中澳生物医药国际研讨会
会议通知

各有关单位：

为积极推动生物医药、再生医学及组织工程和新材料工作的发展，加强相关领域科技工作人员的交流与合作，由我校与澳大利亚联邦科学与工业研究组织(CSIRO)共同举办的“中澳生物医药国际研讨会”将于 2018 年 6 月 11 日在我校大学城校区图书馆红棉厅召开。

此次会议特邀澳大利亚联邦科学与工业研究组织及我校相关领域共 14 位专家、学者就生物医药、再生医学及组织工程和新材料的发展做大会报告，请各单位积极组织相关老师和学生参与。

会议有关具体安排如下：

一、会议时间：

2018 年 6 月 11 日 9：00-17:00

二、会议地点：

广州大学城外环东路 280 号广东药科大学图书馆红棉厅

三、会议议程：

2018 年 6 月 11 日 （地点：广东药科大学图书馆红棉厅）				
序号	时 间	内 容	主持人/主讲人	备注
1	**9:00-9:10**	广东药科大学副校长张陆勇教授致欢迎辞	国际交流与合作处	
2	**9:10-9:20**	澳大利亚联邦科学与工业研究组织代表 **Paul Savage** 博士致辞	国际交流与合作处	
3	**9:20-9:30**	郝晓娟博士做 **GDPU-CSIRO** 合作情况介绍	国际交流与合作处	

4	**9:30-9:50**	**CSIRO Biomedical Manufacturing Introduction**	**Paul Savage**	澳大利亚联邦科学与工业研究组织
5	**9:50-10:10**	基于金属钌配合物的抗肿瘤作用研究 **The antitumor study of ruthenium-based complexes**	王金全	广东药科大学
6	**10:10-10:30**	**RAFT as a Platform Tool for Encapsulation of Photodynamic Therapy Drugs**	郝晓娟	澳大利亚联邦科学与工业研究组织
7	**10:30-10:50**	中医经方小半夏汤防治化疗性胃肠道毒副反应实验研究 **Experimental studies of Xiaobanxia Decoction, a classical prescription in Traditional Chinese Medicine, alleviates chemotherapy-induced gastrointestinal toxicity**	聂克	广东药科大学
8	**10:50-11:00**	休息		
9	**11:00-11:20**	用于药物研究的大规模哺乳动物细胞培养和蛋白质生产：当前趋势和扩展考虑因素 **Protein production for pharmaceutical research using large-scale mammalian cell cultures: current trends and scale-up considerations**	**George Lovrecz**	澳大利亚联邦科学与工业研究组织

10	**11:20-11:40**	促进药物递送至内耳的方法：针对老问题的新思路 **Enhancing Drug Delivery to the Inner Ear: new thoughts on an old puzzle**	陈钢	广东药科大学
11	**11:40-12:00**	群体智能与机器学习在药物发现中的应用 **Application of swarm intelligence and machine learning in drug discovery**	唐德玉	广东药科大学
12	**12:00-14：00**	午餐及休息		
13	**14:00-14:20**	关于 **CSIRO** 生物医学合成化学组功能和 **CSIRO** 复合文库简介 **Introduction to CSIRO Biomedical Synthetic Chemistry Group capabilities and CSIRO Compound Library**	**Craig Francis**	澳大利亚联邦科学与工业研究组织
14	**14:20-14:40**	介孔炭纳米球的设计合成及应用 **Mesoporous Carbon Nanospheres (MCNs): Synthesis and Application**	王秀芳	广东药科大学
15	**14:40-15:00**	生物材料和再生医学 **Biomaterials and Regenerative Medicine**	**Veronica Glattauer**	澳大利亚联邦科学与工业研究组织
16	**15:00-15:20**	广东省生物活性药物研究重点实验室 **Guangdong Provincial Key**	卢雪梅	广东药科大学

		Laboratory of Pharmaceutical Bioactive Substances		
17	**15:20-15:40**	休息		
18	**15:40-16:00**	与生物环境通信的医疗器械 **Medical devices that communicate with their biological environment**	**Helmut Thissen**	澳大利亚联邦科学与工业研究组织
19	**16:00-16:20**	基于机器学习识别疾病相关的蛋白质和药物 **Identifying disease-related protein and drug based on the machine learning**	李占潮	广东药科大学
20	**16:20-16:40**	肿瘤抗原特异性 **TCR** 基因筛选 **Identification of tumor antigen-specific TCR gene**	邵红伟	广东药科大学

科技处、国际交流与合作处

2018 年 **6** 月 **7** 日

澳大利亚联邦科学与工业研究组织(CSIRO)专家介绍

Paul Savage 博士是 CSIRO 制造业务部门中生物医药制造部的研究负责人。

Savage 博士于 1988-1990 年在美国佛罗里达大学攻读博士后，导师为皇家学会会员 Alan R Katritzky 教授，之后于 1990 加入了 CSIRO。他的博士后研究包含多种项目如：各种化学战剂的检测和去污、有机液晶的合成、计算化学和激光解吸 FT-ICR 质谱、多环氧化酶的高场核磁共振分析，LIC 杂芳族化合物，以及将苯并三唑作为合成助剂的制备转化。

回到澳大利亚后，Savage 博士于 1990 年在 CSIRO 的化学工业和化学聚合物部门任博士后研究员一职，从事 CSIRO 和杜邦合资企业的 Dunela 项目研究。随后他于 1991 年被任命为研究科学家；1994 年任命 为高级研究科学家；1997 年至 1999 年，担任作物保护化学品项目的负责人；2000 年任 Dunlena Pty 有限公司的负责人以及 CSIRO 分子科学分子工程部的负责人；2005 年任澳大利亚生物技术发展伙伴关系课题负责人；2014 年任生物医学制造部的研究主任 2014。

该部门有两个目标：

（1）与澳洲生物医药行业中现有公司进行合作，以开发新兴设备，材料以及工艺，同时提高同时也提高生产力和效率，从而促进增长、全球竞争力以及经济和环境效益；

（2）通过澳洲生物医药产业中新兴公司将开发的新型创新设备、产品和工艺投放，以满足不断增加的新兴市场对医疗以及医药产品和服务的需求，从而创造投资和经济机会。

Dr Paul Savage is the Research Director of the Biomedical Manufacturing Program within the CSIRO Manufacturing business unit.

Returning to Australia, Dr Savage took up a postdoctoral position with CSIRO in the Division of Chemicals & Polymers in 1990 working on the Dunlena Project, a joint venture between CSIRO and DuPont. He was subsequently appointed: Research Scientist, 1991; Senior Research Scientist, 1994; Project Leader of the Crop Protection Chemicals Project, 1997-99; Director of Dunlena Pty Ltd; Program Leader of the Molecular Engineering Program at CSIRO Molecular Science, 2000; Theme Leader, Australian Biotechnology Growth Partnerships, 2005; and Research Director of Biomedical Manufacturing in 2014.

The Program's aim is twofold:

(1) Working collaboratively with existing companies in the Australian biomedical industry to develop new and innovative devices, materials and processes, while also improving productivity and efficiency, thereby leading to growth, global competitiveness and economic and environmental benefits; and

(2) To develop novel and innovative devices, products, and processes, delivered through new companies in the Australian biomedical industry, which will meet emerging market demands for medical and pharmaceutical products and services, thereby creating investment and economic opportunities.

Dr Savage joined CSIRO in 1990 following a postdoctoral fellowship at the University of Florida, USA, 1988-90, with Professor Alan R Katritzky, FRS. His postdoctoral research encompassed a variety of projects including: the detection and decontamination of chemical warfare agents, synthesis of organic liquid crystals, computational chemistry and laser desorption FT-ICR mass spectrometry, high-field nuclear magnetic resonance analysis of polycyclic heteroaromatic compounds, and preparative transformations using benzotriazole as a synthetic auxiliary.

郝晓娟博士在CSIRO制造业务部中生物医学制造部担任高级研究科学家和项目负责人。郝博士在墨尔本大学工作并在新南威尔士大学从事博士后研究后，于2006年加入CSIRO。她是RAFT生物应用团队负责人，带领一个团队成功地完成了一些重大项目。她与一些中国大学和中国科学院研究所进行长期合作。其研究领域包括 RAFT 聚合制备各种结构、纳米材料如金纳米粒子和量子点的聚合物改性、用于药物递送和医疗装置的生物材料、碳材料的聚合物改性（富勒烯、CNTs和GO)、以及成像对比剂等。

Dr Xiaojuan Hao is a Senior Research Scientist and Project Leader in the Biomedical Manufacturing Program within the CSIRO Manufacturing business unit. Dr Hao joined CSIRO in 2006 after working in Melbourne University and the University of New South Wales as a postdoc. She was a Team Leader of RAFT Bio-application Team and led a team to successfully deliver a number of significant projects. She has a long term collaboration with a number of Chinese universities and CAS institutes. Her research areas include RAFT polymerization to prepare various structures, polymer modification of nanomaterials such as gold nanoparticles and quantum dots, biomaterials for drug delivery and medical devices, polymer modification of carbon materials (fullerenes, CNTs and GO), and imaging contrast agents, etc.

陆哲雄博士于1983年毕业于广东医药学院，于1999年获拉特巴大学澳大利亚生物化学博士学位。 陆博士在CSIRO生物医学制造部担任高级实验科学家。他的研究领域主要是重组蛋白生产中的各种宿主细胞，如细菌、酵母、昆虫和哺乳动物细胞的优化和放大。 单用生物反应器在实验室良好生产实践中的实施与应用。陆博士对可变细胞系的大规模瞬时转染生产技术以产生不同的重组蛋白用于药物发现方面有广泛认识。陆博士也参与了生物技术学科的研究生培养。 他在大规模的重组蛋白生产和下游加工的发展方面超过20年的研究经验，我们的大型哺乳动物细胞培养设备是澳大利亚最大的开放式教学设施之一。

Dr Louis Lu graduated from Guangdong Institute of Medical and Pharmaceutical Science, China in 1983 and obtained his PhD in Biochemistry from La Trobe University Australia in 1999. Dr Louis Lu is a Senior Experimental Scientist, within the Biomedical Program, Manufacturing, CSIRO. His research areas focus on optimization and scale-up of various host cells, such as bacterial, yeast, insect and mammalian cell in the recombinant protein production. Implementation and application of single use bioreactor for Good Manufacture Practice (GMP) in the laboratory. Dr Lu has extensive knowledge of a large scale transient transfection production technique in variable cell lines to produce different recombinant proteins for drug discovery. Dr Lu is also involved in the postgraduate student training in biotechnology subject. He has more than 20 years of experience in large scale recombinant protein production and downstream processing development. Our large scale mammalian cell culture facility is one of the largest open teaching facility in Australia.

George Lovrecz 在CSIRO制造业务部门中的生物医学制造部担任研究负责人。研究领域包括化学工程、哺乳动物细胞培养、发酵过程的扩大和优化，发酵生产蛋白质等。George Lovrecz 教授是 CSIRO 制造业的资深主要研究科学家，在发酵研究领域拥有超过30年的经验，专攻哺乳动物细胞培养的规模化。George 为学术和工业项目的内部和外部研究合作者提供了大规模生产、优化、开发和描述重组蛋白质领域的专门知识。他的团队在提供适合于研究的质量和数量的蛋白质方面有一个行之有效的记录，如临床前、动物和 ISO9001 和兽医 cGMP 认证下的1期试验。该小组的活动得到了 国家合作基础设施计划(NCRIS) 和超级科学倡议(SSI) 的资助，用以在克莱顿创建澳大利亚最大的规模发酵生产设施合作试点(价值 1600万美元)。这个设施直接促成了大量发酵领域的科研成果的产业化及商业化。

George 还参与了多个组织的专利/出版物、教学和培训：他已经为维多利亚大学及两所继续教育学院（TAFE）开发了两门课程。 目前他任皇家墨尔本理工学院、莫纳什大学副教授，承担皇家墨尔本理工学院、莫纳什大学和墨尔本大学的教学任务。 George 在 18 年前在 CSIRO 帕克维尔建立了一年一度的蛋白质表达研讨会，该研讨已发展成为澳大利亚在该领域的最大的科学论坛之一。

Professor George Lovrecz is a Senior Principal Research Scientist at CSIRO Manufacturing with over 30 year experience in fermentation, specialising in the scale-up of mammalian cell cultures. George provides expertise in the area of large-scale production, optimisation, development and characterisation of recombinant proteins for internal and external research collaborators both for academic and industrial projects. His team has a proven track record in delivering proteins in qualities and quantities suitable for research such as preclinical, animal and up to Phase 1 clinical trials under ISO9001 and veterinary cGMP accreditations. The team activities were rewarded by major NCRIS (National Collaborative Infrastructure Scheme) and SSI (Super Science Initiative) grants which allowed the creation of Australia's largest collaborative pilot-scale fermentation facility (worth ~ $16M) at Clayton. This facility is heavily involved in translational research, i.e. turning academic discoveries into commercial reality.

George also has been involved in several patents/publications, teaching and training at various organisations: he has developed two subjects for Victoria University (VU), courses for Adelaide and Box Hill TAFE. He was lecturing at UNSW and VU, currently he lectures at RMIT, Monash and the University of Melbourne. George is an adjunct professor of RMIT and Monash Universities. George established the Annual Protein Expression Workshop (PEWS) at CSIRO Parkville, 18 years ago, which has grown to be one of the biggest science forum in this field in Australia.

Craig Francis 博士分别获得理学士（一级荣誉，1987 年）和博士(1991年)。在剑桥大学的博士后学习中（1991-1992 年安德鲁·福尔摩斯博士），Francis 博士学习了关于不饱和中环醚海洋天然产物钝性的非对称合成，以及关于与天然物毒效霉素有关的减少喹啉类药物合成的电泳环化方法论在南澳大利亚阿德莱德大学学习关于与天然物毒效霉素有关的减少喹啉类药物合成的电泳环化方法论。他于 1993 年回到澳大利亚参加联邦科学与工业研究组织（简称 CSIRO)并且于 2004 年成功在队伍中崛起成为研究中的领头羊。

Francis 博士在 CSIRO 的大部分时间都用在将合成有机化学尤其是杂环化学应用于生物活性分子的发现与发展领域，在各种各样的药物化学，发现和过程开发项目中。这些项目已经与几个在药学、动物健康以及 植物保护部门的行业合作伙伴开展合作了。

他长期的研究兴趣便是新颖或不常见的杂环系统的合成方法研发。

Dr Craig Francis obtained his B.Sc. (First Class Honours, 1987) and PhD (1991) at

The University of Adelaide in South Australia, studying electrophile-initiated cyclization methodology for the synthesis of reduced quinolines related to the natural product virantmycin. Following a post-doctoral fellowship at The University of Cambridge (Professor Andrew Holmes, 1991-1992), studying asymmetric synthesis of the unsaturated medium ring ether marine natural product obtusenyne, Dr Francis returned to Australia to join the Commonwealth Scientific and Industrial Research Organization (CSIRO) in 1993 and rose up through the ranks to become a Principal Research Scientist in 2004.

Dr Francis' time at CSIRO has been mostly spent applying synthetic organic chemistry, particularly heterocyclic chemistry, to the field of bioactive molecule discovery and development, in a wide variety of medicinal chemistry, discovery, and process development projects. These projects have been in collaboration with several industrial partners in the pharmaceutical, animal health, and crop protection sectors.

His other abiding interest is in the development of synthetic methodology for novel or uncommon heterocyclic ring systems.

Veronica Glattauer 是 CSIRO 制造业务部门中生物医学部成员之一。她在生物材料科学与工程、细胞外基质生物（主要是胶原蛋白），蛋白质化学和细胞生物学领域拥有广泛的知识。

Veronica Glattauer 还是是细胞-材料相互作用研究领域的团队负责人。该团队目前专注于研究生物医学和组织工程应用的新材料平台。她研究重点是以最终应用来定制完全合成和重组非动物胶原蛋白材料。

她的研究工作涉及了跟许多与工业，澳大利亚或者海外公司开展商业化的合作关系。她还和整个 CSIRO 中的其他研究小组和其他澳大利亚或者澳大利亚的研究机构进行了合作。她获得了个人和团队奖，其中包括两项 CSIRO 奖励研究成果奖。她是澳大利亚生物材料和组织工程学会的委员之一。

Veronica Glattauer is a member of the Biomedical Program at CSIRO in the Manufacturing Business unit. She has extensive practical knowledge in the area of biomaterial science and engineering, extra-cellular matrix biology (principally collagen), protein chemistry and cell biology.

Glattauer is a Team Leader in the area of Cell Material Interactions with current focus on new material platforms, for biomedical and tissue engineering applications. Her emphasis is in fully synthetic and recombinant non animal collagen materials tailored to end application.

Her research project activities have involved a large number of commercially driven partnerships with industry, Australian and overseas companies. Has collaborated with research groups throughout CSIRO and other research institutions both Australian and international. She has received individual and Team awards including two CSIRO medals for Research Achievement.

She is a committee member of the Australasian Society of Biomaterials and Tissue Engineering.

Helmut Thissen 在德国亚琛工业大学获得了化学博士学位，在那里他也开始在生物医学研究中转为临床实践，同时在跨学科的临床研究中心工作。他于 1998 年加入 CSIRO，目前，他带领了一由超过 30 位科学家的组成的团队，该团队主要是研究生物医学器件和再生医学的交叉学科，特别是生物界面相互作用的有效控制。他发表了 130 篇同行评议的期刊刊物和书籍章节（影响指数＞30，＞3500 次引用）和＞300 会议摘要。他的科研成果转化重点体现在 8 个同族专利中，并将科研成果成功转化为多个生物医学产品。除了经常担任从澳大利亚国

立健康与医学研究理事会到欧洲委员会的国家和国际机构的专家评估员之外，他还是墨尔本莫纳什大学、澳大利亚和台湾台北台湾大学的兼职教授。所获权威奖项包括 CSRO 研究成果奖和杰出特级科学家牛顿特纳奖。他在科学组织担任多个职务，包括澳大拉西亚生物材料与组织工程学会（ASBTE）主席、聚合物研究合作中心（CRC）和多个国家和国际会议和研讨会主席。他是 ASBTE 的成员，澳大利亚皇家化学研究所（RACI）和组织工程和再生医学国际协会（TyMIS）。

Helmut Thissen obtained his PhD in Chemistry from RWTH Aachen University in Germany, where he also started to translate biomedical research into the clinic while working at the Interdisciplinary Centre for Clinical Research. He joined the Commonwealth Scientific and Industrial Research Organisation (CSIRO) in 1998, where he now leads a team of more than 30 scientists that are focused on the interdisciplinary topics of biomedical devices and regenerative medicine, and here in particular the effective control of biointerfacial interaction. He has published >130 peer-reviewed journal publications and book chapters (h-index >30, >3500 Citations) and >300 conference abstracts. His translational focus is reflected by 8 patent families and the translation of research results into multiple successful biomedical products. Apart from frequently serving as an expert evaluator for national and international institutions ranging from the NHMRC to the European Commission, he is also an Adjunct Professor at Monash University in Melbourne, Australia and National Taiwan University in Taipei, Taiwan. Prestigious awards include the CSIRO Medal for Research Achievement and the Newton Turner Award for Exceptional Senior Scientists. He has served his scientific community in many roles, including President of the Australasian Society for Biomaterials and Tissue Engineering (ASBTE), Program Leader of the Cooperative Research Centre (CRC) for Polymers and chair of multiple national and international conferences and symposia. He is a member of the ASBTE, the Royal Australian Chemical Institute (RACI) and the Tissue Engineering and Regenerative Medicine International Society (TERMIS).

广东药科大学专家简介

陈钢，博士，教授，主要从事新型给药系统及新药的研发。1996-2000 年，华西医科大学药学院，药学专业，理学学士；2000-2003 年，四川大学华西药学院，药剂学专业，理学硕士；2003-2006 年，四川大学华西药学院，药剂学专业，理学博士；2006 年至今于广东药科大学任教;2013-2014 年,University of Manchester，访问学者。广东省药物新剂型重点实验室 PI，广东省药物制剂创新研究团队核心成员。兼任国家、广东省、江西省、四川省、广州市评审/咨询专家，Sci Transl Med, Eur J Pharm Biopharm, J Biomed Nanotechnol, Int J Pharm, Eur J Pharm Sci, Drug Deliv, J Ethnopharmacol, Colloid Surface B, Carbohyd Polym 等 20 余个国际期刊审稿人。

主要研究方向：(1) 内耳给药系统的研究，即从剂型角度出发，优化设计给药载体，构建安全高效、成药性好的内耳递药系统；(2) 防治内耳疾病的创新药物研究，即建立针对内耳疾病活性成分的多靶点、多模式筛选与评价系统，研发具有自主知识产权防治内耳疾病的创新药物及制剂。近年来，作为课题负责人主持国家自然科学基金 4 项、省市项目 10 项及企业委托项目 2 项；以第一作者或通讯作者发表论文近 50 篇。2016 年获中国药学会“青年药剂学奖”。

Dr. Gang Chen is a professor at Guangdong Pharmaceutical University wit his research focusing on R&D of novel drug delivery system and drug discovery He received a B.S. in Pharmacy from Western China University of Medica Sciences (2000) and a Ph.D. in Pharmaceutics from Sichuan University (2006) He joined Guangdong Pharmaceutical University as a lecturer of pharmaceutic (2006), and was promoted to a professor (2012). He was a visiting schola at the University of Manchester (2013-2014).

His main research interests include both inner ear drug delivery systems and new drugs for prevention and treatment of inner ear disorders. In recent years, Dr. Chen headed four projects funded by Natural Science Foundation of China, ten provincial/municipal programs, and two enterprise-authorized items. As the first or corresponding author, he has published nearly fifty research papers. He received the Young Investigator Award from Chinese Pharmaceutical Association in 2016. Dr. Chen is an invited reviewer for more

than twenty journals including Sci Transl Med, Eur J Pharm Biopharm, J Biomed Nanotechnol, Int J Pharm, Eur J Pharm Sci, Drug Deliv, J Ethnopharmacol, Colloid Surface B, Carbohyd Polym, et al. He also takes social positions as national and provincial assessment/consultant expert, leader member of Guangdong Provincial key discipline of pharmaceutics, and core member of Guangdong Provincial innovative team for advanced drug delivery.

聂克，医学博士，教授，博士生导师。山东省医药卫生重点学科“中药药理学”学科带头人。2017 年 8 月由山东中医药大学调至广东药科大学中药学院。

本科和硕士毕业于山东中医药大学，博士毕业于广州中医药大学。先后在英国伦敦大学圣乔治医学院和美国匹兹堡大学医学中心进行访问研究。

主要社会兼职：中国药理学会中药与天然药物药理专业委员会委员，中华中医药学会中药实验药理分会常务委员，中国中西医结合学会基础理论专业委员会委员。国家自然科学基金项目同行评议专家，国家重大新药创制等重大专项评审专家，科技部国际科技合作计划项目同行评议专家，国家留学基金委公派出国项目评审专家，教育部学位与研究生教育发展中心评审专家，教育部高等学校博士学科点专项基金评审专家，等。

长期从事中药药理与毒理学和中西医结合科研与教学工作。研究领域主要是中药及复方药效作用及作用机制、药效物质基础研究。近年主要从事中药防治肿瘤化疗导致的胃肠道毒副反应研究。先后主持国家自然基金面上项目、教育部留学回国人员科研启动基金、教育部高等学校博士学科点博导基金、山东省科技发展计划项目等项目 10 余项。作为课题组主要成员参加国家重大新药创制、国家山东创新药物孵化基地等课题多项，负责药理药效研究。

以第一位获奖人先后获得山东省科技进步三等奖、山东中医药科学技术二等奖、山东高等学校优秀科研成果三等奖等奖励。以第一或通信作者发表学术论文 80 多篇。作为副主编或编委参编出版《中药药理研究方法学》、《中药药理学专论》、《现代中药毒理学》等专著和本科生、研究生国家规划教材 8 部。培养博士和硕士生 20 名。

KE NIE, Professor of pharmacology of Chinese Materia Medica.

Prof Nie got his bachelor (1988) and master degree (1996) in Shandong

University of Traditional Chinese medicine. After received his PhD in Guangzhou University of Traditional Chinese Medicine (2000), he joined Shandong University of Traditional Chinese Medicine in Jinan, Shandong province. He was engaged in teaching for undergraduate and postgraduate students and scientific research in the field of pharmacology and toxicology of Traditional Chinese Medicine (TCM). As an academic visitor, he visited Prof Paul Andrews' vomiting laboratory in St George's University of London, UK in 2004, and visited Dr Charles Horn's neuroscience laboratory in the University of Pittsburgh, USA in 2014. He moved to Guangdong Pharmaceutical University in September 2017.

His current research interest mainly includes studies of TCM to alleviate cytotoxic cancer chemotherapy induced gastrointestinal side effects, such as nausea, vomiting and mucositis, to improve quality of life of cancer patients. Clarifying mechanism and targets of classical prescriptions from TCM and finding active compounds extrated from TCM (i.e. natural products) are also his research interest.

邵红伟，博士毕业于中山大学，现为广东省生物技术候选药物研究重点实验室常务副主任，主要从事肿瘤免疫治疗研究。主持国家自然科学基金项目，广东省自然科学基金，广东省科技计划项目等科研项目多项，合计经费约 300 万元。近 5 年发表 SCI 索引论文（含共同第一作者和共同通讯作者）16 篇，其中单篇最高影响因子 6.5。

Dr Hongwei Shao graduated from Sun Yat-sen University, he is mainly engaged in cancer immunology and immunotherapy. He was funded by the National Natural Science Foundation project, the Guangdong Natural Science Foundation, the Guangdong science and technology plan, the Guangzhou science and technology project and so on, with a total of about three million RMB. He has published (the first author and corresponding author)16 papers(SCI) in the past 5 years and the highest impact factor was 6.5.

王秀芳博士2006年毕业于华南理工大学，获得化学工程专业博士学位，随后进入广东药科大学药学院从事教学和科研工作；研究以“功能化有序介孔炭及炭纳米球的设计合成”为研究主线，在大孔径、大孔容、高比表面、超顺磁性、高分散介孔炭纳米球的合成新工艺和合成作用机理方面，研究思路新颖，并将其应用于药物可控释放及水体污染物去除作用的具体问题。目前基本掌握了介孔炭纳米微球的动力学载药机理及释药过程的磁靶向和响应释放规律，揭示了该新型吸附材料在相关药物分子的释放与环境毒性分子的吸附领域的应用前景。研究结果已通过广东省科技成果鉴定（粤科鉴字2013[40]号），并获得广东省科学技术三等奖（第一完成人）。

2017-2018 年到美国加州大学圣克鲁兹分校做访问学者。近 3 年，以通讯作者在国际学术期刊 *J. Mater. Chem. A, ACS Appl. Mater. Interf., J. Catalysis, ACS Sustain. Chem. Eng., Carbon, Chem. Eng. J.* 发表论文 18 篇，并被 RSC 知名期刊 *J. Mater. Chem. A* 前封面亮点报道。

Dr. Xiufang Wang graduated from South China University of Technology in 2006 and got her Ph.D degree in Chemical Engineering. Then she entered Guangdong Pharmaceutical University and was engaged in teaching and scientific research work. Her research focuses on the design and synthesis of functional ordered mesoporous carbon and carbon nanospheres. She has got some interesting results concerning the optimum synthesis of carbon nanospheres and their applicantion in drug loading and pullutant removal. At present, the dynamic loading mechanism of mesoporous carbon nanoparticles and the magnetic targeting and responsive rules of the drug release process are basically mastered. The experimental results have been identified by Guangdong Provincial Scientific and Technological Achievements, and won the third prize of Science and Technology in Guangdong Province (person-in-charge).

From 2017 to 2018, she was a visiting scholar at the University of California, Santa Cruz. In the recent 3 years, she has published 18 papers in international journals such as J Mater Chem A, ACS Appl Mater Interf, J Catalysis, ACS Sustain Chem Eng, Carbon, Chem Eng J, etc. Some resuts are featured in the front cover of J. Mater. Chem. A.

卢雪梅博士，副研究员，硕士研究生导师，广东药科大学药用生物活性物质研究所副所长，国家自然科学基金委评议人，广东省科技业务评审专家，广州市科技专家库专家。主要从事药用生物活性物质筛选、鉴定及功能研究，先后主持国家自然科学基金、广东省自然科学基金、广东省公益研究与能力建设专项项目、广州市科技计划、广东省医学科研基金项目等各级科研项目 7 项；参与了国家科技部“重大新药创制”科技重大专项项目,国家自然科学基金面上项目、广东省战略性新兴产业核心技术攻关项目、广东省自然科学基金重点项目、广东省教育部产学研结合项目和广州市社会发展攻关等各类科技项目 10 余项；获广东省科学技术进步二等奖 1 项(第 3 完成人)；在 Mol Nutr Food Res, Appl Microbiol Biotechnol, BMC Biotechnol, Microsc Microanal 等国内外学术刊物上发表研究论文 60 余篇（其中第一/通讯作者 SCI 收录论文 12 篇)；申请 PCT 专利 2 项，申请国家发明专利 15 项，其中授权发明专利 6 项。

Dr. Xuemei Lu is the vice professor and master instructor of Guangdong Pharmaceutical University. She is also the associate director of the Institute of Pharmaceutical Bioactive Substances, the review expert of National Natural Science Fund, Guangdong Provincial Science & technology Project and Guangzhou Science & technology Project. Her research interests include antimicrobial peptide, liver-targeting molecules and DNA and recombinant protein development, etc. She has received 7 projects such as National Natural Science Foundation of China, Special Foundation of Public Welfare Research and Capacity Building of Guangdong Province, etc. She has applied 15 Chinese invention patents and 2 international application PCT patents. Some of her research was awarded the science and technology award of Guangdong Province. She has published 60 papers in *Appl Microbiol Biotechnol*, *BMC Biotechnol*, *Mol Nutr Food Res*, *Microsc Microanal*, *AMB Express*, etc.

王金全，博士毕业于中山大学，现在主要从事基于金属钌配合物的抗癌药物药理毒理学研究。主持国家自然科学基金面上项目，广东省自然科学基金，广东省科技计划，广州市科技计划等项目，合计经费约 125 万元。近 5 年发表 SCI 索引论文（含共同第一作者和共同通讯作者）13 篇，累计影响因子 49，其中单篇最高

影响因子8.5,单篇最高引用34次。《*Eur. J. Med. Chem.*》,《*Inorg. Chem. Atca.*》,《*Inorg. Chem. Commun.*》审稿人。

Dr Jinquan Wang graduated from Sun Yat-sen University, he is mainly engaged in pharmacological and toxicological studies of anticancer drugs based on ruthenium complexes. He was funded by the National Natural Science Foundation project, the Guangdong Natural Science Foundation, the Guangdong science and technology plan, the Guangzhou science and technology project and so on, with a total of about one million RMB. He has published (the first author and corresponding author)13 papers(SCI) in the past 5 years. The total number of impact factor was 49, of which the highest impact factor was 8.5, and the most cited articles was cited 34 times . He's the reviewer of 《*Eur. J. Med. Chem.*》, 《*Inorg. Chem. Atca.*》,《*Inorg. Chem. Commun.*》.

李占潮博士于2009年毕业于中山大学,同年在中山大学物理学博士后流动站从事博士后研究工作，2011年入职广东药科大学医药化工学院。主要从事帕金森和心脑血管等复杂疾病的网络药理学研究。基于图论、复杂网络和系综等理论，采用机器和深度学习等技术，结合化学计量学和生物信息学等数据处理和分析方法，从生物分子相互作用网络角度，在蛋白组尺度开展疾病基因预测、靶标蛋白识别、先导化合物发现与结构优化、药物重定位、药物组合和药物副作用等相关方面研究。近五年，承担国家自然科学基金青年基金项目和面上项目各一项，在*Bioinformatics*、*Scientific Reports*和*Biochimica et Biophysica Acta*等杂志发表SCI研究论文10篇。

Zhanchao Li received his Ph.D from Sun Yat-Sen University in 2009 and worked as a postdoctoral research fellow at the Postdoctoral Research Institute of physics,and joined the School of Chemistry and Chemical Engineering, Guangdong Pharmaceutical University in 2011. He is mainly engaged in network pharmacology research on complex diseases such as Parkinson and cardio cerebrovascular diseases. Based on the theory of graph theory, complex network and ensemble, with the techniques of machine learning and deep learning, and combined with methods of data processing

and analysis in chemometrics and bioinformatics, his research goal is to identify disease associated genes and target proteins, discovery lead compounds and optimize structures, study drug repurposing, combinations and side effects, from the point of view of biomolecular interaction network and proteome scale. In the past five years, he has undertaken two National Natural Science Funds and published ten research papers in *Bioinformatics*, *Scientific Reports* and *Biochimica et Biophysica Acta*.

唐德玉，副教授。2015 年获得华南理工大学计算机应用专业博士学位，研究方向为智能计算方向；2004 年获得华南理工大学计算机软件与理论专业硕士学位. 从 2005 年至今，在广东药科大学医药信息工程学院从事教学和科研工作，主要研究领域：群体智能算法、机器学习、生物信息学等。

主持和参与广东省自然基金项目及国家自然基金项目多项。提出了“基于协同智能优化的药物-靶标相互作用预测方法研究”;“基于量子粒子群与支持向量机的冠心病不稳定性心绞痛中医辨证方法研究”等。“ 近年来，已在国外著名刊物上发表论文(SCI)多篇，包括 Information Sciences , Applied Soft Computing, Neural Computing & Applications, Journal of Computational Information Systems, Journal of Digital Information Management 等。

Deyu Tang, associate professor. In 2015, he received a doctorate in computer application from South China University of Technology, researching on intelligent computing, and received a master's degree in computer software and theory of South China University of Technology in 2004. From 2005 to date, he is engaged in teaching data mining and scientific research in School of medical information engineering, Guangdong Pharmaceutical University. The main research fields are as: swarm intelligence, machine learning, bioinformatics etc.

He presided over and participated in the Provincial Natural Science Foundation projects and National Natural Science Foundation projects. The study of drug target interaction prediction method based on collaborative intelligent optimization was proposed, and he has researched on ‘TCM syndrome differentiation method based on quantum particle swarm and support vector machine for unstable angina pectoris’. In recent years, many articles have been published in journals (SCI) including Information Sciences , Applied Soft Computing, Neural Computing & Applications, Journal of Computational Information Systems, Journal of Digital Information Management and so on.