



Shung-Chang Jong

**Consultant for Global Affairs / Director Emeritus of Microbiology,
ATCC**

Dr. Shung-Chang Jong is a Fellow of the American Academy of Microbiology and the Washington Academy of Sciences. As an experienced biological resource manager employed in ATCC for more than 40 years, Dr. Jong is currently a Consultant for Global Affairs at ATCC. He is a former Director of ATCC Microbiology Division, Director of the Yeast Genetic Stock Center, and Director of Mycology, Botany and Protistology Programs. He received a B.S. degree in plant pathology from the National Taiwan University in 1960 and a M.S. degree in biological sciences from Western Illinois University in 1966. Upon completion of his Ph.D. in mycology and plant pathology at Washington State University in 1969, he joined the ATCC staff.

Dr. Jong's research interests include biotechnological applications and cryopreservation of microbial and cell cultures; mushroom biotechnology; biotechnological patent laws; intellectual capital and asset management; fungal molecular systematics; dietary supplements, and fungal cell wall glycans. He is the author or co-author of more than 250 publications and has lectured extensively in North America and worldwide on the intellectual asset management of biological resources, on the medicinal aspects of mushrooms and on mushroom cultivation. He has been awarded numerous research grants and contracts from the U.S. National Science Foundation(NSF), National Institutes of Health(NIH), Food and Drug Administration(FDA), as well as Brown -Hazen Grants from Research Corporation in New York. He was honored by the American Society for Microbiology and U.S. Federation for Culture Collections in 1997 with the J. Roger Porter Award. In China, Dr. Jong was recognized by the Ministry of Agriculture with Agricultural Award for International Science and Technology Cooperation in 1988; by the City of Shanghai with White Magnolia Honor-Medal Award for Shanghai's Construction and Cooperation in 1996; and by the State Bureau of Foreign Experts with Friendship Award for China's Construction and Cooperation in 1997.

Dr. Jong is an Affiliate Professor at George Washington University, George Mason University, Wuhan University, Shanghai Teachers University, and Yunnan University, and an Honorary Director of the Shanghai Association of International Exchange of Personnel in China. He has served as a Technical Advisor to the YAMAZAKI Baking Co., KIRIN Brewery Co., and KIKKOMAN Soy Sauce Co. in Tokyo; the L.F. Lambert Mushroom Spawn Co., the Biotech Research Laboratories, Inc., and the Ameri-BioChem Inc. in the U.S.; MycoBiotech Inc. in Singapore; the Food Industry Research and Development Institute, the Development Center for Biotechnology, the National Laboratories of Foods and Drugs of the Department of Health, and the Taiwan Agricultural Research Institute in Taiwan; the Chinese Academy of Sciences, the Chinese Academy of Agricultural Sciences, the Shanghai Academy of Agricultural Sciences, the Shanghai Institute of Pharmaceutical Industry and the Wuxi Science Park of Universities in China; and various biotechnology-related establishments under USAID, UNDP and UNIDO technology transfer programs.

Dr. Jong also served on the Executive Committee of the International Mycological Association (1983-1992), the Executive Board of the U.S. Federation for Culture Collection (USFCC), and Executive Board of the World Federation for Culture Collections (WFCC), the WFCC Committee to Safeguard Endangered Collections (member, 1982-1992; chairman, 1988-1992), the International Commission on the Taxonomy of the International Union of Microbiological Societies, and the Advisory Board of the International Culture Collection of VA Mycorrhizal Fungi, the Sub-Chamber of Edible Fungi of China Chamber of Commerce for Import & Export of Foodstuffs Native Products & Natural By-products, and the TAIWAN Edible/Medicinal Fungi Biotech Association & TAIWAN Federation of Niu-Chang Mushroom Industry.

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A Scientific Symbiosis between ATCC and Government Outsourcing Contracts

Abstract:

American Type Culture Collection (ATCC) is the premier global biological materials resource and standards organization, providing research and development tools and reagents as well as related biological material management services, consistent with its mission: to acquire, authenticate, preserve, develop, and distribute standard reference microorganisms, cell lines, and related materials for research in the life sciences. With distribution to more than 150 countries and a working relationship with 12 distribution partners, we have the experience, knowledge, rigorous methodologies, standards, longevity and the global reach to serve academic institutions, government agencies, biotech, biopharma, and research organizations around the world.

ATCC is ISO 9001:2008 and ISO 13485:2003 certified, and ISO Guide 34:2009 and ISO 17025:2005 accredited. ISO Guide 34 establishes the requirements for reference material standards manufacture, and ISO 17025 establishes the requirements for laboratory testing. These accreditations support the activities of ATCC as a material standards provider. We are also accredited by the American National Standards Institute (ANSI) as a Standards Development Organization (SDO). ANSI accredits organizations that develop written consensus standards, and we believe that we are the first organization accredited to develop written consensus standards for biological materials. Although there are other organizations engaged in managing biological materials, few of them are developing written standards.

The ATCC is a non-profit 501(c)(3) organization under the U.S. Code, and we are not part of the government, although some people who do not know us well think that we are. ATCC was founded in 1925. However, the core collection really originated with the Winslow Collection at the Museum of Natural History in New York prior to 1925, so we can claim nearly 100 years of experience and expertise. For more information about ATCC, visit us at www.atcc.org.

ATCC has supported the federal government for over 50 years with biological products and innovative solutions. ATCC's current federal outsourcing contracts are focused on employing our expertise in global health / infectious diseases, biodefense, non-communicable diseases, clinical study support, global logistics, and biorepository establishment / maintenance -- all combined with ATCC's commitment to quality and responsive management. For example, we have a contract with the Centers for Disease Control and Prevention (CDC) to develop an influenza reagent resource and manage it, and part of our service included providing support for the response to the H1N1 virus outbreak when it hit in May of 2009. In response, we assisted the CDC and the World Health Organization (WHO) in delivering diagnostic kits to laboratories in 133 countries in a very short time period. The WHO noted that this was the fastest response to a global disease outbreak it had ever experienced. ATCC did not develop the kits, however we assisted in their manufacture and assembly, and we distributed them. The H1N1 virus which caused that pandemic is now a regular human flu virus and continues to circulate.

Increasingly, governments are asking the private sector to become involved in managing and operating government technology through outsourcing. The largest and most experienced government contributors to utilize public sector outsourcing are the US, UK, Canada, India, Hong Kong, Japan, Singapore and Taiwan.

In the US, the Federal Government awarded more than \$500 billion in outsourcing contracts in the most recent fiscal year. The primary reasons that the government agencies turn to outsourcing are to utilize external knowledge and expertise, and to gain access to external technologies, business processes and standardization. Today, I would like to share with you ATCC's successful government outsourcing contracts and services that enhance and expand ATCC's growing portfolio of biorepository management services.