ventures, the net revenues of which will be shared with Jackson County for purposes of improved health care and job creation.

**WHEREAS**, the Research organizations have engaged in discussions as to the process and collaborative activities necessary to achieve results of drug and device discovery leading to cures for the population of our region and the nation, including expanding the research currently being performed on illnesses that affect the minority community in Jackson County, and will result in the commercialization of new products and the start-up of new companies, as evidenced by the Overview; and

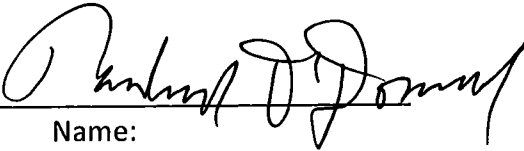
**WHEREAS**, the Overview delineates the respective roles and responsibilities of each of the entities; the assurance that funds that should become available through the passage of the Sales Tax Proposal will be used solely for the purposes outlined herein; as well as the governance and oversight for the use of the funds that would be generated under the Sales Tax Proposal.

**NOW, THEREFORE**, be it resolved that the undersigned do hereby agree as follows:

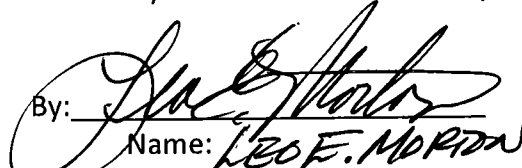
1. That the Overview attached hereto and made a part hereof represents their agreement and mutual understanding of the structure, governance and use of funds relating to the Institute (as defined in the Overview), subject to continued refinement as the Institute begins to reach reality.
2. That the undersigned agree, within the limitations of their own charters and powers, to support the passage of the Sales Tax Proposal.
3. The undersigned hereby present this Memorandum to the County Executive and members of the County Legislature and the citizens of Jackson County, Missouri, as our commitment to insure not only our concurrence with this document but our absolute commitment to the collaborative effort and excellence required to achieve the health care, and economic benefits described herein for the benefit of Jackson County, Missouri, and the region.
4. The parties agree that this Memorandum of Understanding and the attached Overview will be followed by more formal and detailed agreements relating thereto.

**IN WITNESS WHEREOF**, the undersigned have executed this Memorandum as of the day and year first above written.

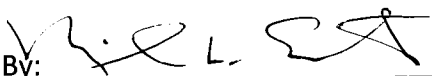
The Children's Mercy Hospital

By:   
Name:  
Title:


University of Missouri – Kansas City

By:   
Name: LEO F. MORION  
Title: CHANCELLOR


Saint Luke's Health System

By:   
Name: MELINDA L. ESTES, MD  
Title: President and CEO

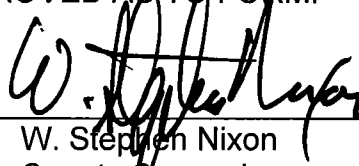
Kansas City Area Life Sciences Institute

By:   
Name: Robert James MD  
Title: Chair, KCAHSI

Jackson County, Missouri

By:   
Name:  
Title:

APPROVED AS TO FORM:

By:   
W. Stephen Nixon  
County Counselor

ATTEST BY:

  
Mary Jo Spino  
Clerk of the County Legislature

**TRANSLATIONAL MEDICINE INSTITUTE  
OF JACKSON COUNTY  
August 26, 2013**

**Operational and Governance Overview**

The Translational Medicine Institute of Jackson County (the "Institute") is proposed to be a world-class translational medicine research and development organization that would bridge the gap between basic research discoveries and clinical applications. It will be incorporated as a stand alone, independent nonprofit corporation.

The Institute will be a multidisciplinary operating organization (and not a virtual institute or a grant-making entity) that would focus on translational medical research to accelerate treatments and cures. Within the first ten years, the Institute is projected to help create employment for more than 200 scientists, as well as technical and scientific staff, who will share extensive common services, equipment and intellect.

The impetus for this initiative was provided by the Scientific Advisory Committee ("SAC") of the Kansas City Area Life Sciences Institute ("KCALSI"). In 2007, the SAC proposed the establishment of a world-class "institute for translational medicine" as a strategic addition to the region that would attract a critical mass of the best translational researchers and complement existing regional strengths. Dr. David Livingston, Director of Dana Farber Cancer Center and KCALSI SAC member, described the significance of translational research to our region and country as unique and transformational and of critical importance to the region's long-term success.

**1. Community Partners**

The Institute will be based on "Hospital Hill" in Jackson County, Missouri, to take advantage of a clustering of bioscience facilities in the region, including the Stowers Institute for Medical Research, major research universities, nursing schools, pharmacy schools, dental and medical schools, as well as other strategic partners discussed below.

The Institute will serve as the focal point for collaboration between a number of existing medical and scientific organizations that have a presence on a health/education campus in the urban core of Kansas City, which already serves as a center for medical, academic, and research activities, including The Children's Mercy Hospital ("CMH"), Truman Medical Center ("TMC"), Saint Luke's Health System ("SLHS") and the University of Missouri - Kansas City Schools of Medicine, Dentistry, Pharmacy, and Nursing ("UMKC"), among others.

## **2. Governance Structure**

A. **Board of Directors.** The Board of Directors shall be comprised of the CEOs of CMH, UMKC, SLHS, and KCALSI, one other qualified person selected by the CEO of CMH and a member of the Jackson County Legislature selected annually by the Legislature. The County Executive will convene the Board, and the CEO of CMH will serve as the chair of the Board of Directors. The Board will enter into a Memorandum of Understanding with each of the partners and collaborators clearly identifying the relationships and responsibilities of each organization. In addition, the partner organizations will enter into a Memorandum of Understanding with Jackson County clearly identifying its mission on August 26, 2013. The Board shall be responsible for: (i) in conjunction with an international search firm, recruiting and hiring the first Scientific Director; (ii) in conjunction with the Scientific Director, recruiting and appointing the first Scientific Advisory Board of nationally and internationally recognized experts in areas of science and medicine relating to translational medicine (the "SAB"), and developing a charter designating the functions to be performed by the SAB (the "SAB Charter"); and (iii) directing the corporate and business affairs (but not the scientific research activities) of the Institute after it commences operations in accordance with its fiduciary duties of loyalty and due care. The Board may contract with any of its Partners or other institutions and organizations as appropriate for functions and services in order to avoid duplication and fulfill its vision.

B. **The Scientific Director.** The Scientific Director will be employed by CMH, and have joint appointments with the Institute and CMH. The Scientific Director will be tasked with developing the specific scientific mission, as well as fostering collaboration and commercialization, and focus for the Institute. The Scientific Director will report to the CEO of CMH. The hiring and termination of the Scientific Director shall required concurrence of at least four members of the five member Board, including the vote of the Chair of the Board.

C. **Scientific Advisory Board.** As noted above, the Board, in conjunction with the Scientific Director, will recruit and appoint the SAB. The SAB will advise the Scientific Director in developing and monitoring the scientific research mission of the Institute.

D. **Community Advisory Board.** The Board of Directors of the Institute shall appoint a Community Advisory Board ("Advisory Board") to assist the Institute if fulfilling its mission. The purposes of the Advisory Board shall be: (i) to serve as a community resource and advocate for the Institute, (ii) to review the activities of the Institute and each of its partners as well as their collaborative activities; (iii) to review the annual fiscal and performance audit and, together with the Board, report to the Economic Development Tax Board on the economic development results of the Institute; (iv) to encourage philanthropic donations to the Institute and its partners to further their research activities; and (v) such other activities as may be assigned to it by the Board. The Advisory Board shall not play a role in the day to day operations of the Institute or its partners nor their research activities, nor participate in the selection or removal of staff. The Advisory Board shall meet at least quarterly, and its meetings shall be open

to the public. Members of the Advisory Board may include the partner organizations and other representative groups throughout the County.

E. Oversight and Transparency Board. In order to ensure that all funds generated as a result of the sales tax described below are appropriately expended, the County Executive shall appoint a five member Oversight and Transparency Board with six-year staggered terms. This Board shall provide for independent fiscal and performance audits to be conducted and provide its findings to the County Legislature, Community Advisory Board, Economic Development Tax Board and the public. Funding for these audits shall be provided from the 2.5% of the Tax Proceeds Funds described below set aside for such purpose.

### **3. Joint Appointment of Institute Scientists**

To facilitate close collaborations between the scientists, the Scientific Director will work primarily with CMH, UMKC, and SLHS (the "Partners") to develop protocols for the recruitment of "principal investigator" level scientists ("PIs"). For administrative purposes, the Scientific Director and the PIs and their staff will be employees of the partner organizations, which will be reimbursed for salary, fringe benefits, etc., based on the allocation of their time to the Institute. Equipment and other necessary items shall be purchased either by the Institute or by the Partners and then reimbursed by the Institute. Procedures will be developed to monitor and allocate expenses as appropriate. The PIs will have joint appointments with the Partners and the Institute, and the Institute would allow the PI's to provide teaching services at the Partners, to recruit post-doctoral and student researchers from the Partners to work in the PIs laboratories and form other collaborative interrelationships.

The Institute is intended to expand the current capacity of the Partners in translational research by supporting these joint appointments and collaborative relationships. The Institute would receive funding from the Tax Proceeds as described below. As provided by the statute, 1% of the Tax Proceeds are paid to the state for collections. Up to 2.5% of the remaining amount will be set aside for the purposes of conducting appropriate annual performance and fiscal audits by an auditing firm experienced in similar ventures, as provided for by the Oversight and Transparency Board. Of the balance, following appropriate administrative expenses of the Institute itself, as approved by the Board of Directors, the funds would be allocated as follows:

- 50% for The Children's Mercy Hospital
- 20% for Saint Luke's Health System
- 20% for University of Missouri-Kansas City
- 10% to be allocated by the Board to further the economic development initiatives of the Institute, including institutions such as the Metropolitan Community Colleges.

In the event the Institute requests the County to issue bonds, the allocation of funds will give preference to maintaining adequate reserves to protect the full faith and credit of the County.

#### **4. Intellectual Property Commercialization Opportunities**

The translational medicine research that will be undertaken at the Institute is likely to lead to patentable intellectual property that may have the potential for commercialization into drugs, medical devices, and other products that can enhance the quality of human life. The Institute will adopt normal and ordinary intellectual property ownership agreements with the Partners (including the PIs with joint appointments) pursuant to which the Partners will own and have the right to commercialize all intellectual property ("IP") developed by those employees.

In addition, the Institute's Board will adopt policies agreeable with its Partners for the sharing of any net revenues received by the Institute from commercialization of IP developed at the Institute. The Institute will establish or contract for a "commercialization" function to aggressively explore commercialization of the IP, with the goal of establishing a future source of funding that can provide an "endowment" for funding the Institute and the Partners. The Institute will pursue these commercialization efforts through sale and outlicensing transactions, as well as other commercialization initiatives that may involve obtaining development funding from strategic, angel investor, and venture capital funding sources, who will share the financial results of these commercialization efforts with the Institute. Additionally, the Institute will seek funding from various patient advocacy groups. It is likely that these results will be realized over 20 to 30 years or more after the formation of the Institute, thus providing a long term potential revenue stream.

In addition, it is agreed that a "carried interest" of 20% of the net revenue received by the Institute or its Partners from such commercialization efforts by the Institute or its Partners will be retained as a potential long-term "return on investment" to the citizens of the County in partial consideration for the commitment of the Tax Proceeds to the Institute. The County residents will benefit, for example if a portion of this carried interest could be held by a new nonprofit County Healthcare Foundation or other existing entity whose purpose could be to use these funds to benefit health-related initiatives, including: health care job creation, health care for indigent citizens, or re-investment in the Institute for years into the future. In effect, these returns in the commercialization activities would not only support the Institute and the Partners, but also could provide the potential for a long-term "annuity" that would provide additional "return on investment" to the taxpayers of the county in return for their approval of this tax.

#### **5. Funding and Possible Sales Tax**

The Institute's operations may be funded from numerous sources, including research grants, charitable donations, returns from commercialization of intellectual

property produced by the Institute (as described below) and the proceeds of a new Jackson County sales tax (the "Tax Proceeds") of up to one-half cent per dollar for a period of 20 years, which must be approved by the voters of the County. The funding from the Tax Proceeds will be used to further beneficial human health initiatives and create an economic development engine to grow high-quality, knowledge-based jobs in the County. The statute requires that the ballot submitting the tax to a vote read substantially "Shall Jackson County impose a sales tax at a rate of 0.5% for economic development purposes?" The ballot language will limit the use of the tax revenue to be used solely to fund the Institute, which would lead to medical cures and discoveries, create health-care related jobs and promote economic development in the County within the parameters of the authorizing statute. The statute authorizing the sales tax contains certain parameters regarding the use of the Tax Proceeds, including (a) a maximum of 25% of the Tax Proceeds shall be used annually for administrative purposes and (b) a minimum of 20% shall be used for projects directly related to long-term economic development preparation. (RSMo. §67.1305(10)).

By Missouri statute, the Tax Proceeds must be applied to spur economic development in accordance with the authorizing statute and the ballot language approving the sales tax, as overseen by a statutorily mandated "Economic Development Tax Board" consisting of 7 members, 4 of which are appointed by the governing body of the County, 2 of which are appointed by the cities in the County, and 1 of which is appointed by school districts in the County. (RSMo. § 67.1305(3) ). The Economic Development Tax Board is also charged with reporting, at least annually, to the governing body of the county on the use of funds provided under this section and on the progress of all previously adopted plans and such report shall be available to the public. (RSMo. § 67.1305(16-17)).

Since the Tax Proceeds would be used solely to fund the creation and operations of the Institute, in accordance with the terms of the statute and within the limits of the ballot language, and since commitment of this funding for the life of the sales tax is critical to the vote on the sales tax, the commitment of philanthropic funding, recruitment of the Scientific Director, and other critical gating issues that must be determined very early in the development of the Institute. However, the Economic Development Tax Board is not technically formed under the applicable statute until after the voters approve the sales tax. Therefore, it is contemplated that the persons who are anticipated to be appointed to the Economic Development Tax Board may meet informally even before the passage of the sales tax to discuss the role of the Tax Board. After the passage of the sales tax, the county legislature will pass an ordinance that commits the Tax Proceeds solely to the Institute over the life of the sales tax for the purposes outlined above, which would then be passed as soon as possible after the passage of the sales tax. The Economic Development Tax Board considers (including public hearings) and makes recommendations to the County on economic development plans and projects, although ultimately the governing body of the County has the final determination on use and expenditure of any funds received from the Tax Proceeds, pursuant to the terms of the ordinance and within the confines of the ballot language (RSMo. § 67.1305(13)).



Please note that the Economic Development Tax Board is not a body comprised by the Institute or related in any way to the Institute's Board, the Advisory Board, the Partners or the SAB.

## **6. Economic Impact**

As part of a feasibility and planning study, The Battelle Memorial Institute provided estimates of the economic benefit of the Institute. Battelle used a Kansas City Metropolitan Statistical Area (MSA) region-specific input/output model that is a product of the IMPLAN Group. The model estimates:

- Direct job creation and income impacts – the result of the Institute hiring
- Indirect jobs and income impacts – job hiring and income expenditures from the Institute suppliers
- Induced jobs and income impacts – additional jobs and incomes generated by employees and suppliers purchasing goods throughout the region.

The economic impact was projected annually for the initial ten years of operation assuming six "principal investigator" level scientists ("PIs") instead of the currently proposed nine PIs. It does not estimate impacts related to the creation of new businesses as a result of the science being directed into commercial production. The Battelle jobs' estimate in the first year is 73 Institute employees with direct income impacts from compensation and other start-up operational expenses of \$14.2 million. When indirect and induced impacts are totaled, the first year will have a total job impact of 196 new jobs and \$30.680 million in economic output.

By Year 10, the Institute is projected, by Huron Consulting, to have nine principal investigators creating on-site approximately 237 jobs. Including the 310 indirect and induced jobs in the economic impact estimates results in a total of 547 jobs in the MSA by Year 10. Total economic output is estimated, annually, at \$61.3 million (\$32.5 million direct and \$28.8 million indirect and induced).