

The November 2018 Newsletter of The GP-TCM Research Association



Corporate & Institutional Member Special Features

Heilongjiang University of Chinese Medicine



Founded in 1954, Heilongjiang University of Chinese Medicine (HUCM) is situated in Harbin, a well-known northern city with its beautiful scenery. Through its over 60 years of construction and development, the university has won influence at home and abroad. HUCM has grown into a medical and academic complex with a high level of teaching, scientific research and medical care, making it one of the provincial key universities being constructed by the government in Heilongjiang province, China. In the fourth-round national discipline evaluation, the Traditional Chinese Pharmacy discipline of HUCM was ranked first in China with “A+” conclusion.

In the first nationwide assessment by the Ministry of Education in 2004, HUCM achieved the rating of Excellent Results for its undergraduate teaching level.

In 2008 it was the first university that passed Professional Accreditation by the Ministry of Education for undergraduate teaching of Traditional Chinese Medicine (TCM). The university was designated as a Construction Unit of the national clinical research base of TCM in 2008; In 2009, it was assessed as a national advanced Construction Unit of Spiritual Civilization.

HUCM has 12 colleges, 11 affiliated hospitals (2 directly affiliated), 1 TCM research institute, 27 associated teaching hospitals and 70 practice bases. There are more than 15,000 full-time students at various levels. They can choose from 13 specialized lines and 24 undergraduate majors, covering many disciplines including medicine, science, liberal arts, engineering and management.

The four first-level disciplines are: Traditional Chinese Medicine, Traditional Chinese Pharmacy, Integrative Medicine, and Pharmacy. These have been given the right to award the doctoral degree. They are taking the lead nationally in their fields compared to similar kinds of colleges and universities, and have established four post-doctoral research mobile stations at the university in the same disciplines. Under these four disciplines are 30 at the secondary level with the right to offer doctoral degree programs and 36 at the secondary level with the right to offer master degree programs. The university owns 4 mobile post-doctoral stations for Traditional Chinese Medicine, Traditional Chinese Pharmacy, Integrative Medicine, and Pharmacy respectively.

There are 4 national-level key disciplines, 21 key disciplines of State Administration of TCM, 11 provincial-level key disciplines.

The university was among the first group to be designated as first-and second-category National Characteristic Specialty Construction Spots. The first category contains Traditional Chinese Pharmacy, Pharmaceuticals, and Acupuncture and Massage. The second category concerns Traditional Chinese Medicine.

In 2007, Heilongjiang University of Chinese Medicine founded the global first Confucius Institute for TCM with London South Bank University and Harbin Normal University, it is now the largest organization of its kind in the world. CITCM has received many awards including the Confucius Institute of the Year Award (2009, 2010, 2011, 2012 and 2013) and Model Confucius Institute status (2014).

With the support of governments of China and Hungary, Heilongjiang University of Chinese Medicine is working with Semmelweis University, Hungary to create the China-Central and Eastern European Center for TCM (located in Hungary).

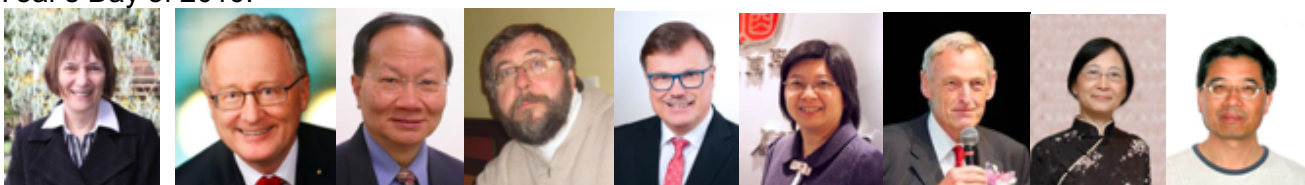


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Special Feature

1. Warmest congratulations to new GP-TCM RA President-elect and Board of Directors (2019-2022). Professor Monique Simmonds was elected President-elect. The elected BoD members, listed in alphabetic order are Prof. Rudolf Bauer, Prof. Kelvin Chan, Prof. Pierre Duez, Prof. Thomas Efferth, Prof. Clara Bik-San Lau, Prof. Rob Verpoorte, Prof. Vivian Taam Wong and Dr. Qihe Xu. The new President-elect and BoD will take office on 1st January 2019, and will serve a term of two years. They will work under the chairmanship of Prof. Aiping Lu, our current President-elect, who will become President and our current President Dr Tai-Ping Fan will become Past President on the New Year's Day of 2019.



2. Warmest congratulations to Prof. De-an Guo, Past-President and BoD Member of The GP-TCM RA and Editor-in-chief of WJTCM, for being awarded the WFCMS Outstanding International Contribution Award! De-an received the award and delivered a plenary lecture at the 15th World Congress of Chinese Medicine held in Rome, Italy on the 17th November 2018.

https://mp.weixin.qq.com/s/abIRzwnZ0IZKsjKlpz_H1Q (中文)



3. Warmest congratulations to GP-TCM RA Member Dr Mei Wang (Leiden, The Netherlands) and President of The Society for Medicinal Plant Research (GA), Prof. Dr. Anna-Rita Bilia (Sesto Fiorentino, Italy) for being awarded the 2018 Qihuang International Prize of China Association of Chinese Medicine!



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4. Moderniser of TCM drugs Yi-Ping Wang honoured by Chinese Central Government as a



“Role Model of Our Times” The scientist, who passed away in April 2018, was a PI at Shanghai Institute of Materia Medica, Chinese Academy of Sciences. He developed a new drug derived from *Salvia miltiorrhiza*, which has benefited 15 million coronary heart disease and angina patients in China and aspired to "invent drugs that are the first choice for doctors around the world"...

[https://mp.weixin.qq.com/s/U-](https://mp.weixin.qq.com/s/U-eViK4qWHspWHicCCAf_A)

[eViK4qWHspWHicCCAf_A](https://mp.weixin.qq.com/s/U-eViK4qWHspWHicCCAf_A) (中文)

<http://www.chinadaily.com.cn/a/201808/08/WS5b6ab9f2a310add14f384ae2.html>

CCTV report on the honour:

[http://app.cctv.com/special/cbox/detail/index.html?guid=32021dbb5c7c4da1a4a300c00be468fd&mid=\(null\)&vsid=VSET100192490568&from=groupmessage&isappinstalled=0#0](http://app.cctv.com/special/cbox/detail/index.html?guid=32021dbb5c7c4da1a4a300c00be468fd&mid=(null)&vsid=VSET100192490568&from=groupmessage&isappinstalled=0#0)

5. Rome Declaration—Introducing a New Era of Benefiting Human Health with Chinese Medicine—and World TCM Day 11 Oct.: <https://mp.weixin.qq.com/s/tRi6FtQ-QNAOAHqQ6WfpMw>

6. Footprints: School of Chinese Medicine, Hong Kong Baptist University in celebration of its 20th Anniversary: <https://scm.hkbu.edu.hk/anniversary/publication/>

European Reports:

1. Editorial. High noon for a sensible decision on Brexit. *Lancet* 2019;392:1599. So far, leaders of Britain's medical and science community have been too silent. It was therefore good to see that Venki Ramakrishnan, President of the UK's Royal Society, in a letter to the UK's Prime Minister Theresa May and the European Commission's President Jean-Claude Juncker, signed by 29 Nobel Prize winners, including Paul Nurse, Director of the Francis Crick Institute, and six Fields medallists, urged them to seek "a deal which allows the closest possible cooperation between the UK and the EU, now and in the future". They point out that Europe, as the home of Enlightenment and the birthplace of modern science, had only recently benefited from a renaissance of collaborative science programmes under the auspices of the EU after the detrimental effects of two devastating world wars. [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(18\)32768-5/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(18)32768-5/fulltext)

2. European Universities Call for Horizon Europe to be Based on Excellence. After months of discussions within the EU Parliament on the next EU Framework Programme, European associations representing universities and researchers are calling for Horizon Europe to be based on research excellence, instead of focusing on reducing differences in national levels of participation, as suggested by some MEPs... <https://www.leru.org/news/research-excellence-and-cooperation-must-prevail-in-horizon-europe>

3. Spain moves to ban alternative medicine. The Spanish government has declared war on alternative medicine like acupuncture or homeopathy, announcing it plans to eliminate from health centres what it considers a "health risk". The plan, unveiled by the science and health ministers, aims to avoid the "potential harmful effects" of these practices "when they are used as an alternative or a complement to treatment" which itself is based on "proof and scientific rigour," the government said in a statement. It did not detail what it included as alternative medicine, but gave the examples of acupuncture and homeopathy. "Many people still believe that some treatments work despite there being no scientific proof available," it read. According to a 2016 poll, "59.8% believe that acupuncture is of therapeutic use and 52.7% think that



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homeopathic products work," the plan read. The government said it wants to "eliminate" alternative medicine from health centres where all treatment must be given by "recognised" professionals...

<https://www.rte.ie/amp/1010939/>

4. UK Government Explains the Withdrawal Agreement in a set of slides

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/757135/OUTLINE_AND_WA_-_FOR_PUBLICATION.PDF

Reports on China and Chinese-European Cooperation

1. Normile D. China fosters competition in its race to exascale computing. *Science* 2018; 362: 384-385. ...The United States still dominates among the truly powerful supercomputers used for research, with 21 systems in the top 50 to China's two. But scientists play down the ranking's importance. "Having the top 500 No. 1 supercomputer—that's pretty good, but that's not the goal," Qian says. "The real measure should be what kind of new science we have as a result of these computers," Dongarra says...

<http://science.sciencemag.org/content/362/6413/384?utm>

2. Wang M, et al. Trends in smoking prevalence and implication for chronic diseases in China: serial national cross-sectional surveys from 2003 to 2013. *The Lancet Respiratory Medicine*, 2018. [https://doi.org/10.1016/S2213-2600\(18\)30432-6](https://doi.org/10.1016/S2213-2600(18)30432-6). The implementation of tobacco control policies in China since the signing of the WHO Framework Convention on Tobacco Control in 2003 has not been effective in reducing smoking prevalence. Smoking prevalence among adolescents of both genders has increased substantially and there has been a steady increase among young women. More practical and effective policies targeting adolescents and women are urgently needed. Action is needed to prevent the large and growing smoking-related chronic disease burden further increasing as China's population ages.



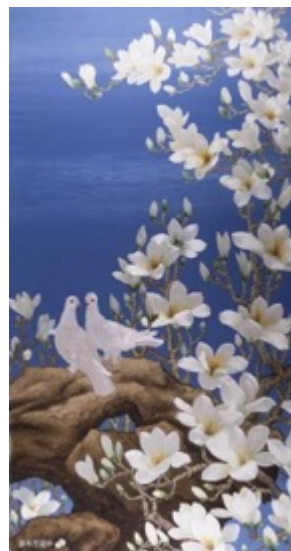
[https://www.thelancet.com/journals/lanres/article/PIIS2213-2600\(18\)30432-6/fulltext](https://www.thelancet.com/journals/lanres/article/PIIS2213-2600(18)30432-6/fulltext)
https://mp.weixin.qq.com/s/9_NYhlp56l5-GlWGc1bW4A (中文)

[https://www.thelancet.com/journals/lanres/article/PIIS2213-2600\(18\)30432-6/fulltext](https://www.thelancet.com/journals/lanres/article/PIIS2213-2600(18)30432-6/fulltext)

https://mp.weixin.qq.com/s/9_NYhlp56l5-GlWGc1bW4A (中文)

3. China Nutrition Society guideline for dietary prevention and treatment of diabetes (2017)

<http://www.chinanews.com/cj/2017/05-23/8231201.shtml> (中文)



<https://mp.weixin.qq.com/s/F6nmlAk-28sgYIINPPSTgA> (中文)

4. China postpones lifting of ban on trade of tiger and rhino parts.

China has postponed the lifting of a ban on the trade of rhino horn and tiger parts for medicine and other uses, the government said on Monday (Nov 12), after a storm of protest from conservation groups over a plan to water down the decades-old prohibition... <https://www.straitstimes.com/asia/east-asia/china-postpone-lifting-of-ban-on-trade-of-tiger-and-rhino-parts>

5. Horvat M. Reform and cooperation in China. *Science* 2018; 362:727. Since it was established as a science funding organization in 1986, the National Natural Science Foundation of China (NSFC) has seen its annual budget grow from CNY 80 million to 28.04 billion in 2018, as China underwent rapid transformation and became a global player in research. Now under the new leadership of President Li Jinghai, the NSFC has engaged in consultations about its future. To promote international dialogue, the NSFC convened representatives from 15 funding agencies around Europe to solicit

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feedback on proposed reforms. This September meeting in Paris marked a first major step by the NSFC to align its new strategies and policies with those of international partners and demonstrate its commitment to cooperation.

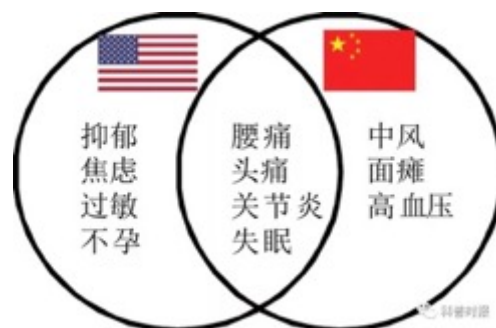
<http://science.sciencemag.org/content/362/6416/727>

https://mp.weixin.qq.com/s/_m4kWG7fiA9cDZ5UFpl-6g (中文)

Acupuncture, TCM and other traditional medicine

1. Wang H, et al. The Most Commonly Treated Acupuncture Indications in the United States: A Cross-Sectional Study. *Am J Chin Med.* 2018;46:1387-1419.

Acupuncture has been a popular alternative medicine in the United States for several decades. Its therapeutic effects on pain have been validated by both basic and clinical researches, and it is currently emerging as a unique non-pharmaceutical choice for pain against opioid crisis. However, the full spectrum of acupuncture indications remains unexplored. In this study, we conducted a cross-sectional survey among 419 acupuncturists nation-wide to investigate the top 10 and top 99 acupuncture indications in private clinics in the United States. We found the top 10 indications to be: lower back pain, depression, anxiety, headache, arthritis, allergies, general pain, female infertility, insomnia, neck pain and frozen shoulder. Among the top 99 indications, pain represents the largest category; and mental health management, especially for mood disorders, is in greatest demand. The following popular groups are: immune system dysfunctions, gastrointestinal diseases, gynecology and neurology. In addition, specialty index, commonality index, and the potential to become medical specialties were estimated for each indication. Demographic analysis suggests that China trained acupuncturists tend to have broader indication spectrums, but the top conditions treated are primarily decided by local needs. Also, gender, resident states, age and clinical experience all affect indication distributions. Our data for the first time outlines the profile of acupuncture treatable conditions in the US and is valuable for strategic planning in acupuncture training, healthcare administration and public education.



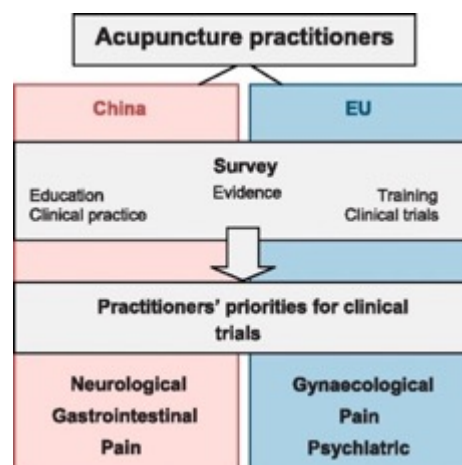
Among the top 99 indications, pain represents the largest category; and mental health management, especially for mood disorders, is in greatest demand. The following popular groups are: immune system dysfunctions, gastrointestinal diseases, gynecology and neurology. In addition, specialty index, commonality index, and the potential to become medical specialties were estimated for each indication. Demographic analysis suggests that China trained acupuncturists tend to have broader indication spectrums, but the top conditions treated are primarily decided by local needs. Also, gender, resident states, age and clinical experience all affect indication distributions. Our data for the first time outlines the profile of acupuncture treatable conditions in the US and is valuable for strategic planning in acupuncture training, healthcare administration and public education.

https://www.worldscientific.com/doi/abs/10.1142/S0192415X18500738?url_ver

https://mp.weixin.qq.com/s/yslcciQEQUMOMIHh_PpU-A (中文)

2. Robinson N, et al. Exploring practice characteristics and research priorities of practitioners of traditional acupuncture in China and the EU-A survey. *J Ethnopharmacol.* 2012;140: 604-613.

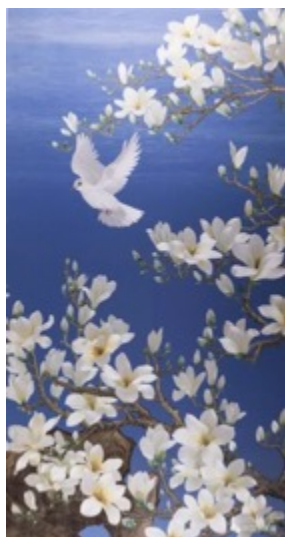
This was a survey conducted by the EU's FP7 GP-TCM consortium. From 1126 survey responses, 1020 (559 EU, 461 China) could be included in the analysis for direct comparison. A response rate for the EU could not be calculated but for China was 98%. Pain was the most frequently reported commonly treated condition by EU acupuncturists and neurological conditions (mainly stroke) for Chinese practitioners. The top reported priorities for research were obstetrics/gynaecological conditions in the EU and neurological problems in China. CONCLUSION: The survey identified differences in practice and training between acupuncturists in China and the EU and between EU member states. These differences may inform prioritisation of health conditions for future trials. Innovative research methods are recommended to



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incorporate the complexity and plurality of acupuncture practice and theory. Creation of collaborative networks is crucial in overcoming these differences to facilitate international, multi-centre clinical trials. <https://www.sciencedirect.com/science/article/pii/S0378874112000657?via%3Dihub>



3. Acupuncture mentioned in the Opioids Law signed by President Trump on 24 Oct. 2018.

<https://www.channel3000.com/news/politics/national-politics/trump-expected-to-sign-opioids-law-at-white-house-event/822474701>

https://mp.weixin.qq.com/s/4sGp4dRZwmS_CXdH6OAiVg (中文)

4. Gu S. Acupuncture for Women Undergoing In Vitro Fertilization.

JAMA 2018;320:1384-5. Editor: In a randomized clinical trial of women undergoing in vitro fertilization (IVF), acupuncture did not improve live birth rates, compared with sham acupuncture, and the authors concluded: "These findings do not support the use of acupuncture to improve the rate of live births among women undergoing IVF." However, ...

<https://www.ncbi.nlm.nih.gov/pubmed/30285171>

<https://mp.weixin.qq.com/s/OdeTBL1tdT6agzgSe0gqdQ> (中文)

5. Chen H et al. Acupuncture for Women Undergoing In Vitro Fertilization.

JAMA 2018;320:1385-5. Dr Smith and colleagues performed a large multicenter randomized clinical trial in which the efficacy of acupuncture during IVF on live births was compared with sham acupuncture. They found no significant difference in live birth rates between the acupuncture and sham acupuncture treatments. We are surprised...

<https://www.ncbi.nlm.nih.gov/pubmed/30285170>

6. Smith C. Acupuncture for Women Undergoing In Vitro Fertilization-Reply. *JAMA*. 2018;320:1385-6. Dr Gu and Dr Chen and colleagues expressed concerns about the generalizability of the findings of our study. Our trial results ...

<https://www.ncbi.nlm.nih.gov/pubmed/30285174>

7. The importance of strengthening Pi (Spleen) in TCM

<https://mp.weixin.qq.com/s/ew660H5uDhX8AKb32cs9BA> (中文)

8. Six papers published in *Phytomedicine* 2018; volume 49 highlighted in Chinese.

<https://mp.weixin.qq.com/s/jZy1TymJ-DBN2BIFc7liaA> (中文)

9. Salguero CP. A Missing Link in the History of Chinese Medicine: Research Note on the Medical Contents of the Taishō Tripiṭaka. *East Asian Science, Medicine, and Technology* 2018;47:93–119. <http://www.eastm.org/index.php/journal/article/view/816/703>

10. Wu Y et al. SymMap: an integrative database of traditional Chinese medicine enhanced by symptom mapping. *Nucleic Acids Res.* 2018 Oct 31. doi: 10.1093/nar/gky1021. [Epub ahead of print]. The SymMap database can be accessed at <http://www.symmap.org/> and <https://www.bioinfo.org/symmap>.

Overview of the data curated in SymMap

Components	Data source	Amount
Herbs	Extracted from the Chinese pharmacopoeia (2015 edition)	499
TCM symptoms	Extracted, manually curated, and standardized from the Chinese pharmacopoeia (2015 edition)	1717
MM symptoms	Indexed in the UMLS database, and manually mapped to TCM	961

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Components	Data source	Amount
	symptoms	
Ingredients	Integrated from the TCMID, TCMSP and TCM-ID databases	19 595
Targets	Integrated from the HIT, TCMSP, HPO, DrugBank and NCBI databases	4302
Diseases	Integrated from the OMIM, MeSH and Orphanet databases	5235

NEW 11. Freedman M, Bierwirth PA. **Pragmatic use of acupuncture in a neurology practice: experience in an outpatient veterans administration neurology clinic.** *Medical Acupuncture.* 2018;30:242-244.

<https://www.liebertpub.com/doi/full/10.1089/acu.2018.1290>

<https://www.ajmc.com/newsroom/acupuncture-may-be-effective-nonopioid-treatment-for-pain-in-the-va>

NEW 12. TCM: **Yang deficiency causes Heat and Fire.** YI Yang Bai Jia Tan WeChat Platform. 2 Nov. 2018:

<https://mp.weixin.qq.com/s/m5U3YTdQR2hOEJcAQxL> QA (中文)

NEW 13. Gai X, et al. **Huang Lian (Coptis Rhizome): Advances in Chemical and Pharmacological Research.** *Chinese Traditional and Herbal Drugs* 2018;49: 4919-4928.

<https://mp.weixin.qq.com/s/fhTAQAqwbHv7AMhmRWR2WA> (中文)

NEW 14. Oppong MB, et al. **Ethnopharmacology, phytochemistry, and pharmacology of *Sterculia lychnophora* Hance (Pangdahai).** *Chin J Nat Med* 2018;16:721-31.

<https://www.sciencedirect.com/science/article/pii/S1875536418301122>



NEW 15. Chen Q, et al. **Effect of Huaier granule on recurrence after curative resection of HCC: a multicentre, randomised clinical trial.** *Gut.* 2018;67:2006-2016. This is the first nationwide multicentre study, involving 39 centres and 1044 patients, to prove the effectiveness of Huaier granule as adjuvant therapy for HCC after curative liver resection. It demonstrated a significant prolongation of RFS and reduced extrahepatic recurrence in Huaier group.

<https://www.ncbi.nlm.nih.gov/pubmed/29802174>

NEW 16. Zhang Q-Y et al. **Natural Product Interventions for Chemotherapy and Radiotherapy-Induced Side Effects.** *Front. Pharmacol.* 2018;9:1253. <https://doi.org/10.3389/fphar.2018.01253>

NEW 17. Huang Y et al. **The Yin-Yang Property of Chinese Medicinal Herbs Relates to Chemical Composition but Not Anti-Oxidative Activity: An Illustration Using Spleen-Meridian Herbs.** *Front. Pharmacol.* 2018;9:1354. <https://doi.org/10.3389/fphar.2018.01304>

NEW 18. Lu L et al. **Shexiang Baoxin Pill, Derived From the Traditional Chinese Medicine, Provides Protective Roles Against Cardiovascular Diseases.** *Front. Pharmacol.* 2018;9:1161.

<https://doi.org/10.3389/fphar.2018.01161>



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19. A Grand Modern Illustration and Annotation of *The Compendium of Materia Medica* edited by Academician Prof. Peigen Xiao, Prof. Shilin Chen and colleagues was published in November 2018 in honour of the 500th Anniversary of Li Shizhen's birth.

<http://play.yunxi.tv/livestream/flash?id=7669389cef5a4afab82efed660f00da8> (中文)



Omics in Progress

1. Law K. The DNA Fortune Teller. *Evening Standard* 25 October 2018, page 38-39. Genetic testing can now predict everything from sleep patterns to coffee consumption. Katie Law puts it to the test, and asks London's expert (Professor Robert Plomin, King's College London, author of *Blueprint: How DNA Makes Us Who We Are* published by Allen Lane, a book that shows how nature trumps nurture) where the controversial science might lead.

<https://www.standard.co.uk/news/uk/the-dna-fortune-teller-a3971371.html>

A Guardian review of Professor Robert Plomin's book:

<https://www.theguardian.com/books/2018/oct/24/blueprint-by-robert-plomin-review>

2. Network pharmacology and TCM: WJTCM, official journal of the WFCMS and GP-TCM RA, published its 4th issue of 2018;



- Shao Li, Yuan-Jia Hu. **Network Pharmacology: An Approach to the Analysis of Complex Systems Underlying Traditional Chinese Medicine:**

<http://www.wjtcn.net/showcaptcha.asp?RedirectUrl=article&issn=2311-8571;year=2018;volume=4;issue=4;spage=135;epage=136;aurlast=Li>

- Shou-De Zhang, et al. **Exploring the Pathways and Targets of Shexiang Baoxin Pill for Coronary Heart Disease through a Network Pharmacology Approach:** <http://www.wjtcn.net/article.asp?issn=2311-8571;year=2018;volume=4;issue=4;spage=137;epage=146;aurlast=Zhang>

- Yao Gao, et al. **A Network Pharmacology Approach to Decipher the Mechanisms of Anti-depression of Xiaoyaosan Formula:** <http://www.wjtcn.net/article.asp?issn=2311-8571;year=2018;volume=4;issue=4;spage=147;epage=162;aurlast=Gao>

- Shen Xiao, et al. **A Visual Analysis of Network Pharmacology Research Trends:** <http://www.wjtcn.net/showcaptcha.asp?RedirectUrl=article&issn=2311-8571;year=2018;volume=4;issue=4;spage=163;epage=169;aurlast=Xiao>

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- Xiao-Yan Li, et al. **Compound-Target-Pathway Network Analysis and Effective Mechanisms Prediction of Bu-Shen-Jian-Pi Formula:** <http://www.wjtcn.net/article.asp?issn=2311-8571;year=2018;volume=4;issue=4;spage=170;epage=175;aulast=Li>
- Xue-Ling Ma, et al. **Study on the Biological Basis of Hypertension and Syndrome with Liver-Fire Hyperactivity Based on Data Mining Technology:** <http://www.wjtcn.net/article.asp?issn=2311-8571;year=2018;volume=4;issue=4;spage=176;epage=180;aulast=Ma>

3. Song C, et al. The *Chrysanthemum nankingense* genome provides insights into the evolution and diversification of chrysanthemum flowers and medicinal traits. *Mol Plant* 2018 Oct 17. pii: S1674-2052(18)30308-3. The Asteraceae (Compositae), a large plant family of approximately 24,000–35,000 species that strongly contributes to plant diversity, accounts for ~10% of all angiosperm species. Its most representative members are the economically important chrysanthemums (*Chrysanthemum* L.) that were diversified by reticulate evolution. Biodiversity is typically created by multiple evolutionary mechanisms such as whole-genome duplications (WGDs) or polyploidizations and locally repetitive genome expansion. However, the lack of genomic chrysanthemum data prevents an in-depth analysis of the evolutionary mechanisms involved in chrysanthemum diversification. Here, we used the Oxford nanopore long-read technology to sequence the diploid *Chrysanthemum nankingense* genome, which represents one of the progenitor genomes of domesticated chrysanthemums. Our analysis revealed that the evolution of the *C. nankingense* genome was driven by bursts of repetitive elements and WGD events including a recent WGD that distinguishes chrysanthemum from the sunflower, which diverged from chrysanthemum approximately 38.8 million years ago. Variations of ornamental and medicinal traits in chrysanthemums are linked to the expansion of candidate gene families that included paralogous gene duplication events. This is the first reference genome suitable for deriving the chrysanthemum progenitor gene set and critical for exploiting the genetic diversity of chrysanthemums in future breeding projects and beneficial applications.



<https://www.sciencedirect.com/science/article/pii/S1674205218303083?via%3Dihub>
<https://mp.weixin.qq.com/s/pa-4FxQcW3D7C1sTsZlb4Q> (中文)

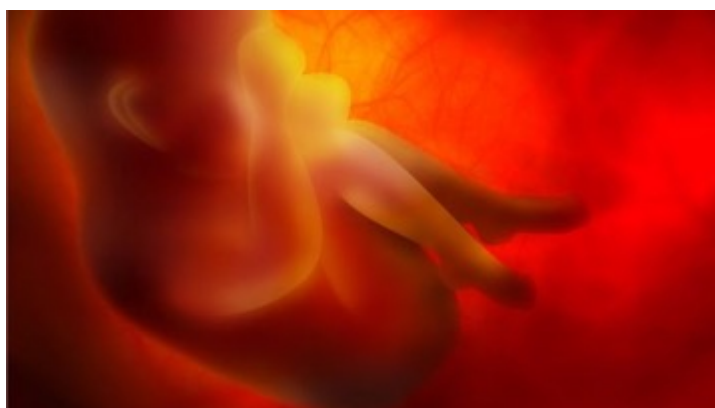
4. Professor Zhiwei Cao (Tongji University, Shanghai) shares her HIM and HIT databases of Chinese herbal medicines:

<http://lifecenter.biosino.org/him/>
<http://lifecenter.biosino.org/hit/>

5. Roberts M. China baby gene editing claim 'dubious'. BBC News online, 26 November 2018. Significant doubts have emerged about claims from a Chinese scientist that he has helped make the world's first genetically edited babies... <https://www.bbc.co.uk/news/health-46342195>

Other Recommended Reading

1. Service RF. Molecular CT scan could speed drug discovery. *Science* 2018;362:389. In chemistry, structure rules: A molecule's 3D shape determines how it behaves. But the two standard ways to map the structure of small organic molecules, such as pharmaceuticals, hormones, and vitamins, have drawbacks. In mid-October 2018, two research teams reported they've adapted a third technique, a variant of



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electron microscopy commonly used to chart much larger proteins, to determine the precise shape of small organic molecules. The new technique works with vanishingly small samples, is blazing fast, and is surprisingly easy...

<http://science.sciencemag.org/content/362/6413/389?utm>

https://mp.weixin.qq.com/s/Xgy6_PWkEmMW42Ykbzmtzw (中文)

2. Frankish H, et al. Mental health for all: a global goal. *Lancet* 2018;392:1493-4. ...The burden of mental disorders globally is enormous, with an estimated 1.1 billion people affected by mental or substance use disorders worldwide. Human rights violations remain common and people with mental disorders are often marginalised and even abused, with large numbers of people forcefully detained or locked away in institutions. There is little evidence of any reduction in the treatment gap: surveys from China and India—home to a third of the world's population—suggest that more than 80% of people with a mental or substance use disorder do not seek treatment. And when individuals do seek treatment, the quality of those treatments is often poor. For example, for those with a depressive disorder,

only one in five people in high-income countries and only one in 27 people in low-income and middle-income countries receive minimally adequate treatment. Moreover, government spending on mental health and development assistance for mental health in many of the poorest nations is shockingly low...

[https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(18\)32271-2/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(18)32271-2/fulltext)

https://mp.weixin.qq.com/s/T_zqCDD6xYvHud0BgD-bVw (中文)

3. The Lancet. GBD 2017: a fragile world. *Lancet* 2018; 392: 1683. ...In 2017, global adult mortality rates decreases plateaued, and, in some cases, mortality rates increased. Alarmingly, conflict and terrorism have become two of the fastest growing causes of death globally (increasing by 118% between 2007 and 2017). Alongside this alarming growth in violence, our era is characterised by epidemics such as opioid dependence, noncommunicable diseases, depression, and dengue fever. Opioid dependence has grown to an unprecedented scale, with 4 million new cases in 2017 and 110 000 deaths. Non-communicable diseases accounted for 73% of all global deaths in 2017, with over half of all deaths (28.8 million) attributable to just four risk factors: high blood pressure, smoking, high blood glucose, and high body-mass index. Obesity prevalence has risen in almost every country in the world—leading to more than a million deaths from type 2 diabetes, half a million deaths from diabetes-related chronic kidney disease, and 180 000 deaths related to non-alcoholic steatohepatitis. In 2017, depressive disorders were the third leading cause of years lived with disability after low back pain and headache disorders, and deaths from dengue fever, a disease often associated with struggling development and urbanisation, increased substantially in most tropical and subtropical countries, rising from 24 500 deaths globally in 2007 to 40 500 in 2017...

[https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(18\)32858-7/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(18)32858-7/fulltext)

For a series of GBD 2017 reports published in the same issue of *The Lancet*, please read on:

[https://www.thelancet.com/journals/langlo/issue/vol6no8/PIIS2214-109X\(18\)X0010-2](https://www.thelancet.com/journals/langlo/issue/vol6no8/PIIS2214-109X(18)X0010-2)

<https://mp.weixin.qq.com/s/uLhdsiZJGWF5F0rRV1AXXw> (中文)

4. Chang S, Lee TH. Beyond Evidence-Based Medicine. *N Engl J Med* 2018;379:1983-5. Evidence-based medicine shifted medicine's center of gravity away from the space between clinician and patient. A new "interpersonal medicine" would be a disciplined approach to delivering care that responds to patients' circumstances, capabilities, and preferences...

<https://www.nejm.org/doi/full/10.1056/NEJMp1806984>

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5. Jasmine Flower Growers Find Budding Prosperity. *China Daily* 2018; 22 Nov. 2018. Wei Caiyu, 47, leans over in a field of jasmine and quickly picks some fragrant flower buds. She is anxious to get on her motorcycle to sell the fresh jasmine in the market before it rains.
<http://www.chinadaily.com.cn/a/201811/22/WS5bf606f1a310eff30328a520.html>

Meeting Reports

1. The 2018 TCM and Acupuncture Continuing Education Conference and 20th Anniversary of Ontario College of TCM was held on October 27th and 28th of 2018 in Toronto, Canada. The conference was organized by the International Association of Acupuncture & Moxibustion Manipulative Techniques and co-organized by OCTCM, Inheritance Base for Acupuncture-Moxibustion of TCM, and DC Acupuncture and TCM Inc; with support from Georgian College, Dr. Wu Naturals Canada Inc., Wu's Head Massage International Association, International Health Qigong Federation, World Federation Of Acupuncture-Moxibustion Societies, World Federation of Chinese Medicine Societies, and more than 40 other organizations. The topic of the conference was how TCM can benefit society globally. The purpose was to “promote the benefits of traditional medicine and improve clinical outcomes.” This academic conference aligns with the “One-Belt-One-Road Initiative” in North America.



2. The 15th World TCM Conference was held in Rome, Italy, on 17th November 2018. Over 1000 delegates from 36 countries attended the meeting.
https://mp.weixin.qq.com/s/mglhyv5z_INtdWmMQyhoFQ



3. The 11th Pong Ding Yuen International Symposium on TCM was successfully held in Hong Kong at the occasion of the celebration of the 20th Anniversary of the founding of the School of Chinese Medicine, University of Hong Kong.



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4. The 5th Traditional Chinese Medicine Science Conference was held in Huizhou, Guangdong Province, in China on 7-8th November 2018. The meeting was attended by Professor Zhu Chen, Academician, Chinese Academy of Science & Vice-Chairman, The Standing Committee of National People's Congress, 3 Nobel laureates and a number of Academicians of the Chinese Academy of Science, Chinese Academy of Engineering, TCM grand masters and leading TCM practitioners and scientists. The theme of the meeting was "Integrating Chinese and Western Medicine to Promote Advances in Medical Science".

https://mp.weixin.qq.com/s/y43or-1h8ArEBj_b5F71rw (中文)

<https://mp.weixin.qq.com/s/P9n2RIQKc3vodUJkrKeQnA> (中文)



5. Beijing Consensus on Quality TCM Medicinal Materials: Action Plan and Related Good Manufacture Practice Guideline published.

<https://mp.weixin.qq.com/s/noXVXK8ThYAtSfOVMsaW2A> (中文)



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6. The 19th International Congress of Oriental Medicine was held successfully in Taipei, Taiwan, on 24-26 Nov. 2018. The meeting attended by hundreds of delegates from Taiwan, Korea, Japan, USA and Europe was featured by 15 keynote lectures, 9 special invited lectures, 41 invited lectures, 31 oral presentations and almost 200 poster presentations. GP-TCM RA BoD member Dr Qihe Xu was invited to deliver a keynote speech on TCM prevention and treatment of acute kidney injury. BoD member Mr Abraham Chan attended the meeting. GP-TCM RA Newsletter Deputy Editor-in-chief Prof. Yuan-Shiun Chang, Life Member Prof. Ching Chiung Wang and Senior Members Yi-Tsau Huang and Lee Yan Sheen were on the Organising Committee.



Invitation from journals

1. World Journal of Traditional Chinese Medicine: Sincere invitation for submissions. World Journal of Traditional Chinese Medicine (ISSN 2311-8571, CN10-1395/R) is sponsored by WFCMS, and is the official journal of GP-TCM RA. WJTCM dedicates to report the research progress in clinical efficacy and action mechanism of Traditional Chinese Medicine, Chinese materia medica, acupuncture and moxibustion to doctors and biomedical researchers around the world, so as to provide new thoughts and methods for solving complex diseases and knotty diseases. To submit your manuscripts, or to read articles in the past issues, please visit: <http://www.wjtcn.net>
Great news! Since November 2018, WJTCM has been included in the list of core Chinese scientific journals and magazines! <https://mp.weixin.qq.com/s/r5BAEi8uinlpxj0QvhapMA> (中文)



2. Call for Papers: Phytomedicine Special Issue Entitled “systems pharmacology and Metabolomics of Traditional Medicine”

Archives (2008-2018): www.gp-tcm.org/news-list/

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Deadline for submission of manuscripts is December 31st 2018.

Edited by

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<https://www.journals.elsevier.com/phytomedicine/call-for-papers/systems-pharmacology-and-metabolomics-traditional-medicine>

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Pictures of Suzhou silk embroidery are adapted from:

<https://mp.weixin.qq.com/s/xAH63Cp9IHdPuj0fqz08eQ> (中文)

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Sounding Board

This column is reserved for comments, personal views, proposals for collaborations or any other features from our readers across the world.

We look forward to hearing from you! Please get in touch with your editors: Dr Qihe Xu (qihe.xu@kcl.ac.uk), Prof Pierre Duez (pierre.duez@umons.ac.be) and Prof Yuan Shiun Chang (yschang0404@gmail.com).

