



# Science, Technology, Education and Health News from China

## Number 119 – May 2014

Please note that the previous newsletters can be downloaded from the website of the Embassy of Switzerland in China: [www.eda.admin.ch/beijing](http://www.eda.admin.ch/beijing)<sup>1</sup>. To subscribe/unsubscribe or send us your comments, please send an email with the corresponding subject to [chenchen.liu@eda.admin.ch](mailto:chenchen.liu@eda.admin.ch).

### Introduction

The Story of the Month features Chinese government's new policy to encourage university student entrepreneurship. In science and technology, the Swiss government's venture lab program will bring 10 Swiss technology start-ups to China for business development. Stem Cell research in China raises ethical questions. After Xiaomi, another local innovative smart phone Smartisan has been announced. China's online payment giant Alibaba will move into healthcare sector. In education, Peking University announces prestigious international master program. China's leading private education company to offer online courses.

### Contents

Story of the Month .....	2
News.....	3
1. The Swiss Government to Bring 10 Start-ups to China for Business Development.....	3
2. 2 <sup>nd</sup> China University Starts Rhodes-style Program.....	3
3. Stem Cell Research in China: A Dose of Ethics .....	4
4. Alibaba's Ambitious Future Hospital Plan: Facilitating the Current Healthcare Service in China.....	5
5. Chinese Leading Private Education Company New Oriental to Offer Digital Education Content .....	6
6. The Easiest-to-use Smartphone in Asia? Apple, Meet Smartisan.....	7
7. CAS Issues Open Access Policy .....	8
(Collaborating Opportunities) .....	9

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 We also invite you to follow Swissnex on Weibo! <http://e.weibo.com/swissnexchina>*

<sup>1</sup> Please click on the blue texts to activate the hyperlinks to either email addresses or related websites.



## Story of the Month

### **Student Entrepreneurship Strongly Encouraged by Government**

Following a State Council Guideline on Promoting University Graduate Employment and Entrepreneurship, published in early May 2014, the Ministry of Human Resources and Social Security has announced a national initiative to support and guide student entrepreneurship.

The guideline applies to all university students, graduates and returnees from overseas universities and research institutes. The goal is to encourage 800'000 university graduates to pursue entrepreneurship in the next 3 years (2014 – 2017).

Entrepreneurial training used to be an on-demand service offered in selected universities, with the new initiative, such training is expected to be systematically developed, standardized and implemented in all universities. Entrepreneurial education will become part of the university general knowledge education, with credit-based courses on innovation & entrepreneurship to be designed and relevant faculty and coaches to be trained at university level.

At the government level, local human resources and social security departments will proactively work with universities, industry associations and private training institute to develop training programs that will “meet the demand of every student who would like to start his or her business and wishes to receive trainings of any kind”. A stipend will be made available for students in the training program.

On the financing side, multiple financing options for student startups are aimed for. As a demonstration project, a National University Student Entrepreneurship Fund has been created by the Ministry of Education to support 20 – 30 student startups each year (up to RMB 300'000 contribution with no strings attached). Corporations, industries, NGOs and angel investors are also encouraged to financially support student entrepreneurship. Local universities are advised to “resource pooling” by integrating the university-level financial means to have a centralized larger fund to support student startups in the region.

The government has also lowered the bars for registration of businesses and offered other incentives for student startups, including tax incentives, simplified administrative procedures, free office space in incubators, etc.

Despite all efforts, entrepreneurship remained as a very rare career option for Chinese university students, although success cases kept rising. Lack of training in entrepreneurship and qualified coaches is a strong reason, given the relatively short history of market economy in China. The traditional culture of Confucius doctrine also plays a big role in the mentality of Chinese students, who would much prefer to secure stable positions in public sector. Confucius placed civil service at the top of his social ranking and despised businessmen for being greedy, a mentality that continues to influence Chinese mentality today.

The guideline is part of an overall policy guideline for promoting university graduate employment, as 7.27 million students will graduate from universities in June, bringing in additional pressure for the Chinese employment market. Lack of employability, unwillingness to work in service and private sector and low interest in jobs in second and third-tier cities have led to decreasing starting salary, low job satisfaction and leaping unemployment rate for university graduates. For China, creativity, innovation and entrepreneurship are indeed the keys to the mounting worries of the employment market.



## News

### 1. The Swiss Government to Bring 10 Start-ups to China for Business Development

(Tech Node, 29-05-2014)

Venture Lab, a national training program by the Swiss government for innovative, high-tech startups, will bring 10 Swiss entrepreneurs to China as part of the 'Venture Leaders China' program. This is the first year the program is being organized in China, a similar program in the U.S. has been running for 13 years. The 10 selected entrepreneurs will travel to Shanghai and Beijing in September to boost their understanding of the Chinese market.

"No entrepreneur can ignore Asia anymore, especially at a time when China and other countries' economic growth shift to an innovation-driven model. While remaining a challenging and complex environment, China offers market opportunities, world class expertise in production and supply chain as well as a competitive talent pool. Venture leaders China will guarantee that the startups will learn how to make the best of this fast moving region," says Pascal Marmier, CEO, Swissnex China, a Swiss government body which promotes Swiss industry, technology and innovation in key markets globally.

(<http://technode.com/2014/05/29/swiss-government-bring-10-swiss-startups-china-september-business-development/>)

### 2. 2<sup>nd</sup> China University Starts Rhodes-style Program

(the Washington Post, Peking University, 05-05-2014)

An elite Chinese university announced plans for China's second international program modeled after the Rhodes Scholarship, as the country seeks more influence in global education and greater international prestige befitting its economic rise.

Beijing-based Peking University said it will launch the Yenching Academy to recruit top scholars from China and the world to study in a one-year master's degree program.

The announcement came one year after the founder of American private equity and financial advisory firm Blackstone, Steve Schwarzman, set up a program at rival Tsinghua University and led a \$350 million endowment campaign.

Both schools said their programs are modeled on the Rhodes Scholarship, an elite award for students to study at the University of Oxford.

Peking University issued a press release on May 9<sup>th</sup> 2014, announcing that "PKU starts a brand new college to cultivate international leaders with rich history and culture, as well as real-time development of China."

The "Yenching Academy" remarked by Wang Enge, president of PKU, as the "most ambitious academic initiative PKU has launched since the turn of the new century," is an innovative research center that aims to cultivate world leaders who will make a difference in the world. Its mission is to provide an opportunity for global students to imbibe Chinese and international perspectives and thus cultivate global progress and mutual understanding.

This program aims to bring together the best scholars and elite students from around the world, to understand China in an international context, to create a world-class research center of "Chinese Studies." The faculty consists of academic stars—20 internationally reputed academic luminaries, 30



most renowned and influential PKU scholars and 20 visiting senior fellows with worldwide recognition. With a diversity of academic backgrounds, research expertise and experience, they come from a wide range of countries and are devoted to researching and teaching.

The courses of this program are mainly categorized into six fields—"Philosophy and Religion," "History and Archeology," "Literature and Culture," "Economics and Management," "Law and Society," and "Public Policy and International Relations." It creates an opportunity to understand Chinese society, culture on a fuller scale and thus can foster future leaders who know every field about China and can contribute to the world.

The first class of 100 Yenching Scholars will begin in the September of 2015. Graduates from all world-class universities can apply for this program. Thus this program will reflect the richness of culture, ethnicity and academy. The expected enrollment is 100 students, with one third from China and two thirds from overseas. PKU will offer full tuition scholarship, accommodation in the residential college, and a stipend to cover living expense. Eligible students are those who are highly academically, socially and innovatively competitive.

([http://www.washingtonpost.com/world/asia\\_pacific/2nd-chinese-university-starts-rhodes-style-program/2014/05/05/4955e2be-d451-11e3-8f7d-7786660fff7c\\_story.html](http://www.washingtonpost.com/world/asia_pacific/2nd-chinese-university-starts-rhodes-style-program/2014/05/05/4955e2be-d451-11e3-8f7d-7786660fff7c_story.html))  
([http://english.pku.edu.cn/News\\_Events/News/Focus/11335.htm](http://english.pku.edu.cn/News_Events/News/Focus/11335.htm))

### 3. Stem Cell Research in China: A Dose of Ethics

(CKGSB, 20-04-2014)

Perhaps more than any other field of science, the study of stem cells has been shaped by political opinion and subject to ethical objections. For much of the last decade, stem cell science was viewed negatively in the US. Devout Christians criticized the creation and destruction of days-old embryos for research, guided by their religious beliefs that embryos were emerging individuals. Elsewhere, the idea of producing embryos solely for scientific experimentation appalled people from more varied walks of life.

The debate became heated and politicized. Pope John Paul II called it a "cannibalization of embryos". Then in 2001, US President George W. Bush limited federal funding for research on stem cells obtained from human embryos. That moratorium—lifted more than seven years later by Barack Obama in 2009—has left the US "years behind" leading stem cell nations, according to Reginald from CTL.

The debate in the US and West sharpened scrutiny on the morals and ethics of Chinese stem cell research, to the chagrin of some in China who chafed at what they perceived to be smug Western lecturing and condescension.

China has debated but not dwelled upon the ethical dimension of human embryonic stem cell research. The absence of outcry has been partly attributed to a Confucianist view that a person begins at birth, as people are shaped and defined by their closest social relationships—which embryos lack. Then there is the 'utilitarian' argument that embryo research is justifiable if it brings enormous welfare to people that cannot be otherwise achieved. Furthermore, the years of pervasive sex-selective abortions and infanticides in China could be seen as evidence of a cor-ollary cultural detachment from the value of a fetus or embryo, which contrasts starkly against some viewpoints in the US. China's treatment of abortion may have normalized the practice, paving the way for societal acceptance of embryonic stem cell research. Also fueling interest are reports that tissue from aborted fetuses is a source of stem cells. New discoveries and advances in recent years have also dampened some of the moral controversy by sidestepping thorny ethical issues. A major breakthrough came in 2007, when two independent teams at the University of Wisconsin-Madison in the US and Japan's Kyoto University reprogrammed adult human cells to form pluripotent stem cells, negating the need to depend on embryonic tissue for stem cells. For his pioneering work at Kyoto, Shinya Yamanaka earned the Nobel Prize in medicine in 2012.



It is probable that in any case, ethical qualms would have taken a backseat to the Chinese government's desire to move from 'made in China' to 'innovated in China'. Stem cells fit in with Beijing's ambitious plans to vault the country to the top of the research ranks. In 2001, the Chinese Ministry of Science and Technology formed two independent stem cell programs under the National Basic Research Program—a special national research initiative better known by its '973' moniker.

Since 2002, China has pumped money into the field through multiple sources. The ministry has provided abundant research funding through the 973 plan and a separate '863' program—grant sizes from both can reach up to \$5 million, with the difference between the two being that the former focuses on basic research and the latter on applications. The National Natural Science Foundation of China has also contributed grants, boosting funding from just over RMB 100 million in 2008 to more than RMB 450 million in 2012.

Chinese researchers are forging ahead in the field, backed by the substantial grants from central agencies and local governments too. And keen to reverse a so-called 'brain drain', Beijing has enticed Chinese scientists educated at top universities in the US and Europe to return home with the promise of competitive salaries, funding and leadership of labs staffed with eager young researchers.

While China smelled an opportunity to steal a march on the dawdling West, its interest in stem cells has more pragmatic reasons. The Chinese are aging quickly, with more than a quarter of the population set to be older than 65 years by 2050.

The scale of China's greying could place an enormous strain on the healthcare system, as the number of people with degenerative diseases grows. China already has more people with dementia than any other country, while a new study suggests two out of every 100,000 in the nation have Parkinson's. Stem cells then could allow China to stave off a healthcare crisis by offering much-needed treatments for these chronic illnesses.

[...]

[\(http://knowledge.ckgsb.edu.cn/2014/05/05/technology/stem-cell-research-in-china-regenerative-economics/\)](http://knowledge.ckgsb.edu.cn/2014/05/05/technology/stem-cell-research-in-china-regenerative-economics/)

#### 4. **Alibaba's Ambitious Future Hospital Plan: Facilitating the Current Healthcare Service in China**

(tech node, 30-05-2014)

Alipay announced a Future Hospital plan, which aims to facilitate the workflow efficiency in the current healthcare system in China. Through such a program, Alipay plans to utilize its own platform to enable users to register for consultations, monitor queues, conduct payments, review results as well as report on user experience.

Additionally, the plan also aims to take advantage of Alipay's mobile payments, cloud computing and database to remold a more efficient healthcare system in China.

According to the product manager of Alipay Healthcare, Zhao Liansheng, the plan will launch a so called "service window" on Alipay wallet, the mobile app by Alipay, through which the users will be able to complete the entire process of hospital visit from registration to retrieve medical check report. This helps to eliminate the issues like multiple queuing. It is also believed that such improvement will free up medical resources by identifying and limiting the repeated registration accounts, often times known as scalper tickets.

Similar to the review function available in Taobao, Alipay hopes to also add a reviewing function to the service window, through which doctors and patients will be able to comment on each other upon the completion of medical checkup process.



Alipay will also provide technical support like free Wi-Fi and indoor navigation to guide users through different hospital departments for registration, checkup, payment and medicine pickup.

Currently, phase one of the Future Hospital only supports self-funded clients, Alipay claims they're working actively to incorporate the medical care insurance system into the plan, thus to support both self-funded and medical care insurance accounts.

Alipay claims that so far they have reached corporation agreements with over 10 triple-A grade hospitals in first tier cities including Beijing, Shanghai and Guangzhou, two of which have now entered the testing phase of the proposed Future Hospital plan.

After phase one, there is an even bigger plan that allows Alipay to take its presence in the whole healthcare system to a different level. Zhang Jiangang, an exec at Alifinance, mentioned that in the next 5-10 years, in order to implement phase two of the said plan, Alipay will establish a comprehensive online platform to allow virtually mobile prescription, medicine delivery, hospital transfer, medical care insurance reimbursement, commercial insurance as well as damage claims, as part of the improvement of healthcare reform in China.

In phase three, Alipay will further utilize its database and cloud computing capability to work with wearable technology manufacturers, medical care institutions and even government agencies to construct a resource backed healthcare management platform. "This is a long term plan to realize the shift from cure to prevention." Zhang Jiangang said.

This is not the first time that Alibaba Group, the owner of Alipay, gestured that it will move into the medical care and pharmaceutical industry. Back in June 2011, Alibaba launched Tmall Medicine (Tmall Yao), which was later questioned for its qualification and policies. Early this year, Yunfeng Capital, a private equity firm co-founded by Alibaba Chairman Jack Ma, and Alibaba Group together acquired a 54.3% stake in pharmaceutical data provider CITIC 21CN, a Hong Kong-listed subsidiary of Chinese conglomerate CITIC Group, for HK\$1.33 billion (RMB 1.07 billion). Interestingly enough, CITIC 21CN owns the very first license that allows third party online drug distribution through 95095, a drug distribution platform.

[\(http://technode.com/2014/05/30/alipay-announces-ambitious-future-hospital-plan-facilitating-current-healthcare-service-china/\)](http://technode.com/2014/05/30/alipay-announces-ambitious-future-hospital-plan-facilitating-current-healthcare-service-china/)

## 5. Chinese Leading Private Education Company New Oriental to Offer Digital Education Content

(Tech Node, 23-05-2014)

New Oriental, the pioneer in Chinese private education sector announced on May 23<sup>rd</sup> to team up with BesTV, a digital content and solution provider, to offer digital educational content through the latter's various channels.

A program named "New Oriental TV School" will be available in more than 20 provinces in China through BesTV's IPTV content platform. Students will be able to watch video courses on demand by New Oriental teachers who mostly give lectures at physical classes. And those classes charge pretty high prices. Apparently the content on BesTV's platform is for free.

A kid-oriented educational program will be pre-loaded in the set-top boxes by BesTV. It is reported that the two companies will cooperate on digital education programs for Chinese schools later.

It's unknown why New Oriental chose BesTV to work with. Almost all big Chinese Internet companies, including Alibaba, Tencent, Baidu and YY (real-time voice chat platform), are building online education



platforms where quality content by New Oriental teachers must be in great demand. It seems New Oriental wants the access to Chinese families where most decisions on education are made by parents.

BesTV's IPTV service covered 20 million Chinese families and smart TV solution covered 30 million as of the end of 2013. The company also has sold more than one million set-top boxes.

Earlier this year when YY launches the online education platform 100.com, Yu Minhong, CEO of New Oriental, commented that the business model — offering free services and then converting a portion into paying users — had been practiced by his company 20 years ago, and YY couldn't be successful with online-only services. He and his team believe the offline classes will always be needed. But it seems New Oriental felt pressure from players like YY, for shortly after the launch of 100.com, New Oriental decided to offer some online content for free and encourage the existing teachers to give lectures on its own website, for free or not.

Teachers are of the most valuable to a business like New Oriental. It is estimated that some teachers may join other online platforms of YY, Tencent or Alibaba if those platforms manage to show them the effect of the Internet will bring them way more students or revenues.

(<http://technode.com/2014/05/23/chinese-leading-private-education-company-new-oriental-offer-digital-educational-content-iptv-service-besttv/>)

## 6. The Easiest-to-use Smartphone in Asia? Apple, Meet Smartisan

(Real China times, 22-05-2014)

First Steve Jobs captured the pocketbooks of Chinese with the iPhone. Then local entrepreneur Lei Jun did the same with his low-priced Xiaomi phone.

Now a former English teacher most famous for once smashing a refrigerator with a hammer hopes to join their ranks. Luo Yonghao this week unveiled his entry, the Smartisan T1 smartphone. The phone offered by Smartisan Technology Co., where he is chief executive, comes in the form of a familiar-looking black slab running on a variant of Android, the Google Inc. mobile operating system found on most phones in China.

That leaves Mr. Luo with the task of differentiating his phone, which he attempted with gusto during during a more than two-and-a-half-hour presentation on Tuesday in Beijing. He described it as “the easiest-to-use smartphone in the Eastern Hemisphere” with “the best screen” and “the fastest mass-produced mobile CPU.” In an appeal to a very small part of the Chinese market, he also said the phone could be tweaked to be better for lefties.

Mr. Luo has also invested in packaging for the phone, known as the Hammer among many online after for the Chinese name of his company. Its design was by Ammunition Group, which includes former Apple designer Robert Brunner, while the packaging includes material from paper supplier James Cropper. The Tuesday presentation itself looked to be modeled after one of Apple's famous product launches. Mr. Luo nodded to the perception that he is copying Apple which a perhaps less than tasteful joke. “If I ever die from work, I hope it won't be pancreatic cancer, since people are always saying we copy from Jobs,” he said.

The phone, which will go on sale in July, runs on a 2.5 gigahertz Snapdragon processor, measures 141 millimeters tall by nearly 68 millimeters wide and has a thickness of 8.23 millimeters. By the standards of Chinese phones, it is also on the high end, at about 3,000 yuan (about \$480) for the basic version. By comparison, Xiaomi Inc.'s Mi 3 – which has a slower processor – starts at about 1,700 yuan. Mr. Luo said the price had originally been 4,000 yuan but the company lowered it when people complained.

Mr. Luo, himself a celebrity blogger in China, praised Xiaomi's Mr. Lei – who had no presence in smartphones until three years ago — as a guide in the industry. “I should thank Lei Jun,” he said. “Suppliers are less doubtful and alarmed when dealing with a guy who knows little about making mobile phone because of him.”



Hong Bo, an independent IT analyst and consultant, said the phone still has to prove itself. “According to all the parameters shown to us, it’s just a mainstream product in on today’s Chinese market,” he said. “It would only cost more than 1,000 yuan or something for other brands. So if he triples the price, then he’d better make us feel super good when using his product.”

[\(http://blogs.wsj.com/chinarealtime/2014/05/22/the-easiest-to-use-smartphone-in-asia-apple-meet-smartisan/\)](http://blogs.wsj.com/chinarealtime/2014/05/22/the-easiest-to-use-smartphone-in-asia-apple-meet-smartisan/)

## 7. CAS Issues Open Access Policy

(CAS, 16-05-2014)

The Chinese Academy of Sciences (CAS) will promote open access to scientific articles generated from publicly funded research, the academy announced on May 15<sup>th</sup> in Beijing.

In a statement, CAS said it will require its researchers and graduate students to deposit final, peer-reviewed manuscripts of research articles into the open access repositories of their respective institutes within 12 months of their official publication in academic journals.

CAS will also encourage researchers to deposit previously published articles into their respective institutional repositories as well.

The academy said open access will “facilitate knowledge dissemination and accelerate the globalization of science.” thus quickly transforming knowledge into innovation and benefiting social development.

As part of its new policy, the academy has also authorized libraries and information departments to develop detailed open access guidelines in accordance with copyright laws.

CAS noted that open access will continue to evolve and the academy expects further cooperation with the international scientific community to promote the cause.

Open access has been widely accepted by the global science community and will be one of two main topics discussed at the 3rd Annual Meeting of the Global Research Council (GRC), to be held this month in Beijing. GRC, which brings together leaders of science and engineering funding agencies from around the world, is dedicated to promoting the sharing of data and best practices for high-quality collaboration among funding agencies.

The National Natural Science Foundation of China (NSFC) also issued a similar policy at the meeting supporting open access to the published results of all NSFC-funded projects.

[http://english.cas.cn/Ne/CASE/201405/t20140516\\_121037.shtml](http://english.cas.cn/Ne/CASE/201405/t20140516_121037.shtml)



**(Collaborating Opportunities)**

**Swiss Day at Beihang University**

Date: June 12<sup>th</sup>

Place: Beijing

Contact: Embassy of Switzerland in China

**Swiss National Day Celebration**

Date: August 1<sup>st</sup>

Place: Beijing

Contact: Embassy of Switzerland in China

**Swiss Universities Academic Expedition  
in China**

Date: fall 2014

Contact: Swissnex China

**Venture Leaders Program in China**

Date: September 3<sup>rd</sup> to 13<sup>th</sup>

Place: Beijing and Shanghai

Contact: Swissnex China

**Swiss Universities Booth at China  
Education Expo**

Date: October 25<sup>th</sup> to 26<sup>th</sup>

Place: Beijing

Contact: Embassy of Switzerland in China

**CAS Grant for International Scientists**

<http://www.iiebeijing.org/cas/cas.html>

**Smart Energy: 4<sup>th</sup> National One-day  
Conference**

Date: September 5<sup>th</sup> 2014

Place: Domaine des Iles, Sion (Switzerland)

Contact: [www.theark.ch/smartenergy](http://www.theark.ch/smartenergy)