

**MISSOURI STATE AUDITOR'S OFFICE
FISCAL NOTE (08-30)**

Subject

Initiative petition from Todd Jones regarding a proposed amendment to Article III of the Missouri Constitution. (Received March 20, 2008)

Date

April 9, 2008

Description

This proposal would amend Article III, Section 38 of the Missouri Constitution.

The amendment is to be voted on in November, 2008.

Public comments and other input

The State Auditor's Office requested input from the **Attorney General's Office**, the **Department of Agriculture**, the **Department of Economic Development**, the **Department of Elementary and Secondary Education**, the **Department of Higher Education**, the **Department of Health and Senior Services**, the **Department of Insurance**, **Financial Institutions and Professional Registration**, the **Department of Mental Health**, the **Department of Natural Resources**, the **Department of Corrections**, the **Department of Labor and Industrial Relations**, the **Department of Revenue**, the **Department of Public Safety**, the **Department of Social Services**, the **Governor's Office/Office of Administration**, the **Missouri House of Representatives**, the **Department of Conservation**, the **Office of State Courts Administrator**, the **Department of Transportation**, the **Missouri Senate**, the **Secretary of State's Office**, the **Office of the State Public Defender**, the **State Tax Commission**, the **State Treasurer's Office**, **Cole County**, **Greene County**, **Jackson County**, **St. Louis County**, the **City of Columbia**, the **City of Jefferson**, the **City of Kansas City**, the **City of St. Louis**, **Cape Girardeau 63 School District**, **Hannibal School District #60**, **Rockwood R-VI School District**, **Linn State Technical College**, **Metropolitan Community Colleges**, the **University of Missouri**, **St. Louis Community College**, the **University of Central Missouri**, **Harris-Stowe State University**, **Lincoln University**, **Missouri State University**, **Missouri Southern State University**, **Missouri Western State University**, **Northwest Missouri State University**, **Southeast Missouri State University**, **Truman State University**, the **Missouri Technology Corporation**, and the **Missouri Life Sciences Research Board**.

Assumptions

Officials from the **Attorney General's Office** indicated that the implementation of this proposal creates no fiscal impact for their office. However, they assumed that because this proposal has the potential to be the subject of state litigation, potential costs are unknown.

Officials from the **Department of Economic Development** indicated this proposal would have a significant negative impact on General Revenue, federal funds and local funds. The department anticipates a negative impact on public and private research institutions as well as on economic development efforts of local and regional government. In addition, they indicate that the passage of this constitutional amendment could have significant impact on small technology business growth and development.

The department assumes that placing the issue on the ballot by initiative petition will have no impact on General Revenue. However, they indicate that passage of the ballot initiative could have impact on the general revenue of this state. While the department did not make any fiscal projections, they do anticipate that this could have a significant economic impact and therefore impact general revenue.

This bill should have no known direct administrative or fiscal impact on the department. However, they do indicate there is a possibility that impact on the state general revenue could impact their agency to an unknown extent. If passed, this proposal could impact the department's mission to attract and retain business as well as grow business within the state.

The department also indicated that passage of the constitutional amendment could have significant economic impact on future research, entrepreneurship, and business development within Missouri. The department did not conduct any specific fiscal or economic projections on the impact of the constitutional amendment. However, they do anticipate that future projects and opportunities could be put at risk by passage of this amendment.

The **Department of Higher Education** indicated no foreseeable direct impact on their department resulting from this proposal.

The **Department of Health and Senior Services** indicated no impact as a result of this initiative petition.

The **Department of Insurance, Financial Institutions and Professional Registration** indicated this proposed amendment will have no cost to the department.

The **Department of Mental Health** indicated this initiative will have no fiscal impact on their department.

The **Department of Natural Resources** does not anticipate a direct fiscal impact from this proposal.

The **Department of Corrections** indicated no impact for their department.

The **Department of Labor and Industrial Relations** indicated the petition has no fiscal impact on the department.

The **Department of Revenue** indicated the petition will have no impact on the department.

The **Department of Public Safety** indicated there is no fiscal impact for this petition on the director's office.

The **Department of Social Services** indicated no fiscal impact to the department. The department further indicated that although they provide primary health care services to low-income Missourians, the proposal does not specify the recipient of these funds. They stated funds could be appropriated to any of several state agencies or the legislature could create a grant program to allocate money to non-governmental organizations that provide primary health care services.

Officials from the **Governor's Office/Office of Administration** indicated passage of this proposal should not result in additional costs or savings to their agencies. However, there would be a budget impact for the programs currently funded from the Life Sciences Research Trust Fund (LSRTF). Those programs would either be eliminated or other funds, most likely general revenue, would be needed to replace the redirected LSRTF moneys. The LSRTF receives 25% of the annual receipts from the tobacco Master Settlement Agreement. For Fiscal Years 2008 and 2009, Budget & Planning estimates the amount to be deposited into the LSRTF to be \$37.5 million and \$38.8 million, respectively.

In addition, Budget & Planning noted the following technical issues:

The amendment does not define or limit “primary healthcare” nor “low-income Missourians” which could go well beyond the current MO HealthNet program. In addition, the General Assembly must appropriate funding prior to any disbursement. There may be an issue with having a disbursement restriction rather than an appropriation restriction.

The **Department of Conservation** indicated no fiscal impact expected to their agency as a result of proposal.

The **Office of the State Courts Administrator** indicated that the proposed initiative petition should not have a fiscal impact on the judiciary.

Officials from the **Missouri Senate** indicated that the petition appears to have no fiscal impact as it relates to their agency.

Officials from the **Secretary of State's Office** indicated their office is required to pay for publishing in local newspapers the full text of each statewide ballot measure as directed by Article XII, Section 2(b) of the Missouri Constitution and Section 116.230-116.290, RSMo. The Secretary of State's office is provided with core funding to handle a certain amount of normal activity resulting from each year's legislative session. Funding for this item is adjusted each year depending upon the election cycle with \$1.6 million historically appropriated in even numbered fiscal years and \$100,000 appropriated in odd numbered fiscal years to meet these requirements. The appropriation has historically been an estimated appropriation because the final cost is dependent upon the number of ballot measures approved by the General Assembly and the initiative petitions certified for the ballot. In FY 2007, at the August and November elections, there were 6 statewide Constitutional Amendments or ballot propositions that cost \$1.2 million to publish (an average of \$193,000 per issue). Therefore, the Secretary of State's office assumes, for the purposes of this fiscal note, that it should have the full appropriation authority it needs to meet the publishing requirements.

Officials from the **Office of the State Public Defender** indicated this initiative will have no significant impact on their office.

The **State Tax Commission** indicated this petition will not impact their organization.

Officials from the **State Treasurer's Office** indicated that there is no fiscal impact on their office as a result of this petition.

Officials from the **City of Columbia** indicated that no fiscal impact is expected from this proposal.

The **City of Jefferson** indicated that they do not anticipate any fiscal impact should this petition become law.

The **City of St. Louis** indicated that the fiscal impact of the proposed constitutional amendment will be both extremely serious and extremely negative with \$14.3 million in annual lost revenue as a conservative estimate of this negative impact on the city.

The new initiative petition filed by opponents of stem cell research purports to ban "human cloning." In addition to what is commonly thought of as "human cloning"—a practice already banned by the Missouri Constitution—the amendment will ban one of the most promising new types of stem cell research, somatic cell nuclear transfer or "SCNT," a procedure for medical research or for treating disease that involves replicating (or "cloning") a patient's own skin cell in a lab dish in order to create healthy new cells to help treat his or her disease. This process is currently permitted by the Missouri Constitution but would be banned if the proposed amendment is passed. SCNT is also sometimes referred to as "therapeutic cloning" because the cells are copied for the purpose of providing or developing a therapy for a patient's disease or injury.

The economy of the City of St. Louis is closely tied to the City's image as a cutting edge center for medical research. The City of St. Louis ranks 12th in a listing of the Top 100 Cities for grants from the National Institutes of Health, with \$441 million in grants flowing into the City in 2005 from NIH sources. This \$444 million represents 85% of all NIH support flowing into the State of Missouri. These grants support our hospitals and medical schools (Washington University School of Medicine, St. Louis University, Barnes-Jewish Hospital, and St. Louis Children's Hospital), and, assuming that 60% of the funding pays salaries, account for approximately 5,300 jobs in the City. If only half of these jobs are lost—and it is a given that many of these jobs will be lost over time if this amendment is passed—the City will lose \$1.3 million in revenue each year—\$50,000 x 5,300 x 50% x .01 City earnings tax.

As the following table shows, the City's hospitals alone account for nearly 19,000 jobs in the City, and other medical, professional and scientific and technical occupations account for an additional 15,000 jobs. Thus, 34,000 of the City's 221,000 jobs—nearly 17%—are related to medical research and treatment and related professional occupations. Many additional jobs reside in the City's colleges and universities—because colleges and universities do not report their employment data in the same manner as other places of business, detailed job and wage data for colleges and is not available from the U. S. Bureau of Labor Statistics.

A threat to ban and criminalize any type of medical research puts a black cloud over our entire state. Scientists in general will view Missouri as a regressive and unfriendly place for life sciences research, and those who make careers of cutting-edge research will not locate in Missouri. In recruiting scientists and companies, perception of the research environment is very important. Some scientists have already said that they would not come to Missouri due to threats to overturn Amendment 2 and potentially criminalize research. The initiative petition now proposed will have a drastic impact on our universities and medical schools. These schools are the engines that drive both our existing medical and research facilities and the promise of a thriving concentration of young and mature science-based companies, like those who are beginning to occupy the CORTEX campus.

The proposed amendment will not only discourage growth in the institutions and businesses directly impacted by the amendment—the deleterious impact on health care over time will also impact the quality and size of our hospitals and our City's ability to attract and retain talent and employers from any industry. Quality of life, in particular quality of available medical care, has become a top issue in the selection of company locations. St. Louis enjoys access to some of the world's premier health care facilities in Washington University, the BJC Medical Center, and Saint Louis University, all of which are teaching hospitals. The regressive negative intellectual environment created by opposition to the newest medical research and treatments will certainly erode this quality of care as it will no longer be possible to attract top students for these schools and top professionals to staff the hospitals. This proposed Constitutional Amendment banning promising forms of stem cell research would also criminalize any patient who might one day get a cure from such a procedure, thus costing these hospitals patients. Again,

restricted access to the newest areas of medicine erodes the quality of life we take for granted from the great medical institutions available to us now.

RESEARCH-RELATED JOBS AND WAGES IN THE CITY OF ST. LOUIS

Source: U. S. Bureau of Labor Statistics--2006

TYPE	BUSINESSES	JOBS	TOTAL ANNUAL WAGES	% OF TOTAL BUSINESSES	% OF TOTAL JOBS	% OF TOTAL WAGE BASE
Medical Equipment & Supplies Manufacturing	15	516	19,613,949	0.19%	0.23%	0.19%
Professional, Scientific & Technical Services	889	14,642	952,212,500	11.11%	6.63%	9.12%
Hospitals	13	18,634	769,206,410	0.16%	8.43%	7.37%
TOTALS--LIFE SCIENCES RELATED:	917	33,792	1,741,032,859	11.46%	15.29%	16.67%
City of St. Louis Totals:	8,000	221,000	10,442,455,000	100.00%	100.00%	100.00%

A 10% loss of jobs in the three categories shown in the above table will cost the City more than \$10 million each year in direct loss of the 1% City earnings tax from these employees. It is also safe to say that this 10% loss will have a similar ripple effect in the thousands of other employees who serve the needs of the hospitals—laundry services, transportation, construction, wholesale food sales, and others.

In addition, passage of the proposed amendment will cost the City growth. The Battelle Institute of Cincinnati has already predicted that if current trends (absent this amendment) continue, Missouri will be eclipsed as a life science-driven economy by other states and regions. On the other hand, Battelle also predicts that if the state aggressively pursues the life sciences and makes the necessary investments over the next ten years in the research capacity and technology commercialization areas, the state would add more than 21,000 permanent jobs in life science industries, for the most part well-paid, quality employment. Conservatively assuming that one fourth of these jobs would be located in the City, given the City's predominance as a center for medical research, further assuming conservatively that each new job had a salary of \$50,000 per year, and further assuming that this salary grew by 3% each year, the loss of these new jobs to the City would cost the City an average of \$3 million per year once these jobs were fully situated. Again, it is also safe to say that this loss will have a similar ripple effect in the thousands of other employees who could be hired to serve the needs of the growing hospitals and research/development businesses—laundry services, transportation, construction, wholesale food sales, and others.

In summary, we therefore conservatively estimate that the proposed amendment will cost the City of St. Louis a minimum of \$14.3 million per year in direct general revenue—approximately 3.5% of the City's general revenue budget—and countless millions more in indirect revenue. This is a loss that the City cannot tolerate in the face of rising costs and rising service needs.

As the Battelle Institute report stated in 2003, “If Missouri does not choose its ‘fork in the road’ consciously, deliberately, and with full knowledge of the consequences, it may take a fork that neither it nor its citizenry chooses. ...one fork may take Missouri to 21,000 additional well-paying jobs, \$7.2 billion in additional gross regional product, and more than \$3.9 billion in real disposable income over the next decade. The other fork may not only cost the state these jobs, but, if the state and the private sector simply continue existing trends, it may also mean further significant job and economic losses in key life science industries such as drugs and pharmaceuticals and medical devices.”

A ban on SCNT will seriously harm the Missouri economy and its life science industry, in particular that industry in the City of St. Louis. The threat of such a ban has already caused harm in Kansas City, where the noted Stowers Institute has been unable to recruit the scientists necessary to carry out the Institute’s work. If the Institute expands in another state, Missouri will lose millions of dollars in economic benefit directly related to stem cell research that is not “human cloning.” Human cloning is currently banned by the Missouri Constitution. Opponents of stem cell research have falsely claimed that human cloning is not banned, because they also want to forbid promising medical procedures that require the copying of cells. However, the terminology, the concepts, and the distinction used in the Missouri Constitution are the same as used by America’s most respected doctors and scientists.

America’s most respected doctors and scientists believe that “reproductive cloning” should be banned, but that “therapeutic cloning” should be encouraged because it holds great medical promise to lead to cures for debilitating diseases—this is also the current philosophy espoused in the Missouri Constitution. In 2002, forty Nobel Prize Winners sent a letter to members of the U.S. Senate making this important distinction. Nobel Prize-winning Scientist Paul Berg has stated that “cloning humans and ‘therapeutic cloning’ are fundamentally different. The cloning of a human being should be prohibited. Therapeutic cloning, on the other hand, is meant to produce stem cells, not babies.” What the proposed amendment would ban is the same procedure that stem cell research opponents have tried unsuccessfully to ban in the legislature for the past five years. The passage of the “Stem Cell Amendment” in late 2006 ended the legislative battle. That battle has now moved to the voting booth with the proposal for this amendment.

In an effort to help quantify the economic impact of a new effort to undo Missouri’s constitutional research and cures protections, the Coalition for Plant and Life Sciences, the Center for Emerging Technologies, and the Nidus Center for Scientific Enterprise collaborated on a survey of St. Louis science and technology-based companies and St. Louis investment firms and organizations that specialize in investments with science-based companies. This survey sought to measure the potential impact of this new proposal.

Responses were received from eleven science and technology companies. The results, summarized below, clearly demonstrate that an overwhelming majority of the leaders of these companies would find the amendment to be a severe impediment to growing their companies in Missouri, that a majority of respondents would consider moving their

companies out of Missouri if the amendment passes, and that a majority of respondents believe that the amendment would be perceived as an anti-research initiative that would make Missouri an unattractive location for the high growth science-based companies that have become a major part of the City's bread and butter.

- 55% said the new amendment would make them less likely to keep their company in Missouri
- 45% said it would have no effect
- 0% said it would make them more likely to remain in Missouri
- 73% said the new amendment would make it more difficult to recruit scientists and other talent to Missouri
- 18% said it would have no effect
- 9% said it would make it easier to recruit scientists and other talent to Missouri
- 73% said the new amendment would make it more difficult to attract investors and capital to their company in Missouri
- 27% said it would have no effect
- 0% said it would make it easier to attract investors
- 73% said the new amendment would increase the pressure to relocate their company to another state
- 27% said it would have no effect
- 0% said it would decrease the pressure to relocate
- 73% said the new amendment would increase the likelihood that existing companies would avoid Missouri when considering whether to locate here
- 18% said it would help attract companies to Missouri
- 9% said it would have no effect
- 82% said the new amendment would make entrepreneurs considering starting a company in Missouri more likely to start their company in another state
- 18% said it would have no effect
- 0% said it would make entrepreneurs more likely to start their company in Missouri

The seven Missouri-based venture capital firm and investor organization respondents were unanimous in their agreement that this newly proposed amendment would harm Missouri's business climate by overturning our current protections for science and research.

- 100% said the new amendment would make it more difficult to relocate existing companies to Missouri
- 0% said it would be easier to relocate companies to Missouri

- 100% said the new amendment would make it more difficult to establish new companies in Missouri.
- 0% said it would be easier to establish companies in Missouri

It is important to note that none of the surveyed companies or investors is involved in stem cell research. That being the case, these results are evidence of the serious harm that this proposed amendment would wreak, not just on companies involved in stem cell research but on the wide variety of companies in Missouri that depend on scientific research for their survival and growth. Any threat to science of any type creates a chilling environment and negatively affects their business climate.

While it is not possible to quantify the results of this survey in terms of specific economic impact on the City of St. Louis, we believe these results clearly support the above assertions that if the amendment passes the City will lose both existing jobs and new opportunities, and as a result will lose, at a minimum, the \$14 million per year in revenue referenced above.

In summary, the negative impact on the amount of research and the consequential economic development emerging from the scientific research that would result from the proposed amendment would impact the City of St. Louis disproportionately: the City would suffer a very substantial reduction in scientific and medical activity and the sacrifice of significant future growth potential. As the chart above shows, medical research and treatment are extremely significant parts of St. Louis's current economy; as the CORTEX initiative and the Battelle report demonstrate, these economies are also very important parts of our future. As the survey results demonstrate, businesses involved in scientific research of all types and the businesses involved in raising capital for these research businesses would seriously question their futures in Missouri. Given the negative attitudes of businesses already ensconced in Missouri to the passage of this amendment, it is also obvious that businesses outside Missouri would have equally if not more strongly negative attitudes and would not locate in the City of St. Louis or Missouri.

Officials from **Linn State Technical College** indicated there appears to be no fiscal impact on their organization as a result of this initiative petition.

Metropolitan Community College indicated this proposed amendment would have no direct fiscal impact on their organization.

The **University of Missouri** indicated this action could have a significant, negative chilling effect on education, research, and economic development across the University of Missouri (UM) System– at all four campuses.

The proposed amendment, if adopted, would have the effect of causing agricultural research in Missouri eventually to lose up to \$200 million of research funding annually as the trust fund grows. Missouri agricultural research has currently benefited from Life Science Trust Fund support, which would not be the case should the proposed

amendment be adopted. Because agriculture is Missouri's primary enterprise, the potential results of this amendment would be felt statewide and would significantly impact the University's agricultural mission.

In the first year that the Life Sciences Research Board has distributed research grants from the Life Sciences Research Trust Fund, University of Missouri researchers have received approximately \$8.3 million. The grants support research in such diverse areas as biofuels, microalgae, bone fracture, functional foods, and bull fertility. The proposed amendment would eliminate this kind of support going forward.

The proposed amendment, if passed, is projected to have a direct impact on the University's ability to grow and sustain its research operations and meet and exceed its economic development goals. Critical to fulfilling the University of Missouri's mission as the state's public research university is the ability to recruit and retain top faculty researchers who will contribute to the research enterprise to the ultimate benefit of the state's economy. The perception that the state has a hostile attitude toward research, and thus to academic freedom, can have a dampening effect on recruitment and retention of faculty. Restrictions on research funding, such as what this amendment would impose, will have a deleterious effect on faculty perceptions and a negative impact on the University's ability to conduct cutting edge research that will extend beyond the life sciences.

Competition nationwide to attract and retain research faculty is exceedingly high. Faculty members consider many factors when deciding whether to stay in current positions or to accept offers from other states, including: supportive environment for research, level of state and private support, institutional reputation, and availability of state-of-the-art research facilities.

This amendment could also have an impact on the University's ability to support and grow commercialization of new technologies and the formation of new companies that result from the research. Grants from the Life Sciences Trust Fund were targeted to leverage agriculturally based research performed by University faculty into commercial products and new companies. Without this funding, the University's goal to increase revenues from patents and licenses from \$2.3 million in FY 2006 to \$10 million will be at risk. This would impact the University's ability to reinvest in research and technology transfer operations and in economic development ventures that benefit the entire state such as the Discovery Ridge research park and the new life sciences incubator in Columbia and the Missouri University of Science and Technology Innovation Park in Rolla. A recent MERIC economic impact analysis on Discovery Ridge indicated that continued investment in this project would yield an economic impact of \$33 billion on the state's economy.

Harris-Stowe State University indicated this petition will have no fiscal impact on their organization.

Missouri Southern State University indicated they are not a research institution and therefore this initiative would not have a fiscal impact on their organization.

Officials from **Northwest Missouri State University** determined that this measure would have no estimated costs or savings impact on their organization.

Truman State University indicated no direct fiscal impact on their organization can be identified.

The State Auditor's Office did not receive a response from the **Department of Agriculture, Department of Elementary and Secondary Education, the Missouri House of Representatives, the Department of Transportation, Cole County, Greene County, Jackson County, St. Louis County, the City of Kansas City, Cape Girardeau 63 School District, Hannibal 60 School District, Rockwood R-VI School District, St. Louis Community College, University of Central Missouri, Lincoln University, Missouri State University, Missouri Western State University, Southeast Missouri State University, the Missouri Technology Corporation, and the Missouri Life Sciences Research Board.**

Fiscal Note Summary

For fiscal year 2008, the state authorized \$13.5 million in spending from the Life Sciences Research Trust Fund to increase life science research capacity. This proposal requires the first \$200 million from the fund, annually, be spent on healthcare for low-income Missourians. The total costs or savings to state and local governmental entities are unknown.