15th Meeting of Consortium for Globalization of Chinese Medicine (CGCM 2016)

Natural Products III

Identification, Bio-transformation and Metabolism

Chair:	Prof. Zhengtao WANG
Co-chairs:	Prof. Jinghong_ZHANG (Huaqiao Univ, Fujian, absence)
Panelists:	Prof. Ping-Jyun SUNG Prof. Shujuan ZHAO

In total 28 abstracts were collected in this session and from which 12 abstracts were chosen for oral presentation focusing on:

- 1. Bio-transformation/synthetic biology,
- 2. Identification of bioactive components, and
- 3. Metabolism and PK/PD profiles of TCM/herbal medicines

Presentation proposed

No	Торіс	Affiliation	Presenter
252	Characterization of a Novel CYP450 Involved in Tanshinone Biosynthesis in <i>Salvia</i> miltiorrhiza	Institute of Medicinal Plant Development (IMPLAD)	Prof. Chao SUN
269	Bafilomycin M, a New Cytotoxicity Bafilomycin Analogue Produced by a <i>Streptomyces</i> sp. Isolated from a Marine Sponge <i>Theonella</i> sp.	National Museum of Marine Biology & Aquarum	Prof. Ping-Jyun SUNG
275	SynBio-guide Directionalbiotransformation of Flavonoids in E. coli	Shanghai University of TCM	Prof. Shujuan ZHAO
276	Two Rare Antitumor Ginsenosides Isolated from Biotransformation by <i>Aspergillus</i> tubingensis.	Shenyang Pharmaceutical University	Prof. Yi-Xuan ZHANG
277	The Improvement of Crop Protoplast Isolation and the Application in CRISPR/Cas9 Genome Editing	Academia Sinica	Prof. Shih Chuan HSIEH
263	Diarylheptdimers A-D, Diarylheptanoids Dimers from the <i>Alpinia officinarum</i> 262-265 can be combined	University of Macau	Dr. Qing-Wen ZHANG
272	Abietane Diterpenoids from the Whole Plant of Caryopteris nepetaefolia	Shanghai R&D Center for Standardization of CM	Dr. Cheng-Gang ZHANG
273	Prenylated Benzoylphloroglucinols and Xanthones from the Leaves of <i>Garcinia</i> oblongifolia with Migration-Inhibitory Activity in Esophageal Cancer	Shanghai University of TCM	Dr. Hong ZHANG
256	Metabolic Profiling of the Chinese Herbal Formula Yu Ping Feng San for the Identification of Constituents relevant for Immunomodulatory Effects on the Expression of TNF- α , IFN- γ , IL-1 β and IL-4 in U937 Cells	University of Graz	Prof. Rudolf BAUER
260	Research on the Material Therapeutic Basis of a Traditional Mongolian Medical Formula Chagantang for Influenza by Evidence-based Medicine Principle and Serum Pharmacological Methods	Inner Mongolia Medical University	Prof. Baoquan BAO
266	Oligo-Fucoidan Cooperates with p53 to Improve the Chemotherapeutic Effects	National Health Research Institutes	Prof, Hsin-Ling HSU
267	Metabolism and Absorption of 25-hydroxyl Re Sulfate and 25-hydroxyl Rg1 Sulfate, the Sulfur-containing Derivatives of Ginsenoside Re and Rg1 in Sulfur-fumigated Ginseng	Jiangsu Province Academy of Traditional Chinese Medicine	Prof. Hong SHEN

• 10 Minutes for each presentation including 2 minutes discussion

Topics presented

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269	Bafilomycin M, a New Cytotoxicity Bafilomycin Analogue Produced by a <i>Streptomyces</i> sp. Isolated from a Marine Sponge <i>Theonella</i> sp.	National Museum of Marine Biology & Aquarum	Prof. Ping-Jyun SUNG
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Discussion

- 1. Bio-transformation/synthetic biology are of extremely importance in the R&D of TCM & natural medicines:
 - > As a source of candidates of new drug/healthcare products;
 - > For protection of rare and endangered species
 - For well understanding of the secondary metabolic and biosynthetic pathway pathways of natural compounds;
 - > For bulk production of high potent natural products;

Discussion

- 2. Marine natural products chemistry need to be reinforced.
 - China has a long coastline and marine resources.
 - Marine natural products provide chemical and biological diversities
 - Few natural products chemists devoted in this area
 - Animal medicines derived from ocean are need to be in deep investigated.

Thanks for your attendance

Shanghai R&D Center for Standardization of Chinese Medicines,

Institute of Chinese Meteria Medica,

Shanghai University of Traditional Chinese Medicine

CGCM Shanghai

