



My Integrative Medicine Life

— Selected Papers by Keji Chen

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 Science Press

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内 容 简 介

本书是中国中西医结合事业的开创者之一，国医大师、中国科学院资深院士陈可冀教授的英文论文集，主要精选收录了陈院士 60 多年来在结合医学领域于国内外公开发表的英文学术论文、演讲稿以及给英文专著撰写的序言等内容。

本书适合从事中医、中西医结合、医学史研究及一切其他医学爱好者阅读。

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Professor Keji Chen MD



A World-renowned scholar, one of the most prominent pioneers of integrative East-West medicine in China. Academician of the China Academy of Science, Honorary President of the China Association of Integrative Medicine and the China Society of Gerontology, President of the Expert Committee of World Federation of Chinese Medicine Societies. Professor Chen has served as the Consultant of WHO since 1979. He is Life-time Professor of Medicine to China Academy of Chinese Medical Sciences. He has invited as the Strategic Advisor of Scientific Innovation by Ministry of Public Health of China since 2016.

Professor Chen is one of the chief researchers of the studies on “Coronary Heart No.II” and the first clinical applier of Ligustrazine (one of the alkaloids of *Radix Ligustracum Wallichii*) in treating acute ischemic stroke and studies its metabolism for anti-platelet and anti-thromboxane production. He first carried out the studies for preventing restenosis after PCI by applying Chinese herbal formulas and got certain progress. He has systematized over 30,000 original medical archives of the Qing Royal Palace. In 2003, Professor Chen awarded the first prize in National Scientific Achievement in China, and has won ten more awards of World/National/Ministerial levels.

Foreword

The collection of essays covers the 60+ years of my career in traditional Chinese medicine and modern medicine. It represents my thinking and views on the evolution of traditional Chinese medicine. Included in the collection are the conference presentations I gave in Geneva, Manila and New Delhi, etc, while I served as a traditional medicine consultant in the World Health Organization and the original articles and clinical case studies published during my half-century research in cardiovascular/ cerebrovascular disease. Dr. Liu Yue, my former student, assisted me in selecting and organizing the works and I would like to thank him for his help.

At a very young age I became interested in Chinese culture and history. Not long after I graduated from Fujian Medical University, I selected a project to examine the royal medical archives of the Qing Dynasty. The findings were summarized as a series of case reports in the book "Medical Case Collection of Royal Qing". This publication was in collaboration with the First Historical Archives of China and highly encouraged by Professor Ji Zhongpu, the ex-president of Chinese Academy of Traditional Chinese Medicine. The famous painters and artists Li Keran and Huang Yongyu designed the book cover and hand calligraphed the title. This work won the Chinese Government Publication Award.

Later on in my career, my research focus has been on integrated medicine applied to cardiovascular disease and geriatric medicine. The work demonstrated the effectiveness of traditional Chinese medicine for the treatment of coronary artery disease and offered new evidence and interpretation of the ancient theory of activating blood circulation and removing blood stasis. The achievement has won multiple awards, including the National Scientific Achievement Award, Li Fu International Chinese Medicine Award, the International Contribution Award of the World Federation of Chinese Medicine Societies, etc. In addition, the translational medicine research achieved new breakthroughs in geriatric medicine. These accomplishments were not possible without the collaboration of my colleagues and students, and the joint publications are included in the book. I sincerely thank them for their efforts.

Traditional Chinese medicine with its long history has a cumulative wealth of theoretical and empirical knowledge. It is my hope that my limited contribution will serve as a catalyst to accelerate the advancement of integrated medicine.

Professor Keji Chen, MD, Ph. D.
Academician, Chinese Academy of Science
Jan. 2017

Table of Contents

Foreword

Views and Insights

1. My 60 Years of Traditional Chinese and Western Medicine Integration	003
2. Thanks for Your Accompanying in the Journey of Integrative Medicine—Strength and Confidence from the Predecessors of Chinese Medical Association	009
3. Historical Responsibility and Great Trust of the Times—Review and Outlook of 60 Years of Integrative Medicine Clinical Sciences	013
4. Where Are We Going?	016
5. Profiles of Traditional Chinese Medicine Schools	019
6. Complementary and Alternative Medicine: Is It Possible to Be Mainstream?	024
7. Convergence: The Tradition and The Modern	026
8. Chinese Medicine Pattern Diagnosis Could Lead to Innovation in Medical Sciences	029
9. Improving Clinical Practice Guideline Development in Integration of Traditional Chinese Medicine and Western Medicine	037
10. Bridging the Traditional Chinese Medicine Pattern Classification and Biomedical Disease Diagnosis with Systems Biology	040
11. Integration of Chinese Medicine with Western Medicine Could Lead to Future Medicine: Molecular Module Medicine	049
12. Integrative Medicine in Clinical Practice: From Pattern Differentiation in Traditional Chinese Medicine to Disease Treatment	057
13. Current Situation and Progress in Integrative Medicine in China	059
14. Clinical Service of Chinese Medicine	068
15. The Principle and Practice of Integrative Chinese and Western Medicine	070
16. Clinical Features and Investigation of Traditional Chinese Medicine	074
17. Forty Years of Integrated Medicine in China	078
18. Integrating Traditional Medicine with Biomedicine Towards a Patient-Centered Healthcare System	082
19. Making Evidence-based Decisions in the Clinical Practice of Integrative Medicine	085
20. Herb-drug Interaction: An Emerging Issue of Integrative Medicine	088
21. Atherosclerosis: An Integrative East-West Medicine Perspective	090



Table of Contents

22. The Potential Benefit of Complementary/Alternative Medicine in Cardiovascular Diseases	095
23. Recent Clinical Trials of Acupuncture in the West: Responses from the Practitioners	096
24. Further Validation of the Health Scale of Traditional Chinese Medicine (HSTCM)	104

Clinical and Experimental Studies

1. The Traditional and the Contemporar—Complementary Nature of Chinese and Modern Medicine—A Speech at Nobel Laureate Summit and Academician Forum of Medicine (2014)	121
2. Certain Progress in the Treatment of Coronary Heart Disease with Traditional Medicinal Plants in China	125
3. XS0601 Reduces the Incidence of Restenosis: A Prospective Study of 335 Patients Undergoing Percutaneous Coronary Intervention in China	129
4. Blood Stasis Syndrome and Its Treatment with Activating Blood Circulation to Remove Blood Stasis Therapy	138
5. The Diagnostic Criteria of Blood-Stasis Syndrome: Considerations for Standardization of Pattern Identification	144
6. Multifactor Dimensionality Reduction Analysis of the Correlation of Chinese Medicine Syndrome Evolvement and Cardiovascular Events in Patients with Stable Coronary Heart Disease	152
7. Clinical Study of Xiongshao Capsule on Preventing Restenosis after Coronary Interventional Treatment	159
8. Paeoniflorin Promotes Angiogenesis in A Vascular Insufficiency Model of Zebrafish <i>in vivo</i> and in Human Umbilical Vein Endothelial Cells <i>in vitro</i>	164
9. A Multi-Center Randomized Double-Blind Placebo-Controlled Trial of Xiongshao Capsule in Preventing Restenosis after Percutaneous Coronary Intervention: A Subgroup Analysis of Senile Patients	174
10. Effect of Xiongshao Capsule on the Function of Vascular Endothelium of Patients with Cervical Atherosclerosis	182
11. Inhibition of Vascular Remodelling in a Porcine Coronary Injury Model by Herbal Extract XS0601	187
12. The Effect of Xuefu Zhuyu Decoction on <i>in vitro</i> Endothelial Progenitor Cell Tube Formation	197
13. Effects of Active Components of <i>Red Paeonia</i> and <i>Rhizoma Chuanxiong</i> on Angiogenesis in Atherosclerosis Plaque in Rabbits	202
14. A Microarray Analysis of Angiogenesis Modulation Effect of Xuefu Zhuyu Decoction on Endothelial Cells	210
15. Research on the Correlation between Platelet Gelsolin and Blood-Stasis Syndrome of Coronary Heart Disease	216
16. Correlation between Fcγ R III A and Aortic Atherosclerotic Plaque Destabilization in	

ApoE Knockout Mice and Intervention Effects of Effective Components of <i>Chuanxiong Rhizome</i> and <i>Red Peony Root</i>	223
17. Effect of EphB4/EphrinB2 Reverse Signal on Angiogenesis Induced by Xuefu Zhuyu Capsule Containing Serum in Human Microvascular Endothelial Cell1 ..	230
18. <i>In Vitro</i> Angiogenesis Effect of Xuefu Zhuyu Decoction and Vascular Endothelial Growth Factor: A Comparison Study	237
19. Effect of Xuefu Zhuyu Pill on Platelet Activating Factor Expression in Patients with Unstable Angina Pectoris	245
20. Effect of Xuefu Zhuyu Pill on Patients with Carotid Atherosclerosis by Colour Doppler Ultrasonography	249
21. Effect of Chinese Herbal Drug-Containing Serum for Activating-Blood and Dispelling-Toxin on ox-LDL-Induced Inflammatory Factors' Expression in Endothelial Cells	250
22. The Effect of Xuefu Zhuyu Tang on Restraining Aortic Smooth Muscle Cell and the PDGF-A, <i>c-myc</i> Gene Expression in Atherosclerotic Rabbits	255
23. Objectified Study of Abdomen Diagnosis on Blood Stasis Syndrome	260
24. Effect of Chinese Drugs for Activating Blood Circulation and Detoxifying on Indices of Thrombosis, Inflammatory Reaction, and Tissue Damage in A Rabbit Model of Toxin-Heat and Blood Stasis Syndrome	261
25. Study on the Relationship between Blood Stasis Syndrome and Clinical Pathology in 227 Patients with Primary Glomerular Disease	269
26. Differential Gene Expression Profiles in Coronary Heart Disease Patients of Blood Stasis Syndrome in Traditional Chinese Medicine and Clinical Role of Target Gene	277
27. Relationship between Platelet Activation Related Factors and Polymorphism of Related Genes in Patients with Coronary Heart Disease of Blood-stasis Syndrome	284
28. Chinese Herb and Formulas for Promoting Blood Circulation and Removing Blood Stasis and Antiplatelet Therapies	292
29. The Electron Microscopic Observation of Alkaloid No.1 of <i>Ligusticum Wallichii</i> to the Influence of the Platelet of the Cases of Coronary Artery Heart Disease	302
30. Acute Hemodynamic Effects of Tetramethylpyrazine and Tetrandrine on Cirrhotic Rats	303
31. Haemodynamic Effects of Chronic Tetramethylpyrazine Administration on Portal Hypertensive Rats	308
32. Protective Effect of Propyl Gallate Against Oxidized Low-Density Lipoprotein- Induced Injury of Endothelial Cells	314
33. Effects of Propyl Gallate on Carotid Artery Thrombosis and Coagulation/Fibrinolysis System in Rats	323
34. Effects of Propyl Gallate on Adhesion of Polymorphonuclear Leukocytes to Human Endothelial Cells Induced by Tumor Necrosis Factor Alpha	327
35. Correlation between Platelet Gelsolin and Platelet Activation Level in Acute Myocardial Infarction Rats and Intervention Effect of Effective Components of <i>Chuanxiong Rhizome</i> and <i>Red Peony Root</i>	338



Table of Contents

36. ITIH4 A New Potential Biomarker of “Toxin Syndrome” in Coronary Heart Disease Patient Identified with Proteomic Method	345
37. Mechanisms and Clinical Application of Tetramethylpyrazine (an Interesting Natural Compound Isolated from Ligusticum Wallichii) : Current Status and Perspective	358
38. Oral Chinese Proprietary Medicine for Angina Pectoris: An Overview of Systematic Reviews/Meta-analyses	369
39. Oral <i>Panax notoginseng</i> Preparation for Coronary Heart Disease: A Systematic Review of Randomized Controlled Trials	385
40. Effects of Extracts from Panax Notoginseng and Panax Ginseng Fruit on Vascular Endothelial Cell Proliferation and Migration <i>in vitro</i>	400
41. Platelet Proteomics and Its Advanced Application for Research of Blood Stasis Syndrome And Activated Blood Circulation Herbs of Chinese Medicine	406
42. Salvianolic acid B Suppresses Maturation of Human Monocyte-derived Dendritic Cells by Activating PPAR γ	414
43. Systematic Review of Compound Danshen Dropping Pill: A Chinese Patent Medicine for Acute Myocardial Infarction	428
44. Tetramethylpyrazine in the Treatment of Cardiovascular and Cerebrovascular Diseases	445
45. The Effect of Xuefuzhuyu Oral Liquid on Aspirin Resistance and Its Association with rs5911, rs5787, and rs3842788 Gene Polymorphisms	446
46. The Expression of CD14 ⁺ CD16 ⁺ Monocyte Subpopulation in Coronary Heart Disease Patients with Blood Stasis Syndrome	453
47. Effect of Chinese Herbal Medicine for Activating Blood Circulation and Detoxifying on Expression of Inflammatory Reaction and Tissue Damage Related Factors in Experimental Carotid Artery Thrombosis Rats	460
48. Observation on the Analgesic Effect of Kuan-Xiong Aerosol on Anginal Attacks	466
49. Zedoary Guaiane-type Sesquiterpenes-eluting Stents Accelerate Endothelial Healing without Neointimal Hyperplasia in a Porcine Coronary Artery Model	469

Gerontology and Geriatrics

1. Some Key Problems and Thinkings on Gerontological Study in China	481
2. Reflections on Human Longevity and Chinese Medicine Prevention and Treatment of Chronic Diseases	487
3. Atherosclerosis, Vascular Aging and Therapeutic Strategies	493
4. The Essential Mechanisms of Aging: Irreparable Damage Accumulation of Biochemical Side-reactions	498
5. The Clinical Research of Chinese Medicines for Retarding Aging Process	512
6. Anti-Aging Herbal Medicines in China	519
7. A Systematic Review of Xuezhikang, an Extract from Red Yeast Rice, for Coronary	

Heart Disease Complicated by Dyslipidemia	522
8. Natural Polypill <i>Xuezhikang</i> : Its Clinical Benefit and Potential Multicomponent Synergistic Mechanisms of Action in Cardiovascular Disease and Other Chronic Conditions	541

Original Archives Research for Qing Royal Palace Medical Experiences

1. Systematic and Scientific Research in Qing Court Medication Experiences	559
2. A Comprehensive Study on Shengmai San Oral-Liquid	561
3. Experimental Research on Anti-motion Sickness Effects by Chinese Medicine "Ping'andan" Pills in Cats	565
4. Clinical and Experimental Studies on the Retarding Effect of Qing Court Shoutao Pill on the Aging Process	570
5. The Effect of Qinggong Changchun Capsule on Decreased Fluid Intelligence Associated with Aging	575

Others

1. Effects of <i>Panax Quinquefolium</i> Saponin on Phosphatidylinositol 3-Kinase/Serine Threonine Kinase Pathway of Neonatal Rat Myocardial Cells Subjected to Hypoxia ..	581
2. Progress in the Research of <i>Radix Astragali</i> in Treating Chronic Heart Failure: Effective Ingredients, Dose-Effect Relationship and Adverse Reaction	588
3. Effects of Tribuli Saponins on Left Ventricular Remodeling after Acute Myocardial Infarction in Rats with Hyperlipidemia	595
4. Advances in Experimental Pharmacological Studies of Effects of Astragalus on Cardiovascular System	601
5. Research Progress on Mechanism of Action of <i>Radix Astragalus</i> in the Treatment of Heart Failure	608
6. Experimental Study on the Abstinence Effect of Herbal Preparation Composite Dongyuan Gao	616
7. Clinical Observations of AIDS Treated with Herbal Formulas	621
8. Acupuncture in Modern Medicine	625
9. Gua Sha, An Ancient Technical Management, for Certain Illness	627
10. Development Is A High Level Inheritance for China Time-honored Brand Products ..	629
11. New Findings Validate an Ancient Technique: How Massage Affects the Biochemistry of Inflammation	631
12. The Circadian Rhythm of Yin and Yang Syndrome on Hypertension	633
Postscript	637



**My Integrative
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Views and Insights

1

My 60 Years of Traditional Chinese and Western Medicine Integration

CHEN Ke-ji

Great Gratitude to the Mentors of the Profession

My father used to take me when I was small to consult Chinese medical practitioners whenever I was sick. My rhinitis was treated with magnolia flowers and other herbs. The prescriptions were written in such an elegant calligraphy style that left a profound impression on me. The cure was effective without me knowing why as was the lasting question in the Chinese poem which literally asked “children unaware of the arrival of spring and why grass are always green in the spring?”

In 1949 I was simultaneously admitted to enter Fujian Medical College (present Fujian Medical University) , Medical College of Beijing University and Xiamen University. I chose to enroll in Fujian Medical College which was the closest to home and, of course, took up Western medicine. Five years of school went by quickly and upon graduation I was assigned to stay in school's affiliated hospital as a lecturer in the Department of Medicine (a resident) . I reported to Prof. Wang Zhong-fang who was the head of Department of Medicine. Prof. Wang graduated from Peking Union Medical College (1941) and excelled in professional expertise, and he was a resident when cardiologist Prof. Huang Wan was an intern. When I first reported to his office, Prof. Wang opened the thick English edition of 'Cecil's Textbook of Medicine' and asked me to elaborate on a section, before we moved on with ward works. Schistosomiasis was endemic that year in Fujian and areas nearby and it was common to see patients with liver cirrhosis and ascites. Diuretics such as mersalyl theophylline were commonly used but Prof. Wang often prescribed on the side Chinese herbs like lobelia and others as treatment. To someone who just entered clinical works, this naturally had an impact on me. During the “Cultural Revolution”, Prof. Wang was persecuted and imprisoned for a fabricated charge of “maintaining illicit relations with foreign countries” and he committed suicide by cutting his wrist with a razor blade. His case was eventually redressed with a vague conclusion that basically said to just accept what has already happened.

China Institute of Chinese Medicine was established in December 1955, and it was at the same time that the Ministry of Health held the first study class for Western medicine-trained doctors to learn traditional Chinese medicine. Each province at the time was asked to send two doctors who had graduated for more than three years to attend this class. Fujian Province had two positions to fill. One of the two came from Department of Orthopedics of Fuzhou Xiehe Hospital, the doctor went to Beijing to the study class and worked thereafter and he has passed away now. The other one was allocated to our hospital. The doctor selected, who had graduated for more than 3 years, chose not to attend so Prof. Wang asked me. At that time I had only actually been working for about one and a half year but I agreed to the assignment and came to Beijing. This started the 60-year stay here in Beijing, my youth, and hence my whole life was then dedicated to Chinese medicine and to the career of integrated medicine.

I reported to work at the clinic for senior government officials and foreigners at the Institute in Beijing the same day as the traditional Chinese medicine Master Ran Xue-feng of the “Southern Ran (南方冉雪峯) and Northern Zhang (北方张锡纯)” fame. There I followed Master Ran for two and half years. Master Ran



Views and Insights

at that time was already 78 of age. I was also able to systematically sit in the series of seminars on Chinese medicine theories held by the Institute and I remembered the seminar topics included “Abstracts of Classics of Internal Medicine (Nei Jing Zhi Yao)” (lectured by Chen Su-sheng), “Treatise on Febrile Diseases” (Shang Han Lun; Chen Shen-wu, Liu Du-zhou), “Synopsis of Prescriptions of the Golden Chamber” (Jin Gui Yao Lue; Yue Mei-zhong), “Shen Nong’s Herbal Classics” (Shen Nong Ben Cao; Zhu Yan), “Epidemic Febrile Diseases (Wen Bing Tiao Bian)” and “Compendium on Febrile Disease (Wen Re Jing Wei)” (Pu Fu-zhou), “Lantai Criteria” (Lan Tai Gui Fan; Ran Xue-feng), “Medical Insights (Yi Xue Xin Wu)” and “Bi Hua Yi Jing” (Wang Yi-men) and 300 herbs from “Dictionary of Chinese Herbal Medicine” (Guo Shi-kui). The lecturers usually explained the classic works line by line, and they all knew the works by heart and this was truly amazing! I am extremely grateful to these mentors, who led me into the profession, for laying the foundations, elevating the proficiency and eventually gaining mastery of the profession, thus forging my lifelong, endless love of traditional Chinese medicine. “A thousand miles start with a single step”, to the teachings from my mentors, indeed there is only endless gratitude.

I know myself not as a bright person, and certainly not endowed with a photographic memory. However I certainly work very hard and never had the need to ‘acclimatize’. I rather look at myself as a ‘sack’, and I just keep on loading myself up with all my worth. When accompanying Master Yue Mei-zhong in rounds he reminded me repeatedly that “with works such as ‘Treatise on Febrile Diseases’ and ‘synopsis of Prescriptions of the Golden Chamber’, one must be able to recite anytime anywhere without thinking and thus when it comes to actual clinical application, the works will be like a source of living water to you, responsive at spur of the moment, both resourceful and creative. Practice makes perfect, can you could even discover and learn something unexpected”. In these clinical rounds with Master Yue, he usually didn’t dictate each herb for you to write down the prescription, instead he just gave the title of the prescription and you must recite and write down all the herbs of that prescription. It was only then he would discuss with you the dose of each of the herbs. Sixty years later today, I realize this is the secret of his ease in practicing medicine and of the motto of his legendary life style in medicine which was ‘read only the classics and be only a gentleman’. This is no doubt the reflection of his disposition, knowledge and competence to cure.

In order to save and protect the clinical experience of traditional Chinese medicine masters, Chinese Ministry of Health in 1957 started the master-and-disciple inheritance program. Dr. Guo Shi-kui and I were assigned as students to Master Ran Xue-feng. Together with Master Ran, we saw a great number of patients, and all in all had treated more than a hundred Soviet experts who worked in China to support the building of various industries. We also came across people I admired from different walks of life. Cases attended to and successfully cured included aconite poisoning of overseas Chinese leader Tan Kah Kee, overfeeding leading to diarrhea of Chinese literati Guo Mo-ruo, exogenous pathogen affliction of Marshal Chen Yi’s father, and the case of Fuzhou fellowman Deng Tuo who suffered from chronic dyspepsia and wasting disease. Looking back at these cases, they are still so vivid in my memories. I also assisted in collating and witnessing the clinical cases cited in Master Ran’s work, the “Efficacious Cases of Eight Methods Prescriptions”. After Master Ran passed away, I was assigned to follow Master Yue Mei-zhong for clinical studies, on and off for the next twenty plus years. Master Yue’s home displayed his motto which says ‘people will remember when you treat the hearts, techniques alone could be hazardous anytime’. Academically and clinically, to advocate syndrome differentiation and treatment combined with the principle of specific medicine, specific prescription for specific disease is the best extension and continuation of the diagnosis and treatment concept championed in “The Synopsis of Prescriptions of the Golden Chamber” by Zhang Zhong-jing. Master Yue is known as the true master of the profession, yet he also possessed a very tolerant academic attitude and supported me in engaging in integrated medicine clinical researches. Master Yue once gave me a verse wishing me ‘good harvest on integration of Western and Chinese medicines’. To encourage me to study the objectivity of pulse diagnosis and in accordance with the guideline of ‘one disciple following multiple masters’,

leaders of the Institute at the time also arranged for Master Pu Fu-zhou to guide me in this study, allowing me to have more solid foundation on my pursue of the science of Chinese medicine, leading to the road to success.

The remarkable character and study style of these masters were even more vigorous with ages, and these no doubt are 'wordless' callings to me, further compelling me to have a rational and calm attitude in inheriting, studying and understanding the view and values of thousands of years of glorious Chinese cultural history as well as traditional medical knowledge. Guided by the principle of "study systematically, grasp completely and to evaluate for improvement", it enables me to rationally approach the differences between Western and Chinese medicines, and to build an attitude that fosters the growth of common ideas and respect of differences at the same time. There are many ways in this world, however my experiences teach me that it will not do without the way of integrated medicine. This 60-year journey has witnessed a gradual build and consolidate a national-confidence in the Chinese medicine culture, along with the new innovative integrated medicine development concept based on two disciplines complementing each other. I was invited to Hong Kong to lecture on two occasions during the 1980's and met with Mr. Chen Cun-ren who came to the lectures. Mr. Chen was elected in March 17, 1929 by the traditional Chinese medicine profession as one of the five representatives to go to Nanjing Kuomintang Government to protest against the "Chinese Medicine Abolition Act". I recall this meeting today with great consolation.

Carrying Forward the Traditional and Blending in the New Knowledge

Travelling through this 60-year time and space, I could only pick a few events that are vivid in my memory to share with all.

Blood Stasis Syndrome, Activating Blood Circulation and Removing Stasis Studies and the Birth of Coronary Heart No. 2 Compound (冠心2号复方)

At the beginning of the 1970's, Premier Zhou En-lai initiated the medical task on the study of cardiovascular diseases. This was a huge collaboration project with participation of more than a dozen large hospitals in the Beijing region. The Director of Fuwai Hospital, Academician Wu Ying-kai headed the task force with Xiyuan Hospital and the People's Liberation Army General Hospital acting as deputy heads. Prof. Huang Wan, Fang Qi, Guo Shi-kui, Chen Zai-jia, Kou Wen-rong, Gu Fu-sheng and others were also in the task force line-up. The collaboration was tasked to obtain in depth understanding and perform studies on blood stasis syndrome (BBS), activating blood circulation and removing stasis (ABCRS) theories and clinical experiences from past generations. The mission was to enhance clinical treatment efficacy, and the targets were clear including that of understanding the mechanisms of action. I believed that we should have sufficient research enthusiasm and capabilities in us to be on the front line facing such tough challenges. The first thing was to do your homework, come well-prepared, and make good of one's commitment for the well-being of society. The outcome of this project would be one that is of China, and it must also be modern, up-to-date, hence modern Chinese medicine. On the aspect of Chinese medicine knowledge, I systematically combed through more than 40 Chinese medicine classics and prescriptions on the ABCRS principle, and made a series of excerpts and notes. This was the forerunner of a later publication entitled "Studies on Blood Stasis Syndrome and Activating Blood Circulation to Remove Stasis" which I corroborated with the late Prof. Zhang Zhi nan who was known as the 'Gifted Scholar of Xiehe". Working together with other research units, we went through classic materia medica works from the past and completed the major undertaking of classifying all ABCRS prescriptions into three classes, namely, blood mixing, blood activating and blood expelling prescriptions. Relevant hemo-physiological and pharmacological studies had proved the rational integrity of this classification. The most important innovation during this period was the emergence of Coronary Heart No. 2 Compound which was developed based on clinical experiences of Dr. Guo Shi kui and



Views and Insights

composed of *Radix Salviae Miltiorrhizae*, *Radix Paeoniae Rubra*, *Rhizoma Chuanxiong*, *Carthamus tinctorius* and *Dalbergia*. Clinical randomized clinical trial observational study was done in 1980 on this compound to investigate its effect on angina pectoris of chronic, stable coronary heart disease patients. This study was generally recognized in China traditional Chinese medicine profession as the first evidence-based research work and was the progenitor that led to the robust research studies on ABCRS prescriptions to follow. After this, dozens of new prescriptions based on this formulation were developed and made available. From here we did further research studies on total alkaloids of *Rhizoma Chuanxiong* and Ligustrazine. I personally completed the observations attesting to the anti-platelet activities of these alkaloids, and this was done in the laboratory of Academician Bei Shi-zhang who was the head of Biophysics Research Institute of Chinese Academy of Sciences.

A series of research studies on biochemical and pharmacological mechanisms of action of atherosclerosis related topics was carried out in collaboration with colleagues from Departments of Cardiovascular and Basic Science of Xiyuan Hospital, and specialists from Basic Medical Research Institute of the Chinese Academy of Medical Sciences including Prof. Jin Yin-chang, Chen Meng-chin, Chen Wen-wei, Xu Lian-na, Li Lian-da, Weng Wei-liang, and Liu Jian-xun. This series of studies was awarded the National Science & Technology Progress Award, a first for China's traditional Chinese medicine profession. At the moment we continue to study the molecular mechanism of action of ABCRS prescriptions on angiogenesis. In addition, the establishment of BBS diagnosis criteria was also accredited for application by the Northeast Asia and Southeast Asia international conferences. Other studies, including research and development on Yuxintong Compound (愈心痛复方) and Kuan Xiong Aerosol (宽胸气雾剂) have all garnered progresses. Of great regret is that after completion of multi-center RCT studies on Xiongshao Preparations (芎芍制剂) in the prevention and treatment of percutaneous coronary intervention (PCI) restenosis, the project was put on halt due to unresolved issues among the collaborators.

Research on Geriatric Medicine

The population is rapidly aging in China. I submitted a request in 1981 to build Geriatric Medicine Research Institute and it was immediately granted by Director Ji Zong-pu who was at the time the head of China Academy of Chinese Medicine. I was then simultaneously serving as head of Cardiovascular Disease Institute and Geriatric Medicine Research Institute, and organized colleagues from the Institute to systematically comb through and collate more than 300 works of gerontology and geriatric medicine monographs and relevant theories into a book entitled "Essence of Chinese Traditional Geriatric Medical Literature". This was an important activity signifying that to have innovative research works one must first inherit and learn from forefather's experiences. This was followed by establishment of the classification of aging symptoms as well as treatment evaluation criteria. For this purpose we conducted studies on the effect of Invigorating Pi (Spleen) and Shen (Kidney) formula on the cognitive function, the effect of Jianpi Fufang Baxian Cake (健脾复方八仙糕) on the digestive enzymes of small intestines, the effect of Ping An Pellet (平安丹) on the balance of the brain function, and the application of Nuclear Stethoscope 99Te as marker for observation of the effect of Shengmai Injection (生脉注射液) on cardiac functions.

From 1978 to 1981, as part of the scientific and technology research efforts of the 'state Sixth Five-Year Planning', my postgraduate students took lead in the application of Swan-Ganz floating catheter to observe the effect of Shengmai Injection on pulmonary wedge pressures and blood ejection functions, and this was considered as one of the innovative works of early period and it attracted wide attention in the profession. In addition, observations on the effect of Aromatic and Warm Kuanxiong Formulation (芳香温通宽胸制剂) and Shoutao Pills (寿桃丸, named national intangible cultural heritage) on lowering aging physiology score and on body trace element level were also done with clear effect.

Research Studies and Collation of Qing Court Original Medical Records

Ever since my boyhood, I have been interested in literature and history. In the 50's of last century when I first arrived Beijing, I visited the Palace Museum the very next day and saw showcases which displayed original medical files of Qing Imperial Court and thought one of these days this should be properly studied and put to order.

Time marches on without mercy. It was only in 1980, after I had been working in Beijing for more than 20 years that I suggested, and got approved by Central Office and the National Archive, in collaboration with China Institute of Chinese Medicine and the First Historical Archive of China, to set up and lead the Qing Court Medical Case Research Unit. Together with Prof. Xu Yi-pu, Zhou Wen-quan, Jiang You-li and Li Chun-sheng we were to sort out more than 30, 000 Qing Imperial Court original medical records in deposit. The team was able put out a series of publications including "Selected Discussions on Cixi and Guangxu Prescriptions", "Studies on Qing Court Medical Cases", "Essence of Qing Court Tea Drinks", "The Best of Qing Court External Prescriptions", "The Best of Qing Court Prescription Leads", "The Best of Qing Court Herbal Pastes", "Complete Collection of Qing Court Prescriptions" and "Complete Collection of Qing Court Medical Cases". This series effectively sorted to order and inherited clinical experience of the imperial court of Qing Dynasty. Of the publications, "Complete Collection of Qing Court Medical Cases" won the Second China Government Publication Award presented by the State Press and Publication Administration. Many efficacious prescriptions from the Qing Court archive were put through new development using modern scientific technologies, including traditional medicine formulations such as Shoutao Pill, Ping An Pellet, Changchun Pill (长春丹) and others. Development of these formulations all fell under inheritance projects of integrated medicine. The study and classification of the original Qing Court medical cases received supports from masters in medical and history fields such as Ji Zhong-pu, Yue Mei-zhong, Ren Ying-qiu, Deng Tie-tao, Kuang An-kun, Geng Jian-ting, Zheng Tian-ting, Pu Jie and Dai Yi who appraised, complemented, and wrote foreword and introduction on these works.

Staying Inspired of Integrated Medicines to Improve Therapeutic Effects

In 2015, Prof. Tu You-you was awarded the annual Nobel Prize in Physiology/Medicine, which was a major watershed event in the fields of science and technology, Chinese medicine and integrated medicine in China. This event provokes people to contemplate the necessity to know anew the bountiful treasure that is the Chinese medicine knowledge and the skills that have been accumulated extending over thousands of years. Of particular importance is that it inspires us to diligently apply modern technology to unearth and to develop further this treasure. We need to further promote the integration of Western and Chinese medicines, and in the process of improving what we have achieved so far in innovative medical development, we need to take up a philosophical, cultural and scientific mindset which is global and cross-culturally integrated. We must learn from the integrated approach in the development of innovative drug such as artemisinin which significantly enhances therapeutic effect and saves mankind from miseries right away. After accepting the Nobel Prize, Dr. Tu couldn't have put it any better by saying that "Chinese medicine is no doubt a treasure pot, but it is not enough just to retrieve from it and use passively", "if we just cling on to what the ancestor gave us and be complacent of it, this trove of Chinese medicines would just be a basket of herbs, it would never be able to become a treasure". The success of Tu You-you is marked with frustrations and hardships, and her words are words of remarkable enlightenment. Clinical therapeutic efficacy is the essence of medicine, and this is not something we can be vague about. Our belief is in the ultimate pursuit of truth, goodness and beauty, it is a combination of subjective will and objective findings, of accessibility,