COLUMBIA MISSOURIAN

GUEST COMMENTARY: Missouri businesses, research universities must unite for better quality of life

By Brady J. Deaton, Leo E. Morton and Robert Duncan
February 16, 2010 | 12:01 a.m. CST

Silicon Valley in California, the Research Triangle in North Carolina, and Route 128 around Boston have emerged as centers for innovation and discovery in the United States. At the center of these regions are at least one outstanding research university and a business community that understands how to utilize the opportunities that universities provide. Collaborations between these university and business communities have shaped the products we use, the services we expect, even the way we work and live. And, the quality of life in these areas is well above the national average.

In the Missouri/Kansas region, we have outstanding universities where researchers are doing outstanding work. At MU, new advances in basic biosciences will impact the food we eat, the medications we take, the medical therapies we use and even the way we expend energy. The region is also home to major businesses interested in discoveries that they can market to customers as products that will vastly improve people’s lives.

Animal and human health are becoming more integrated than ever before. New procedures and techniques that work for dogs, cats, horses and pigs are finding their way into human hospitals, while veterinarians are utilizing diagnostic and therapies for human diseases, including cancer, to treat their four-legged patients. Yet, the time and hurdles that scientists face to get their discoveries from the lab to the bedside can be challenging.
The region from Manhattan, Kan., to Columbia contains the largest concentration of animal/human health researchers PLUS veterinarians and companies interested in marketing human and animal health innovations. This thriving Midwestern region has come to be known as the “Animal Health Corridor.”

It is quite possible that 10 years from now the medicines we take may be custom designed for our illnesses with less risk and faster recovery. The food we eat will be designed to produce a better yield and thus cost less. The energy we use will be cleaner, leading to better respiratory health and lower utility bills.

For these things to occur, business leaders must know about and be provided access to researchers at universities who are discovering new ideas and processes.

On March 8 and 9, MU will lead a regional life sciences summit in Kansas City to do just that. The goal of the summit is to accelerate the movement of new ideas from the laboratory to the marketplace. Business leaders, legislators, scientists, university leaders, bank chairmen and other representatives from prestigious institutions and organizations from the region will come together to identify innovations that will lead to new private sector investments and discoveries that hold the greatest promise for commercialization.

The potential contributions of new government programs, new legislation, community college educational efforts and new business models will be identified.

Anticipated outcomes of the summit include new information on how to best leverage the assets of universities, financial markets and business investments to create new companies and jobs that will strengthen the economic foundations of the region.

People from the Kansas/Missouri region are known for being hard working and determined. During these challenging economic times, the time is right for the region’s businesses and research universities to work together to improve the lives of all U.S. citizens. We have an opportunity to emerge as an innovative center much like Silicon Valley or the Research Triangle. The Missouri Regional Life Sciences Summit is a step toward this goal, which will lead to a better economy and quality of life for all of us.

For more information or to register for the conference, go to MissouriSummits.com.

Brady J. Deaton is the chancellor for the main MU campus; Leo E. Morton is the chancellor for the University of Missouri-Kansas City; and Robert Duncan is the vice chancellor for research at MU.
Benefits at issue in survey

UM employees can have input.

By Janese Heavin

Tuesday, February 16, 2010

Employees across the four-campus University of Missouri System are being asked what they value most about their salary and benefits packages.

A systemwide survey is now online that asks faculty and staff to rank the importance of specific benefits such as medical, long-term disability, UM-paid life insurance and retirement plans. Some of the first questions seem to have an obvious answer — who wouldn’t want to pay 10 percent less for a medical premium? But the questionnaire is customized, and questions adapt to individual responses. That means an employee’s initial responses dictate a series of questions in later sections.

MU Faculty Council Chairwoman Leona Rubin took the survey this morning and said, overall, she liked the content.

“It seemed to ask 21st-century questions, which I thought was good,” she said. Specifically, Rubin pointed to questions asking employees about their diets and exercise habits and whether they would value benefits allowing them to use activity centers. Those are things that “haven’t been in the minds of” human resources “people in the past,” she said.

Rubin was also pleased to see a question asking whether employees think domestic partnership benefits should be a priority if extra resources become available. The MU Faculty Council is studying domestic partnership benefits after faculty at the St. Louis campus adopted a resolution supporting same-sex benefits.

Stephen Montgomery-Smith, vice president of MU’s American Association of University Professors chapter, said he’s “pretty happy with the benefits package” as it’s set up, but he agreed the survey is a good idea, especially if it reveals some trends.

Despite expected revenue shortfalls, the survey is not about making budget cuts, administrators have stressed. It’s “not related to benefit reductions, resource limitations or an increase of the employee contribution to the retirement plan or any other benefit plan,” Betsy Rodriguez, vice president of human resources, said in a video attached to the survey.
She also stressed that the system will not have access to individual responses. The system is paying Hewitt Associates, an independent consulting firm, $125,000 to conduct the survey, said UM spokeswoman Jennifer Hollingshead.

Although administrators are hoping for responses from a majority of employees, Hollingshead said they anticipate a roughly 45 percent return rate.

Lack of participation could skew the data, Rubin said. For instance, if the majority of participants are nearing retirement, results will lean toward better retirement benefits while younger employees might rank take-home pay most important. Rubin said she’s encouraging every employee to fill it out. “It will be very valuable for HR and for us to know,” she said.

The questionnaire also asks for more general feedback about the university. One question, for instance, asks whether employees tell others “great things about working at the university.” Others questions ask whether the university “inspires me to do my best work everyday” and whether “UM motivates me to contribute more than is normally required to complete my work.”

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Current system patently stupid

MU needs to release tech back to inventors.

By GALEN SUPPES

Tuesday, February 16, 2010

There is a flurry of activity on the University of Missouri campus related to technology transfer. The technology transfer group is all but taking over the third-floor offices in the Bond Life Sciences Center. In engineering, newly constructed offices will house a technology transfer staff about equal in number to the number of engineering faculty who are actively trying to commercialize technology through the university. In addition, President Gary Forsee is giving an additional $5 million to the business incubator center.

The MU faculty would gladly welcome a technology transfer office that would regularly succeed in commercializing the employee-inventors’ technologies. For many of us, few things are more motivating than to see our laboratory breakthroughs make it to commercialization where they can help society.

Sadly, the MU technology transfer groups do not rise to this challenge. The need for a $5 million influx of funds to the business incubator is evidence of this — that center was supposed to be self-sufficient. An absence of companies using the facility, however, necessitates that someone step up to pay the mortgage.

In the past nine years, the technology transfer group has undergone three major reorganizations. In each case, the reorganization was in response to the dismal failures of their predecessor organization. As with the past, the most recent reorganization has failed to fix the group’s substantially flawed foundations. Even with the huge expenditure of resources in this current reorganization, it is likely to be yet another dismal failure with the added nuance of costing several million dollars more of Missouri taxpayer money than the past failures.

To get to the source of flawed foundations, we have to overlook the fact that the one constant use of the system’s royalty moneys is toward six-figure salaries for under-qualified administrators and attorneys.

Also, we have to get past the huge amount of money and effort the system places on making sure these six-figure administrators are not held accountable for their many poor decisions. And we have to get past the fact that although these administrators require the faculty to be evaluated regularly by students and peers, they do not subject themselves to similar evaluations.
The catastrophic flaw in the program is university technology transfer administrators have abolished practices that protect faculty from the dysfunctional, incompetent and/or even malicious practices of their offices. They have abolished the timely release of inventions back to the university inventors when the tech-transfer group decides not to pursue patent or when they fail to commercialize the technology. The silent majority of MU faculty does not even attempt to commercialize technology because they know it is hopeless with the current administration.

There are two important consequences when universities honor the fallback position of releasing inventions back to inventors.

The first is the technology leaves the hands of administrators who are typically substantially incompetent on the technology in question — this is as much a testament to the academic system where faculty develop highly specialized programs as it is to the under-qualified administrators. The technology has at least a reasonable chance of commercialization when it is under the control of inventors who truly understand the technology.

The second consequence is a track record can be established on the decision-making ability of the administrators. Are they really worth those six-figure incomes?

Many have correctly speculated the primary reason administrators refuse to release technology is, precisely, to avoid documenting the administrators' inability to earn their salary — their lack of ability to make good decisions about which technology to invest resources in pursuant to commercialization.

Administrators often say technology is not released to protect the interests of Missouri. That excuse, however, is obviously not valid because the most common fate of unreleased technology is the certainty that nobody has both the incentive and know-how to commercialize the technology.

A second major flaw of the many generations of technology transfer offices at MU is that the MU System attorneys spend a lot of time and effort on bickering over contract details. For companies, time is money, and they do not have time to bicker over absurd contract terms. We all know what the primary result of attorney work is — the creation of more work for more attorneys. The up-staffing of attorneys in the MU System will most certainly impair commercialization rather than help it.

If you want to fix the broken technology transfer program at MU, first reignite the fallback position of releasing inventions back to inventors when the technology transfer group is unable to both patent and commercialize the technology. Next, put in place template licensing agreements that are reasonable, recognize the high value of a good commercial partner and recognize how little the president's technology transfer group has to contribute to successful commercialization of university-born technology.

Galen Suppes, a professor of chemical engineering at MU, is involved in litigation with the UM Board of Curators over invention ownership.
Covidien set to unveil a new source of medical isotopes

By Kim McGuire
St. Louis Post-Dispatch

In a day filled with nuke news, here’s more to report.

Covidien, the parent company of the Hazelwood-based Mallinckrodt Pharmaceuticals, will announce tomorrow morning that it’s reached an agreement with the owners of a nuclear research reactor in Poland to produce the medical isotope, Technetium 99m.

The Maria Research Reactor outside of Warsaw will produce Molybdenum 99, another radioactive isotope that decays into Technetium 99m, which is widely used to measure blood flow and diagnose cancer.

Covidien’s Missouri unit manufactures the lead-lined generators where technetium 99m is separated from moly 99.

Just a handful of nuclear reactors scattered around the world produce Moly 99. And in recent years the worldwide supply has been threatened by shutdowns and other problems.

“This is a historic agreement,” said Timothy Wright, president, pharmaceuticals, Covidien. “It is the first time in decades that a new reactor has been brought into the global supply chain for medical isotopes. “We are excited that we will now be working together to provide more than a million patients around the globe with access to a critical isotope during this serious shortage.”
Before that Technetium 99m is available for patients in the U.S, the Food and Drug Administration will have to grant approval.

*About a year ago, we told you about plans to produce Moly 99 at the University of Missouri's research reactor. On Tuesday, a school spokesman said those discussions are still ongoing.*

Be sure to look in Thursday’s Post-Dispatch for more details about Covidien’s plans which will be discussed at greater length during a teleconference in Warsaw tomorrow.

(No Ratings Yet)
The Tribune's View

Energy

A complicated argument

By Henry J. Waters III

Tuesday, February 16, 2010

Two University of Missouri profs recently returned from the climate change summit in Copenhagen saying they were disappointed by what they regarded as its lack of progress. The big nations, including the United States, were not willing to agree to a binding plan for seriously reducing greenhouse gas emissions.

The professors are believers in what they call “settled science,” affirming a pattern of man-made global warming threatening many areas and peoples of the world.

Writing Sunday in these pages, the director of the sustainable development program at the Rockefeller Brothers Fund expressed a similar agenda based on an argument intended to appeal to the economic development gene in all of us: Alternative energy is becoming a huge economic niche that the United States is failing to exploit. Most solar panels and wind turbines are being built in other nations.

You don’t have to be a global warming skeptic, which many people of reasonable intelligence are these days, to question a headlong move into alternative forms of energy as primary sources. What proponents fail to stress is that alternative energy industries and generation are sustained with large public subsidies or plans such as “cap-and-trade,” involving big costs to an industrial nation with cheaper sources of coal and oil and natural gas.

No matter how appealing to promoters of renewable energy, it simply is unrealistic to expect the United States to impose such costs, which visit on every citizen, not just commercial energy users. The plague of global warming is not as evident as the smog in Los Angeles once was.

Subsidies are necessary to launch new technology, and increasing use of renewables is a good thing, but improvements in more efficient sources of energy can be even more effective. If we want to save the environment and fight global warming with public subsidies, we will get much more bang for the buck supporting increased nuclear power generation.

The big debate over global warming is not whether it is occurring but how best to react, starting with an honest assessment of likely effects and whether a feasible cure lies in unrealistic
expectations limiting the use of fossil fuels. We have made great strides in cleaning the atmosphere and should keep at it. Increasing use of wind, solar, hydro and other clean sources of energy should be encouraged. Expecting these sources to become primary by quelling the use of more efficient fuels is a pipe dream and the wrong place to focus intended climatic fixes.

If the Maldives and lower Manhattan are destined to go under water, we won’t be able to avert that outcome with a Copenhagen greenhouse gas policy. When and if such threats become real, we’ll be obliged to take protective action for the particular problems at hand. Meanwhile, most of us are not yet ready to believe such dire promises warrant the prohibitionist policies being promoted by the most ardent climate worriers.

HJW III

Worry is a misuse of the imagination.

— DAN ZADRA, BUSINESS EXECUTIVE
COLUMN: Handing out dollar bills in class and other overcompensation

By Andrew Van Dam
February 15, 2010 | 12:01 a.m. CST

If I could force you to pay me for this column, I would.

In fact, I'd settle for being able to force someone to even read it.

I reckon that's why I'm so fascinated with professors who are in a position to write books, then require students to buy them.

After all, that's more or less the ultimate goal of hundreds of Missouri School of Journalism students: To trick someone into paying us to write stuff.

In journalism, it's a pretty simple proposition. You report, you write, people read it and you get a paycheck. Professors often write for financial reasons too, but the relationship's not nearly as straightforward as it is in journalism.

For starters, the numbers have pretty clearly demonstrated that the 24 MU professors who wrote or edited books, then required students to buy them this semester are not doing it for the money. I never suspected they were, but I was somewhat surprised to find that many professors, through their efforts to avoid any conflict of interest, actually lose money by assigning their own books.

It's all part of the convoluted economics of academic publishing.

At some level, professors who write are motivated by money. But, in their case, "money" does not equal "royalty checks." The vast majority of the books I investigated were published by university presses, and the professors I talked to would have been astonished if their royalties had ever entered four digits. Many years, they don't even break the two digit mark. Commercial textbooks designed for survey courses nationwide can be a slightly different matter, but there were few of those on my list.

In many cases, professors have been assigning their books for so long that there are piles of used copies lying around Columbia and thus few royalty-earning new sales are ever made. Accounting professor Billie Cunningham, for example, asked her large lecture classes where they got their copies
of "Accounting: Information for Business Decisions," which she helped write. Cunningham said 75 percent of them bought used copies at the bookstore, and another 19 percent got used copies from other sources. That leaves just 6 percent who either bought new books or no books at all.

Instead, professors are rewarded for writing with the sort of prestige and status that can lead directly to their profession's holy grails, tenure and endowed chairs. Publishing is explicitly figured into the tenure equation; in many departments it's a major component of the magic formula by which tenure (and the financial security that comes with it) is granted.

To professors, then, writing a book that's groundbreaking and significant enough to justify assigning it to your own students is something to be proud of.

As professor David Sleper, co-author and assigner of "Breeding Field Crops," said, "I don't know of anyone who has a text that does it for the money."

"You do it because you care for students and it does give recognition to the university. It has also given me recognition and has helped to recruit high-quality graduate students in our department."

Minutes before the Super Bowl, I e-mailed Sleper and the 28 other MU professors whose names were on the cover of books that they required their class to read. I got 13 replies, several of which, in a testimony to the priorities of MU's academics, arrived during the big game itself.

Of the 13 who replied, five requested that I remove their names from the list because their book either wasn't technically required or wasn't earning them any royalties. The remaining eight all made it clear that they'd deeply considered the ramifications of assigning their own book and taken steps to deal with it in their own way.

All the professors believed their text was the best fit for the class they taught, and Professor Michael Diamond (who only recommends, not requires, his "Private Selves in Public Organizations") added that, in his opinion, "it's important that students know what their faculty publish and the perspective and expertise they bring to the classroom."

Professor Alex Waigandt pointed out another side benefit: The professor has already spent years writing the text in question, so they won't have to always be reading "one chapter ahead" in lecture. Instead, they'll be able to go well beyond what the text offers. That's not always possible when you're assigning someone else's groundbreaking work.

Respondents did everything from setting up foundations with textbook proceeds to handing out dollar bills to reimburse students for any royalties earned, but Waigandt took the simplest approach. He
simply skipped any financial rewards and had all royalties from "An Introduction to Statistical Reasoning in Quantitative Research" sent directly to his department, whether they were from copies purchased by his own students or not.

Guy Adams teaches a graduate course on "Ethics, Democracy and the Public Service," so it's no surprise that he's turned the tricky ethics of assigning "Unmasking Administrative Evil," an award-winning book he co-authored in the late '90s, into a "teaching example" about conflict of interest and appearance of impropriety.

Adams has always allowed his students to choose which charity he'll donate that class's royalties to, and in 2004 his students took it a step further and turned the whole thing into a fundraising challenge.

Since then, "The commitment I've made to each class is that I will match any funds they raise for the chosen organization," Adams said.

"So, for example, for the 2004 class which raised $217 for El Centro, I matched that with my own $217. Needless to say, this was a bit more than I realized in royalties from sales of the book. In fact, I've lost money, so to speak, every time I've assigned my book."

I admire Adams' approach, but personally, I would just make up for forcing my students to buy my book the only truly fair way: The world's slowest, least-profitable pyramid scheme. As long as you buy mine now, I'd tell them, I'll promise to buy any book that you publish in the future.

That way, everybody's happy. Especially the publishers, paper manufacturers and bookstores, who would collectively be grossing ten times as much as we did from that little scam.

**Andrew Van Dam** is a graduate student at the Missouri School of Journalism. His wife is applying for PhD programs now. If she gets in, he fully expects to rake in massive profits once she starts forcing her students to buy her masters' thesis, a definitive work on Uzbek peasant resistance to early Soviet collectivization efforts in the Ferghana Valley. In other words, high-margin stuff.
Missouri residents deal with winter blues

By Lindsay Ross
February 17, 2010 | 12:01 a.m. CST

COLUMBIA — If you’ve been moaning and groaning about how long and cold this winter seems, here’s a little validation: This is the first time in Missouri since the winter of 1982 that December, January and February have all had below-average temperatures.

So far, February has been 6.2 degrees below average; January, 4.5 degrees; and December, 2 degrees, according to MU meteorology professor Tony Lupo.

Along with the cold, this winter has been extra snowy as well — great news for the snowman population but bad for those who hate the white stuff.

“In the realm of snow, we’re ahead of the game,” Lupo said. Mid-Missouri has seen 18.5 inches of snow since Nov. 1; this area normally gets 20 inches total between Nov. 1 and March 31. “We have not had a winter like this in quite some time,” Lupo said.

Some Columbia residents, such as Dustin Calvin, 29, are experiencing a bad case of the winter blues. “As I’ve gotten older, I hate the winter more,” she said. “It’s pretty, but it’s so cold.” Calvin said what she misses most about warm weather is the flowers.

Kristie Elliott, 38, doesn’t like winter either but takes an unusual approach in dealing with it. “I ignore winter,” she said. “It’s my reverse psychology — if I don’t see it, it doesn’t exist.”

But before you turn and gripe to your neighbor in the grocery line, know that some people look forward to this time of year.

As a meteorologist, Lupo hears a chorus of grumbles every winter about the weather, but said he likes winter better than summer.

“Hot weather is miserable,” he said. He is from upstate New York and said he believes weather preference has a lot to do with where a person grew up.
This assertion holds true for Mike Sweeney, 39.

Originally from Denver, he said he loves the snow, but he is not a fan of the Missouri cold and wind chill. Although immune to the winter blues himself, he does try to offer hope to friends suffering from this Jack Frost-induced syndrome.

“I tell them that spring is just around the corner,” he said.

Lupo said this winter has been especially tough for some because Missouri has experienced consistent cold without the reprieve of a warm spell like in previous years. “People have gotten used to getting breaks from cold, but there has been none this year,” he said.

For those fed up with winter and its triple threat of cold, snow and clouds, take solace in this: spring is a mere month away, and before you know it, your winter blues will have dissolved into spring fever.
COLUMBIA MISSOURIAN

Kansas lab looked at synthetic marijuana's effect on brain

MU MENTION on Pg. 2

By Katy Bergen
February 17, 2010 | 12:01 a.m. CST

COLUMBIA — A legal substance that mimics the effects of marijuana is responsible for some hospitalizations across the country but has not proven to be a significant presence in mid-Missouri.

K2, a substance that state Sen. Kurt Schaefer, R-Columbia, wants to ban in Missouri, is a "non-issue" in Columbia, said Jessie Haden, Columbia Police public information officer. The Columbia police have not received reports of incidents involving the legal substance.

K2 is a combination of plant materials and two synthetic cannabinoids, according to Jeremiah Morris, a forensic scientist for the Johnson County Criminalistics Laboratory in Mission, Kan. The laboratory ran an analysis on K2 in October 2009 after noticing an increase in use in Johnson County.

“They found K2 to contain lab-produced drugs that act on the same part of the brain as marijuana,” Morris said.

But the compounds in K2 are three to five times more potent than THC found in marijuana. Morris compared the effects of K2's compounds to a lock-and-key mechanism in which the lock is a receptor site of the brain and the key is the drug's compounds. The "keys" in K2 compounds are keys that fit the brain's "lock" better than those in marijuana.

The psychoactive drug can cause users to experience rapidly increased heart rates, loss of consciousness, paranoia and, occasionally, psychotic episodes. One hospitalized user claimed he could see his heart beating out of his chest. Individuals have different reactions to the drug, though users do not have to smoke excessively to experience potentially harmful symptoms, Morris said.
K2 was produced in a laboratory at Clemson University in 1995 by a group of research students working under professor John Huffman, who was trying to explore how drug substances latch on to receptor sites in the brain. Morris said he believes that manufacturers of K2 created and sold the substance for drug use by studying Huffman's research, published in 1998.

Morris said there has been little scientific research exploring the toxicity of K2 in the United States, but hospitalization cases have appeared in Florida, Maine and Arkansas, in addition to St. Louis, Springfield and Kansas City.

Scientific studies on K2 compounds were done using a drug called Spice that emerged in Germany in 2008. It was made up of plant materials and the same compounds as K2 and caused psychotic episodes that resulted in increased hospitalizations and accidents, Morris said.

These studies showed that those who ingest K2 compounds exhibit typical drug dependency signs, withdrawal symptoms and addictive behaviors associated with other drug use. Morris said that K2 and Spice are basically the same product with different names.

"We're seeing exactly what Germany saw in 2008 and 2009," Morris said.

Morris said that as people have begun to smoke K2 instead of marijuana, calls to poison control centers and emergency rooms have increased.

Though K2 has psychoactive properties, it is currently legal in Missouri and federally. Schaefer and other legislators hope to change this.

The House Public Safety Committee unanimously voted to pass a bill that, among other things, would make one of the ingredients in K2 illegal.

The bill's next step is passage by the House Rules Committee. It could then go to a vote of the whole body.

Kim Dude, assistant director of the MU Wellness Resource Center said the center has no plans to incorporate K2 into their educational programs until more information is found about the drug.

"The noise is from the media; it's not from the students," Dude said. "I think a lot of people are unaware."