

## ITHI Working Paper Series

### #16 ENTREPRENEURIAL UNIVERSITY AT RISK?

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The entrepreneurial university is at risk of being subverted by metrics that privilege a narrow research university model predicated on an Ivory Tower ideology of isolation from the university's stakeholders. The tension between an insurgent entrepreneurial academic model, and a resurgent research university model, was the hidden dynamic underlying the recent Tomsk Triple Helix conference. This tension also drives a dialectic that will shape the future of the Russian University, an institution in transition from its secondary status in relationship to the Academy research institutes of the Soviet Union, to an as yet to be determined organizational design that will be the driver of Russia's transition from an extractive resource-based to a knowledge-based economy.

For those of you who were at the Tomsk Triple Helix conference, this issue of Helice will be a reunion, while for those who did not reach the "heartland of Russia" this September; it will be a virtual attendance. Our colleagues were expecting an "Indian summer" of renewed warmth, but the Siberian weather gods had another idea forcing cancellation of the pre-conference fishing expedition, and the chance to contribute to an "ukha" fish stew. Instead, after a brief rest after being met at the airport by a Jazz saxophonist, the members of the THA Executive Committee held the annual in person meet, whose results are on the THA website [<http://www.triplehelixassociation.org/executive-committee/>] for your perusal.

Tomsk is a knowledge city with six universities and numerous research institutes. As is the case in New York, my hometown, these schools are highly competitive and rarely cooperate willingly. Professor/Dr Alexander Uvarov, Vice Rector of TUSUR and his colleagues, were able to overcome this retardant to academic and regional development, bringing other universities on board as collaborators in organizing the conference, especially the classical Tomsk State University, the original academic foundation and its Rector, Eduard V Galazhinski (<http://tsu.ru/english/ректор/>), who was a gracious co-host of the conference. The University artists symphonic and operatic performances before the conference dinner, included Verdi's duet Libiamo, reprising the San Jose Opera Company singers at the Stanford Triple Helix conference (TH 9).

Edward Crawley, MIT aeronautics professor and Rector of Skolkovo Institute of Science and Technology or "Skoltech" - Russia's "CalTech" in development with MIT's assistance, led a delegation of Skoltech faculty, staff members, and MIT advisors to the Tomsk Triple Helix Conference. (<http://www.skoltech.ru/en/2014/02/skoltech-campus-will-open-its-doors-in-2015/>). I had a chance to visit the campus in construction in a Moscow suburb during a visit to give a talk at Skoltech Management School, an adjacent independent institution, just before the conference. Skoltech is a specialized graduate school with five focus areas, representing Russia's traditional technological strengths in aerospace and nuclear technology as well as emerging areas, with a mission to foster entrepreneurship and technology transfer across the country. Skoltech's Rector has established the theme of the university as a "triple helix" model of integrated teaching, research, and innovation.

TUSUR is currently Russia's leading entrepreneurial university, having taken the lead in introducing the concept and the Triple Helix to the country, sponsoring the translation and publication of *Triple Helix: University- Industry-Government Innovation in Action* in Russian in 2010. TUSUR subsequently took the lead in organizing the first Triple Helix Association Chapter, and in founding the Association of Russian Entrepreneurial Universities.

TUSUR is a spin-off from the Tomsk Polytechnic University, originally founded as research institute in support of the Soviet Union's space program in the heady days after Yuri Gagarin's world astounding orbital spaceflight in 1961 on Vostok I. In recent years, TUSUR expanded its remit to include spin-off creation, technology transfer, and regional development, in response to the shortfall in university funding and research support that accompanied the collapse of the Soviet Union.

In undertaking this new academic entrepreneurial when it competed for organizations. Importing incubator model from algorithmic expertise to developing improved technologies for the Siberian oil industry, as well as for German and other foreign firms. Representatives of TUSUR spin-offs like 3dbin, a software that transforms 2d pictures into 3d images, established outposts in Silicon Valley to identify markets for their advanced technologies.

In recent years, the Russian government has emphasized university development, including upgrading teaching oriented universities into research universities. A 5/100 program provides special support to five universities, including classical Tomsk State and St Petersburg's entrepreneurial ITMO University, to help them break into the top level of international rankings. Such rating schemes, however, typically focus on traditional academic research criteria of publications and citations, to the relative exclusion of contributions to economic and social development, the forte of the entrepreneurial university.

There is an emerging contradiction within Russian Universities, as well as universities elsewhere, in pursuing an entrepreneurial remit in conjunction with research and teaching as a legitimate framework. Indeed, the pressure to narrowly focus on traditional academic research criteria as an unintended consequence of support provided to achieve ratings advance, augurs a counterrevolutionary reversal of the Second Academic Revolution.

A growing trend for universities to play a more direct role in local, regional, and national development by making innovation and entrepreneurship an academic mission on a par with education and research is placed at risk by pressure to conform to counterproductive metrics.

In cooperation with the Tsinghua University local organizing committee of the 2015 Triple Helix Conference in Beijing, the Triple Helix Association is planning a special plenary session on the future of the entrepreneurial university model, the tensions with the Humboldtian framework, and prospects for complementarity and synthesis. It is clear that there is a need for enhanced definition of and metrics for the emerging entrepreneurial university model, incorporating and transforming the teaching and research university models. Moreover, there is an opportunity to provide a set of entrepreneurial academic metrics to complement and fill gaps in existing indicators. An international collaborative entrepreneurial university definition and metrics project, including research, dissemination, and institution-formation, is in the early stages of development.

**【*Helice*, 09/2014】**

