

Tel: **(+852) 5646-6042** 

(+86) 138-2027-7889

E-mail: runxiwg@hku.hk

wanganrunxi@gmail.com

Website: runxiwang.weebly.com

Address: 3N11, School of Biological Sciences,

Kadoorie Biological Sciences Building,

The University of Hong Kong,

Pok Fu Lam Road, Hong Kong SAR, CHINA



Citizenship: P.R.C. (China) Language: Chinese (native), English (fluent) Birth Date: 12/11/1995



Having been notoriously underrepresented in biodiversity and conservation for a long time, yet one of the ecologically dominant groups of organisms globally, the study on insects will deeply impact our knowledge on biodiversity in the future. This is on the topic that I wish to develop through my scientific career. After understanding the patterns and underlying mechanisms, we could provide a new insight about the global hotspots and endemism of species and apply it to biological conservation which will significantly contribute to fulfil several of the global objectives of the international Convention on Biological Diversity. Here are some topics my research focuses on:

- > Species distribution pattern and modeling
- > Pattern and drivers of species richness
- Biodiversity informatics database
- Taxonomy of insects
- Community ecology of ants
- Biological conservation and invasion

# **<u>m</u>** EDUCATION



MPhil. in Biodiversity and Ecology

Jul. 2018-

School of Biological Sciences, the University of Hong Kong, Hong Kong SAR, China Supervisors: Dr. Benoit GUÉNARD (Primary) & Dr. Bayden RUSSELL (Co-Supervisor)



**B.S.** in **Biological Science** 

Sep. 2014- Jun. 2018

College of Life Sciences, Nankai University, Tianjin, China Supervised by Dr. Wenjun BU<sup>1</sup>, Dr. Fuchen SHI<sup>2</sup> and Dr. Xin YU<sup>3</sup>

- 1.1 "Heteroptera in China: biodiversity and biogeography" PI student *Sep. 2016-Jun.* 2018
- 1.2 "Mechanisms of insect jumping" PI student Jul. 2015-May 2018
- 1.3 "Insects in Nankai University" PI student Jun. 2015-Jun. 2018

Curriculum Vitae (Update: Jun. 2019)

- 2.1 "Accumulation of heavy metals and resistant responds in plants under the haze-fog" PI student *Apr. 2015- Mar. 2018*
- 2.2 "Throwing Light on Individuals of Dark Diversity in China" Jun. 2017-present
- 3 "Taxonomy of larvae of damselfly genera *Vestalaria* and *Matrona* (Odonata: Caloterygidae), *Megalestes* and *Sinolestes* (Odonata: Synlestidae)" **PI student** *Jun. 2016-May 2018*



### Published/Accepted:

### 2019

Lili Tang, Runxi Wang, Kate S. He, Cong Shi, Tong Yang, Yaping Huang, Pufan Zheng, Fuchen Shi. Throwing light on dark diversity of vascular plants in China: predicting the distribution of dark and threatened species under global climate change. *PeerJ*, 7:e6731. https://doi.org/10.7717/peerj.6731

#### 2017

- Runxi Wang, Xin Yu\*, Junli Xue and Xin Ning. Descriptions of larvae of *Vestalaria venusta* (Hämäläinen, 2004) and *Matrona basilaris* Selys, 1853 (Odonata: Caloterygidae). *Zootaxa*, 4306 (4): 580–592.
  - https://doi.org/10.11646/zootaxa.4306.4.8
- Runxi Wang, Xin Wang, Hongrui Wu, Lihong Zu and Fuchen Shi\*. Accumulation of Heavy Metals in Current-year Old Needles of *Pinus tabuliformis* Carrière. and *Pinus bungeana* Zucc. in Different Atmospheric Environment. *The XIX International Botanical Congress (IBC 2017) Abstract Book,* (II): 324.
- Lihong Zu, Xin Wang, Runxi Wang, Hongrui Wu, Yaping Huang and Fuchen Shi\*. Study on heavy metal accumulation and resistance of *Pinus bungeana* Zucc. in different atmospheric environment. *Journal of Agro-environment Science*, 36(11): 2207-2215. https://doi.org/10.11654/jaes.2017-0332

#### **Books:**

• Jiaqing Zhang, **Runxi Wang** et al. 2015. The Manual of Insects in NKU (Popular Version). (Editor-in-Chief and Photographer).

## TECHNICAL SKILLS

- Experimental Skills: Molecular cloning, PCR, RT-PCR, entomological collection, feeding and anatomy.
- Computer Skills: R programming, IBM SPSS Statistics® (*statistical analysis, skilled*); Origin®, Photoshop®, Illustrator® (*graphics*); ArcGis®, Diva-Gis, SAM, NDM/VNDM, MAXENT (*biogeography, skilled*); MEGA, PAUP, TNT, Bayers (*phylogeny, using with effectiveness*).
- Skilled with mathematical modeling: Generalized Linear Models, Random Forest,

Simultaneous Autoregressive Model and other regression models (*using with effectiveness*); hierarchical partitioning and other model analysis.

## **FUNDINGS**

National University Student Innovation Program No. 201610055097. (PI Student)
 Apr. 2015- May. 2018. ¥ 30,000 (~US\$4, 500)

Defended successfully in oral defense and got the highest score in my college, and awarded the Second Prize as an excellent project in the "National University Student Innovation Program" of Creative Research for the Undergraduates of Nankai University.



*2018* **Leader**. Khao Chong in Trang, Thailand.

Research Assistant. Gongga Mountain in Sichuan, China.

Research Assistant. 3 countries ant sampling: Cat Tien National Forest Park & Nam Nung National Reserve, Vietnam; Sakon Nakhon, Thailand; Baxianshan National Reserve in Tianiin & Haizhai Forest Farm in Yunnan China

Reserve in Tianjin & Haizhai Forest Farm in Yunnan, China.

2016 Research Assistant. 9 cities and 6 National Nature Reserves in Yunnan, China.

2015 Research Assistant. Gao Li Gong National Nature Reserve, Yunnan, China.

### **SCIENTIFIC MEETINGS**

- *May 2019.* Runxi Wang, Christophe Barthélémy, Benoit Guénard. A 15-year record of non-ant aculeate Hymenoptera shed light on local community response to long-term interannual and seasonal environmental changes. *The 1st Hong Kong Insect Forum.* (Poster presentation)
- July 2017, Runxi Wang, Xin Wang, Hongrui Wu, Lihong Zu and Fuchen Shi. Accumulation of Heavy Metals in Current-year Old Needles of *Pinus tabuliformis* Carrière. and *Pinus bungeana* Zucc. in Different Atmospheric Environment. *The XIX International Botanical Congress (IBC 2017)*. (Poster presentation)

## SCIENTIFIC PRESENTATIONS (IN-HOUSE)

- Oct. 2017. Runxi Wang, Jiaqing Zhang, Zhen Ye, Wenwu Wang, Guoqing Liu, Leyi Zheng and Wenjun Bu. Heteroptera in China: biodiversity and biogeography. Graduate Student Academic Advances Symposium. (Oral presentation)
- Oct. 2016. Runxi Wang, Wenjun Bu. The review of mechanisms of terrestrial insect jumping by legs. Graduate Student Academic Advances Symposium. (Oral presentation)

# A HONORS AND AWARDS

2018 The Second Prize as an excellent project in the "National University Student Innovation

	Program" of Creative Research for the Undergraduates of Nankai University (PI)
2017	The Excellent Student of Nankai University.
2017	The Champion of the Volleyball Competition of Nankai University
2017	The Special Award of Merit of Student Union of Nankai University
2014-16	The Excellent Student Cadres of Nankai University.
2016	The Bronze Award of The second "Internet+" National College Student Contest of
	Innovation and Entrepreneurship.
2015	The Excellent Student Cadres of the Communist Youth League of Nankai University.
2015	The Champion of the "Jiyang Cup" University Volleyball League Match of NKU.
2015	The Silver Medal Winner of the Volleyball Competition of Nankai University.
2015	The Excellent Volunteer of the Seminar of Six North Chinese Provinces of China
	Zoological Society
2014-18	The Excellent Students Scholarship of Yunnan Province. ¥ 20, 000 (~US\$3, 200)



### **SERVICES AND OUTREACH**

### Academic institute:

2018-pre Guest member, PICEA (Plant interaction: Climate, Ecosystem and Atmosphere) lab,
 Department of Earth System Science, Tsinghua University.

### Museum:

• 2017-2018 Curatorial assistant, Institute of Entomology, College of Life Sciences, Nankai University. (Trims and image acquisition of type specimen)

### Company:

- 2016-2017 Director, Department of Medium, Tianjin Fawei Science & Technology Ltd. Sports Team:
- 2014-2018 Major member of volleyball team of College of Life Sciences, Nankai University. Student Organization
- 2017-2018 President of Student Union of College of Life Sciences, Nankai University.
- 2016-2018 Assistant College Counselor of College of Life Sciences, Nankai University.

#### |<u>=</u> |၀ူ\_

### PROFESSIONAL DEVELOPMENT

• 2017 Workshop on Ecological Niche Modeling, Tianjin Normal University, Tianjin, China



Dr. Benoit Guénard, Assistant Professor, School of Biological Sciences, HKU *Email*: <a href="mailto:zeroben@gmail.com">zeroben@gmail.com</a> / Phone Number: +852-2299-0665 *Website*: https://benoitguenard.wordpress.com/

Dr. Wenjun Bu, Professor, Institute of Entomology, NKU. Email: wenjunbu@nankai.edu.cn / Phone Number: +86(022)2350-8800 Website. http://sky.nankai.edu.cn/teacher.asp?id=buwj

**Dr. Fuchen Shi**, Professor, College of Life Sciences, NKU. *Email*: fcshi@nankai.edu.cn / Phone Number: +86(022)2350-2477 *Website*: http://sky.nankai.edu.cn/english/teacher.asp?id=6

Dr. Ming Bai, Associate Professor, Key Laboratory of Zoological Systematics and Evolution, Chinese Academy of Sciences *Email*: baim@ioz.ac.cn

Website: http://sourcedb.cas.cn/sourcedb\_ioz\_cas/yw/scs/ap/201102/t20110224\_3075281.html

Dr. Dávid Rédei, Associate Professor, Institute of Entomology, NKU *Email*: david.redei@gmail.com

Website. http://sky.nankai.edu.cn/teacher.asp?id=ledc

Dr. Han Wang, Assistant Professor, Department of Earth System Science, Tsinghua University Email: wang\_han@mail.tsinghua.edu.cn

Website. http://www.cess.tsinghua.edu.cn/publish/ess/7687/2018/20180413224230254420525/20180413224230254420525\_.html

Dr. Xin Yu, Associate professor, Institute of Entomology, NKU (Now in Chongqing Normal University) Email: lannysummer@163.com

Website: http://entomology.nankai.edu.cn/odonata/e\_about%20lanny.htm