



Chinese-American Oceanic and Atmospheric Association

Mail Box: P. O. Box 1293, Greenbelt, MD 20768, USA

Web Page: <http://www.coaaweb.org>

Editor: Yingxi Shi

About the COAA

COAA is a member-led, all-inclusive, non-profit, professional association supporting its members and promoting excellence in oceanic and atmospheric sciences and related activities. Members have many opportunities to share information, news, studies and concerns related to the fields of oceanic and atmospheric sciences through board work, submitting correspondence or articles to the COAA Newsletter, leading workshops and making presentations at the Annual Meetings, making contributions to the COAA website, and networking with people in a wide variety of careers (from well-known senior professionals to young environmental enthusiasts).

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Table of Contents

Message from the New President	2
COAA hosted 2017 AMS Town Hall Meeting	2
COAA 2016 Year-End Workshop.....	3
COAA 2017 AMS Banquet.....	4

COAA-CC Welcomed CAMS

Representatives.....	5
COAA 2017 New Year Luncheon.....	6
COAA-SCC 2017 New Year Luncheon.....	7
COAA-CC 2017 New Year Celebration....	9
COAA Spotlight: Dr. Jonathan Jiang ...	10
COAA Best Dissertation Award 2016...	12

Message from the New President

Happy Year of the Rooster-2017

Our Earth family grows larger and larger; our planet becomes warmer and warmer; and, extreme weather and climate events occur more often and grow more intense. Global agriculture and food security remain a major concern. The Earth's 2016 surface temperatures were the warmest since modern recordkeeping began in 1880, according to independent analyses by NASA and NOAA. According to the WMO, "weather and climate extremes have significant impacts on agricultural production in the major breadbaskets of the world. Crop failures lead to increased food prices, with significant implications for national economies." The increasing frequency and magnitude of extreme weather and climate events, such as floods, droughts, heat waves etc., pose potentially disastrous consequences for the Water, Energy and Food (WEF) nexus.

Under these conditions, the Chinese-American Oceanic and Atmospheric Association (COAA), which has over 600 members, becomes an important non-profit organization focusing on oceanic- and atmospheric-related disciplines. Established in 1993, COAA has become well-established and highly recognized in the U.S., mainland China, Taiwan, and Hong Kong. Many COAA members have become important leaders and contributors for American, Chinese and international societies. Since 1993, COAA has hosted a total of seven international conferences including the 7th International Conference on Atmosphere, Ocean, and Climate Change in Beijing, China, on July 27-30, 2016.

During 2017, I will be responsible for the well-being of COAA, and, my task will be to promote more growth in this renowned association.

Jianhe Qu
President of COAA (2017)

COAA hosted 2017 AMS Town Hall Meeting

January 24th 2017 Tuesday- COAA hosted an AMS Town Hall meeting of "US-International Partnerships: Cooperation and challenges in atmospheric research and operation" 12:15 pm to 1:15 pm Jan. 24, 2017. Panel members from Chinese, Japanese, and Korean meteorological societies gave brief introductions of their meteorology societies at the Town Hall Meeting. They presented the structure of their management, the leadership election, and the roles of their societies in influencing the government decisions on related fields. **Dr. Wenjian Zhang** from WMO introduced the management and activities at WMO, and their efforts and projects in helping international regions from WMO perspective and promoting international collaborations. Attendees to the meeting also had the



opportunity to ask the panel on their concerns. In particular, **Prof. Zhanqing Li** from University of Maryland asked AMS president on how AMS is going to work with the new US administration on the international collaboration and climate science research. **Dr. Jonathan Jiang** from NASA JPL also raised the question on how to resolve the boundaries between the countries on scientific collaborations. The panel answered the questions from the audience very positively. The Town Hall Meeting provides a unique platform for several meteorological societies coming together to exchange general information, to foresee potential collaborations, and to answer general audience's concerns on international collaborations. COAA's efforts in organizing this Town Hall Meeting were well appreciated by the panel as well as the attendees.

(Reports provided by Jingfeng Huang)

COAA 2016 Year-End Workshop

January 19th 2017 Thursday – COAA held its Year-end workshop at the University of Maryland, College Park, Maryland. More than 40 scientists and students from NOAA, NASA, local and abroad universities attended this event. The workshop was kicked off by the president of COAA, **Dr. Chungu Lu**, who gave the guests a warm welcome and an introduction to COAA activities and achievements in 2016. Keynote talk was given by **Dr. Xudong Liang**, Director of State Key Laboratory of Severe Weather (LASW), Chinese Academy of Meteorological Sciences (CAMS). In his presentation, **Dr. Liang** first introduced the history and current infrastructure of CAMS. He then presented a thorough description of the latest development and achievement at LASW and its perspective. **Dr. Liang** also brought CAMS' latest policy on recruiting abroad young scientists to the faculty team and urged the audience to apply.



Dr. Liang introduces the CAMS's infrastructure



A work dinner after the workshop

Lastly, the COAA president-elect, **Dr. Jianhe Qu**, introduced his research background and COAA's activity plan for 2017. The workshop participants enjoyed a joyful work dinner from local restaurants provided by COAA. The dinner was filled with friendly atmosphere, lots of discussions and exchange of scientific ideas and life experiences, connection with long-time-no-see friends and new colleagues.

(Reports provided by Hao He and Photos Provided by Yingxi Shi)

COAA 2017 AMS Banquet

January 23rd 2017 Monday– To foster friendships and promote international collaborations among fellow Chinese professionals, COAA established the tradition in hosting annual AMS Reception. Following a successful COAA AMS reception banquet in New Orleans in 2016, COAA hosted the COAA-AMS Dinner Reception on Monday, January 23, 2017 starting at 6:30 pm in Joyale Seafood Restaurant. This year, the reception fell on a date just a few days away from Chinese New Year. Delegates from Chinese Academy of Science (CAS), Chinese Meteorological Administration (CMA), World Meteorological Organization (WMO), Wuhan Institute of Heavy Rain (WHIHR) and other universities and research institutes from US and China joined us at the Reception. A lavish wine dinner was provided with partial cost subsidized by COAA and supplements sponsored by ERT, IMSG and other sponsors.

The Reception was well attended by COAA members and delegates from China. There were around 200 colleagues at the reception, sitting around 18 dining tables, making the grand dinner room a great environment for big Chinese New Year celebration. On behalf of the COAA Board 2016, COAA President **Dr. Chungu Lu** first greeted the audience with Happy New Year greetings. He introduced the history of COAA and the COAA board members. An overview of the COAA activities in the past year was summarized as well.

Dr. Lu introduced COAA's next president, **Prof. Jianhe Qu** from GMU, which marked the successful presidency transfer of COAA Board 2016 to COAA Board 2017. The local host **Prof. Qiang Fu** from University of Washington welcomed everyone to Seattle and shared his New Year's greetings.



Prof. Fu welcomed COAA members to Seattle

Dr. Wenjian Zhang gave speech

Dr. Rucong Yu, the CMA deputy administrator, gave an enthusiastic speech at the reception on the connections between CMS and COAA. He reviewed the success of COAA-CMS Beijing conference this summer and highlighted the prosperous future on the collaborations of CMA and COAA. During his speech, he expressed keen interests in establishing connections with COAA.

The representatives of the key sponsors, **Dr. Jingli Yang** from ERT and **Dr. Le Jiang** from IMSG also sent their new year greetings to the participants. COAA are thankful to the generous sponsors from ERT, IMSG and other donations.

Dr. Wenjian Zhang, the deputy general secretary of WMO who attends the COAA AMS reception every year, gave a warm speech with great encouragements to Chinese meteorology community to get involved in public service and contribute to China's fast development.

The Reception also celebrated the achievements of the new AMS fellows. **Prof. Zhanqing Li** as the new AMS fellow gave a speech to urge Chinese scientist to run for AGU and AMS public service

positions. At last, as a tradition, the 2017 best dissertation awards were also announced during the reception.



COAA 2017 AMS Banquet

The Reception lasted for 3 hours and finished at 9:30pm. All the participants enjoyed the delicious Chinese food and also wines and beers. They met new and old friends, and sent the Happy New Year greetings to each other. All the participants expressed great interest on the COAA's activities.

Happy New Year from Seattle!

COAA Board 2016

(Materials and photos provided by Jingfeng Huang)

COAA-CC Welcomed CAMS Representatives

January 20th 2017 Friday – COAA-CC kicked off its 2017 events with a seminar combined with a recruitment advertising by representatives from the Chinese Academy of Meteorological Sciences (CAMS). **Dr. Xudong Liang** (梁旭东), Director of the State Key Laboratory of Severe Weather (LASW), and **Mr. Canxin Wang** (王灿新), Director of the Human Resources Department were scheduled to meet the members of COAA-CC and present a seminar to introduce CMA. Due to the delay of flight, **Dr. Min Wen** (温敏), Director of Institute of Climate System, gave the seminar in their behalf. The talk introduced the infrastructure of CAMS and its current research directions, explained the newly released policies by the central government regarding research, and expressed its interests in recruiting scientists who are willing to pursue their career in China. The talk draw many interests among COAA-CC members, especially the early career members. Both parties gathered for an afternoon tea and later a dinner hosted by CAMS to promote the further interactions among scientists.



COAA-CC CAMS Seminar

(Materials and photos provided by Wei Wang)

COAA 2017 New Year Luncheon

February 11th, 2017 Saturday – COAA hosted the annual Chinese New Year Luncheon at Hunan Manor Restaurant in Columbia, MD. This is a long-term tradition of COAA headquarter on celebrating the Chinese New Year and on recognizing of COAA's achievements during the past year. A total of 23 COAA past, current, and future board members attended this event. During the luncheon, COAA 2016 president, **Dr. Chungu Lu**, summarized the major achievements COAA had made during 2016, including the 7th International Conference on Atmosphere, Ocean, and Climate Change in Beijing, China in July 2016. **Dr. Lu** also acknowledged the contributions from COAA board members and continuous support from COAA members and sponsors. He also formally presented COAA's 2017 boards, which will be led by president **Dr. Jianhe Qu** from George Mason University and president-elect, **Dr. Mian Chin** from NASA. **Dr. Qu** welcomed the new board members and presented the outstanding contribution awards to the retired COAA board members. **Dr. Jiangtao Xu** reported the revenue and spending of COAA's budget during the past year afterwards. The luncheon attendees enjoyed joyful reunion as well as delicious gourmets.



COAA 2017 Chinese New Year Luncheon



Prof. Qu gave his inauguration speech

COAA outstanding contribution awardees

(Materials and Photos Provided by Yingxi Shi)

COAA-SCC 2017 New Year Luncheon

February 11th 2017 Saturday – Chinese-American Oceanic Atmospheric Association Southern California Chapter (COAA SCC) held a successful New Year Luncheon in Acadia, CA on Feb 11, 2016. About sixty scholars and their families from various institutes in Southern California attended this joyful event.

The SCC chair, **Dr. Hui Su** (JPL) greeted all the participants with a warm opening remark. The Chinese Consul **Mr. Xianzhi Lu** briefly talked about the recent development of science and technology in China and wished everyone a happy new year. **Prof. Kuo-Nan Liou** (UCLA) gave an inspiring speech to encourage young scientists and students to achieve a better career in the Year of Rooster. **Dr. Jonathan Jiang** (JPL) read two poems written by **Prof. Yuk Yung** (Caltech) to the SCC members. **Prof. Yung's** wife, **Ms. Yi Li**, composed a brush painting of a rooster to celebrate the Chinese New Year.



COAA-SCC president Dr. Su gave New Year's speech



Prof. Liou, Dr. Jiang and others at the reception

Prof. Yuk L Yung gave his greetings

Representatives from the Chinese-American Professors and Scholars Association, Environmental Protection Association and Engineers and Scientists Association of Southern California also delivered their greetings at the party.

Prof. Yongkang Xue (UCLA), the founder of COAA SCC, talked about the installation of the COAA-SCC Advisory Board. The Advisory Board, consisting of past COAA-SCC presidents and vice presidents, aims to maintain the continuity of COAA SCC leadership and its collaborations and connection with other organizations and relevant entities.



COAA-SCC 2017 Chinese New Year Luncheon

This year, the artistic performances during the luncheon were very entertaining and widely acclaimed by all SCC members. Benjamin Liu, a local high school student performed Peking Opera with his elaborate costume accompanied by professional instrument players. Daniel Zhao, also a high school student, played beautiful classic music on cello.

The party concluded with a joyful Chinese song ("Gongxi Gongxi") sung together by all EC members. The lyrics were written by **Dr. Hui Su** and dedicated to COAA-SCC. The song brought a fabulous festival atmosphere to this successful party and happy gathering. More information about COAA SCC can be found at <http://coaasc.com/>

COAA SCC Executive Committee

(News credits go to Yuan Wang and Hui Su)

COAA-CC 2017 New Year Celebration

February 10th 2017 Friday -COAA-CC held the annual Chinese New Year's Party at Lee Yuan Chinese Cuisine in Boulder, Colorado on Feb. 10, 2017. This is a time for COAA-CC community to get together and reflect on what we have accomplished in the past year. COAA-CC President **Dr. Bill Kuo** gave a summary of last year's activities, followed by a financial report by **Dr. Li Zhang**, a membership Report by **Dr. Aixue Hu**, and a member survey report regarding COAA-CC's services by **Dr. Aixue Hu**. The report showed that majority of the members are satisfied with COAA-CC in 2016 and indicated areas that COAA-CC could improve in 2017, including more seminars on research and funding advices and improving the COAA-CC website. A successful fundraiser in forms of trivia game and silent auction was held during the three-hour long party. In the end of the party, the 2017 COAA-CC board was introduced. **Dr. Yuanfu Xie**, Scientist at the Global Systems Division at NOAA, is the President of COAA-CC 2017. **Dr. Bill Kuo** remains on the COAA-CC board as the ex-President.



Members arriving at the party



Dr. Bill Kuo



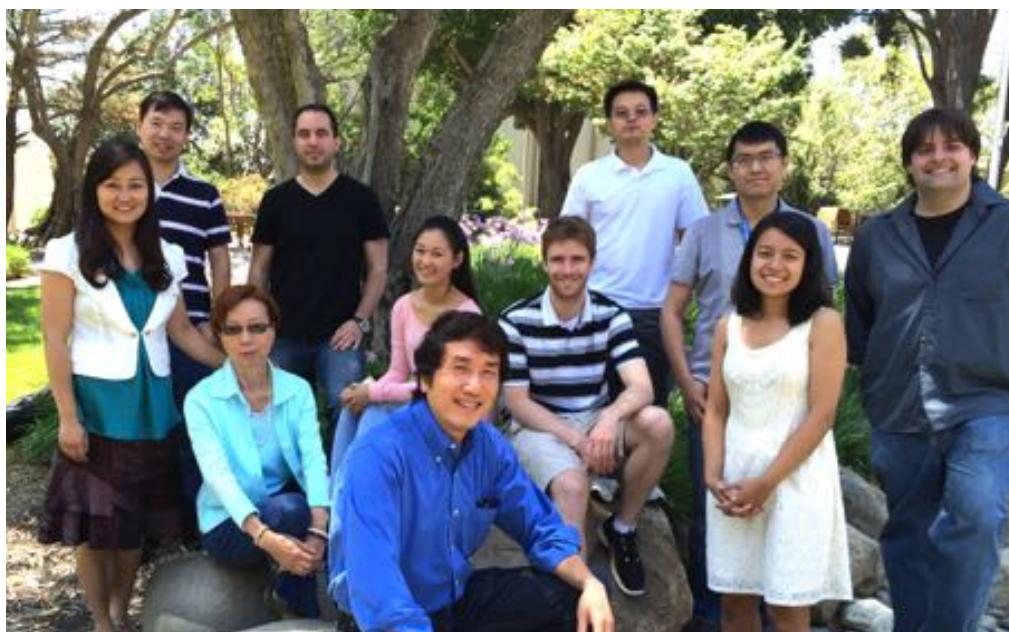
Dr. Yuanfu Xie

(News credits go to Wei Wang)

COAA Spotlight: Dr. Jonathan Jiang

Dr. Jonathan H. Jiang is a Principal Scientist in the Engineering and Science Directorate at NASA's Jet Propulsion Laboratory (JPL), California Institute of Technology (Caltech). He is also the Supervisor of JPL's Aerosol and Cloud Group, managing a team of more than 30 researchers. In addition, Dr. Jiang serves as an American Geophysical Union (AGU) Editor, overseeing the reviewing processes for AGU's journal of Earth and Space Science and Journal of Geophysical Research –Atmosphere. He was also a former president of COAA Southern California Chapter.

Dr. Jiang earned his B.Sc. degree in Astrophysics in 1985 from Beijing Normal University. In his early career as an astronomer at Space Astrophysics Laboratory (SAL) of Canada, he used observations from International Ultraviolet Explorer satellite to study the temperature and distance of supergiant and Cepheid variables stars, which resulted in his M.Sc. degree in Astrophysics in 1991 from York University, Canada. He later joined in Canada's Middle Atmosphere Modeling (CMAM) project, focusing on developing radiative transfer modules for clouds and aerosols, which earned him a Ph.D. degree in Atmospheric Physics in 1996, also from York University. Between 1996-1999, he worked on a Canadian regional climate modeling project as Postdoctoral Researcher at McGill University and Research Associate at University of Quebec at Montreal. During that period, he also taught undergraduate and graduate level classes as Physics Lecturer at University of Waterloo and Trent University. He joined JPL in 1999 for developing the cloud simulator and cloud ice retrieval algorithms for NASA's Microwave Limb Sounder project. Since then, Dr. Jiang has been engaged in a wide range of studies in advancing atmospheric research on both observation and modeling fronts. He has published over 220 peer-reviewed articles in the fields of satellite remote sensing, pollution transport, clouds, water vapor, and their climate impacts. Dr. Jiang has been twice awarded the NASA Exceptional Achievement Medals in 2010 and in 2013 for his leadership and innovation in Earth atmospheric studies using NASA satellite observations.



Dr. Jiang and his research group

We are fortunate to have Dr. Jiang in this issue to share his experience, visions and suggestions with COAA members. His diverse experience inspires us young scientist and scholars.

Q: How did you decide to study atmospheric/ocean science?

Jiang: Before dipping into the Earth atmospheric sciences, my career was launched from astrophysics – working with the IUE (International Ultra-Violet Explorer) satellite data to study supergiant and Cepheid variable stars at SAL and the the Centre for Research in Earth & Space Sciences (CRESS) at York University. After earning my M.Sc in 1991, I proceeded to forge relationships with scientists in the Wind Imaging Interferometer (WINDII) science team and in the Canada's Middle Atmospheric Modeling (CMAM) group, both located in the same CRESS building where my office was located. WINDII was a Canadian instrument on the US Upper Atmospheric Research Satellite (UARS) and CMAM was a major project to extend the Canadian Climate Centre General Circulation Model (CCC/GCM) to include midle atmosphere. I worked for both WINDII's PI Golden Shepherd and CMAP's PI Jack McConnell, from whom I learned to run global climate models and used satellite data for my research. One of the projects I worked on was to investigate the climate effects of the 1991 Pinatubo eruption, I became very involved in this and decided to write it up as my Ph.D. thesis. This decided my career as an atmospheric physicist.

Q: Which accomplishments are you most proud of in your professional life, including your group achievements?

Jiang: I always have high self-confidence in my professional life and I were able to handle new challenges effectively and successfully. In graduate school, I was the technical “go-to” person in my astrophysics class and later in my climate modeling group. Less than one month after completing my PhD oral examination in December 1995, I took a sabbatical replacement position at University of Waterloo (UW) as a physics lecturer. The first class I taught in 1996 scored the highest based on students’ evaluations in the physics department at UW. These made not only me but my family proud.

There are many achievements in my career at JPL, one of the proudest was the leading role I played in the CMIP5 climate model evaluations using A-Train satellite observations in 2011-2012. During that time, I and my team developed collaborations with the majority of world-renown climate modeling centers through monthly teleconferences. The resulting Jiang et al. (2012) paper was highlighted by AGU/Eos, Physics Today, GFDL, UKMO, as well as by the NASA Administrator. I was also awarded 2013 NASA Exceptional Achievement Medal because of this achievement.

I am also very proud of my unique technical skill of generating figures that communicates scientific ideas efficiently. This is a skill that sets me apart – that I cannot find another person, who can produce figures better than mine, any figures, and I welcome any challenge for this ☺.

Q: Who influenced you the most in your professional life and why?

Jiang: As long as I can remember, my passion in science can be attributed first to my father, who was an electrical engineer and a wonderful dad. Early memories include dad explaining to me how the Earth moves around the Sun and interesting stories he told about electrons and the periodic table, etc. I was fascinated by how the nature works ever since. Later, I have my Ph.D. advisor Jack McConnell to thank for developing my problem-solving skills and for building my self-determination and grits. After coming to work at JPL, I am fortunate to interact with many world-leading researchers and engineers, as well as talented students and post-doctoral scholars, who have played critical roles in my professional life.

Q: How are you interacting with Chinese-speaking scientists in Asia?

Jiang: Working for NASA, JPL included, I am not allowed to have direct working relations with any scientists in China. But a number of my students and post-doctoral scholars speak both English and Chinese. I also collaborate with scientists in Japan and South Korea. I often discuss science projects when we meet at conferences, and sometimes via teleconferences.

Q: What are your perspectives for future direction in our field?

Jiang: In the near future, we will see a heightened need for new research in populated environments and the development of technologies on clean energy and waste storage. Food security, water security, and air quality become more pressing issues in the context of accelerating climate and environmental changes.

Q: What are your major advices to young scientists in our field?

Jiang: When you decide to become a scientist, make sure you love science. I find that enjoying what you are doing is a major factor to ensure you have a career that you are happy with. It also drives you to success.

COAA Best Dissertation Award 2016

COAA announced its 2016 Best Dissertation Award January 23rd, 2017 during the AMS COAA banquet. The candidates from 2015 and 2016 are all considered. Here is the list of award recipients. Please join us to congratulate our new graduates!

1. Jiyun Song – Arizona State University (December 2016)
2. Yingxi Shi – University of North Dakota (December 2015)
3. Pei Wang – University of Wisconsin-Madison (April 2016)