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EDITORIAL

Smart Medicine

Multidisciplinary endeavors make future medicine smart

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Humans suffer from thousands of diseases, and many of them lack effective methods for diagnosis and treatment. To address these unmet medical needs, basic research in multiple areas can provide important clinical contributions. The breathtaking discoveries in fundamental life sciences not only enhance our understanding of the human body but also lead to the creation of new diagnostics and pharmaceuticals. Innovations in medically relevant technologies, drawing on a wide range of disciplines, bring hope to previously intractable illnesses. All these lead to the dramatic transformation of medicine toward "Smart Medicine." We foresee the future of medicine to be nourished with cutting-edge ideas from many different fields. We also anticipate specially designed methods that help translate these ideas and make them fit for specific healthcare purposes.

The launching of *Smart Medicine* is rooted in the idea that there is an urgent need for a journal that embraces all medically relevant research. *Smart Medicine* is copublished by Wiley and the Wenzhou Institute of the University of Chinese Academy of Sciences (WIUCAS, China). It aims to foster communications among and joint efforts by multiple science and engineering communities, thus sparking new ideas in the medical arena. *Smart Medicine* is overseen by a world-class editorial group with members from different research backgrounds. We proudly introduce our Editors-in-Chief professors, Prof. Yihai Cao (*Karolinska Institute, Sweden*) and Prof. David A. Weitz (*Harvard University, USA*), our Executive Editors, Prof. Wenguo Cui (*Shanghai Jiao Tong University, China*), Prof. Hongbo Zhang (*Åbo Akademi University, Finland*), and Prof. Yuanjin Zhao (*Southeast University, China*), our Associate Editors, Prof. Fangfu Ye (*WIUCAS, China*), Prof. Cecilia Sahlgren (*Eindhoven University of Technology, Netherlands*), Prof. Kenneth L. Pitter (*Ohio State University, USA*), and Prof. Sergey Filippov (*University of Reading, UK*), and 28 Editorial Board members coming from 16 countries or regions. We would also like to thank the full support from the professional publishing team of Wiley, Dr. José Oliveira, Dr. Guangchen Xu, Dr. Jing Zhu, Dr. Xiaoyu Zhang, and Ms. Kelsey Ma.

In this inaugural issue of *Smart Medicine*, we have collected 4 research articles, 1 minireview, and 7 review papers focusing on different aspects of basic, clinical, and translational medicine. The original studies include that led by Prof. Haozhen Ren (*Nanjing Drum Tower Hospital,*

China) on liver lobule-mimicking scaffolds for tissue engineering, Prof. Fangfu Ye on structural color films for biosensing, Prof. Qingming Ma (*Qingdao University, China*) on bacterial infection microenvironment-responsive microspheres for anti-infective therapy, and Prof. Hongbo Zhang on reregulated mitochondrial dysfunction reversing cisplatin resistance microenvironment in colorectal cancer. The single minireview contributed by Prof. Feili Lai's group (*KU Leuven, Belgium*) focuses on personalized healthcare. Additionally, we have invited Prof. Yuanjin Zhao, Prof. Veijo Hukkanen (*University of Turku, Finland*), Prof. Wenguo Cui, Prof. Renjie Chai (*Southeast University, China*), Dr. Lei Tian (*McMaster University, Canada*), Prof. David A. Posner (*University of Cambridge, UK*), and Prof. Luoran Shang (*Fudan University, China*) to contribute authoritative reviews on several thriving medically relevant technologies and engineering topics, including microfluidics, drug development, reprogramming stem cells, functional hydrogels, living materials, combination therapies, and biomimetics.

We hope this inaugural issue will help readers appreciate the multidisciplinary principles, broad scope, and high-quality standards of *Smart Medicine*. We also hope that our readers will consider *Smart Medicine* as among the most preferred journals in which to share exciting research results and forward-looking viewpoints. The future of medicine has come; let us explore a huge world of new possibilities with *Smart Medicine*.

CONFLICT OF INTEREST

The authors declare that they have no conflict of interest. Luoran Shang, Yihai Cao, and David A. Weitz are members of the *Smart Medicine* editorial board.

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David A. Weitz received his PhD in physics from Harvard University and then joined Exxon Research and Engineering Company, where he worked for nearly 18 years. He then became a professor of physics at the University of Pennsylvania and moved to Harvard at the end of the last millennium as professor of physics and applied physics. He leads a group studying soft matter science with a focus on materials science, biophysics and microfluidics. Several startup companies have spun off his lab to commercialize research concepts in the US, as well as in Europe and China. Weitz is a member of the National Academy of Sciences, the National Academy of Engineering, the American Academy of Arts and Sciences, and is a foreign member of the Chinese Academy of Engineering.