# BENJAMIN D. ANDERSON, MPH, PHD, CPH

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SKILLS AND EXPERTISE

Epidemiology One Health Emerging Infectious Diseases

Public Health Global Health Respiratory Viruses

Zoonoses Environmental Health Virology

**EDUCATION** 

PhD, Public Health (One Health Concentration)

Dec 2015

University of Florida, Gainesville, FL

Master of Public Health, Environmental and Global Health May 2012

University of Florida, Gainesville, FL

Bachelor of Science, Entomology and Nematology May 2010

University of Florida, Gainesville, FL Cum Laude

PROFESSIONAL EXPERIENCE

Assistant Professor June 2022 – Present

Department of Environmental and Global Health College of Public Health and Health Professions

University of Florida, Gainesville, FL

Program Director – MHS in One Health June 2022 – Present

Department of Environmental and Global Health College of Public Health and Health Professions University of Florida, Gainesville, FL

Adjunct Professor June 2022 – Present

Division of Natural and Applied Sciences Global Health Research Center

Duke Kunshan University, Jiangsu, Kunshan, China

Adjunct Professor January 2020 – Present

Faculty of Public Health

University of Indonesia, Depok, Indonesia

Advisory Board Member February 2019 – December 2022

Global Health Initiative Indonesia University of Indonesia, Depok, Indonesia

Assistant Professor of Global Health

January 2018 – June 2022

Division of Natural and Applied Sciences Global Health Research Center

Duke Kunshan University, Jiangsu, Kunshan, China

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# **Deputy Director** November 2019 – June 2022

DKU One Health Research Laboratory
Duke Kunshan University, Jiangsu, Kunshan, China

# **Assistant Professor of the Practice (affiliate appointment)**

August 2020 – June 2022

Department of Global Studies Trinity College of Arts and Sciences Duke University, Durham, NC

#### Postdoctoral Associate

January 2016 – December 2017

#### **Duke One Health Research and Laboratory Manager**

Division of Infectious Diseases & Duke Global Health Institute Duke University, Durham, NC

#### Research Associate August 2014 – December 2015

## **Duke One Health Research and Laboratory Manager**

Division of Infectious Diseases & Duke Global Health Institute Duke University, Durham, NC

PHC 6006 – An Introduction to One Health Problem Solving

#### TEACHING EXPERIENCE

<u>Universit</u>	<u>y of Florida,</u>	Gainesville, FL, USA	

PHC 6006 – An Introduction to One Health Problem Solving	May 2014
PHC 6702 – Environmental Monitoring and Exposure Assessment	Spring 2023
<u>Duke University, Durham, NC, USA</u>	
GLHLTH 731 – One Health: An Introduction to One Health Problem Solving	May 2015
GLHLTH 739 – One Health: Public Health Laboratory Techniques	May 2015
GLHLTH 731 – One Health: An Introduction to One Health Problem Solving	May 2016
GLHLTH 739 – One Health: Public Health Laboratory Techniques	May 2016
GLHLTH 260 – Novel Coronavirus: Epidemics and Response in the Age of Global Interdependence	May 2020

### **Centers for Disease Control, Hanoi, Vietnam**

Novel Respiratory Virus Detection Training	September 2016
Duke Kunshan University, Kunshan, Jiangsu, China	
GLHLTH 101 – Introduction to Global Health	Fall 2018
INTGSCI 101 – Integrated Science 1	Fall 2018

INTGSCI 101 – Integrated Science 1 Spring 2019
GLHLTH 101 – Introduction to Global Health (2 sections) Fall 2019

BIOL 110 – Integrated Science Biology Spring 2020

GLHLTH 105 – Novel Coronavirus: Epidemics and Response in the Age of Global Spring 2020

Interdependence

BIOL 110 – Integrated Science Biology

BIOL 305 – Biological Basis of Disease

GLHLTH 101 – Introduction to Global Health

Spring 2021

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May 2013

January 2022 – May 2023

January 2022 – May 2023

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BIOL 308 – Evolution of Infectious Diseases GLHLTH 305 – Biological Basis of Disease GLHLTH 101 – Introduction to Global Health	Fall 2021 Fall 2021 Fall 2021
STUDENT MENTORING	
Sun Yat-sen Univeristy	
Xia Yao (MS Student)	June 2014 – December 2014
Mengmeng Ma (MS Student)	June 2014 – December 2014
Dingmei Zhang (Visiting Scholar)	Oct 2017 – December 2017
South China Agricultural University	
Lifang Wang (Visiting Scholar)	May 2016 – August 2016
Duke University	
Roxana Martinez (Undergraduate Student)	January 2015 – June 2015
Anastasia Lambrou (Undergraduate Student)	January 2015 – August 2015
Florence Tesha (Undergraduate Student) Baigalmaa Bekh-Ochir (Visiting Scholar)	January 2015 – December 2015 October 2016 – December 2016
Laura Pulscher (MSc-GH Student)	August 2015 – December 2016
Tai Xie (Visiting Scholar)	January 2016 – December 2016
Tom Moore (MSc-GH Student)	August 2015 – May 2017
Hiba Fatima (MSc-GH Student)	August 2015 – May 2017
Rafae Alam (Undergraduate Student)	January 2016 – May 2017
Jennifer Callejas (Undergraduate Student)	September 2016 – May 2017
Jane Fieldhouse (MSc-GH Student)	September 2016 – December 2017
Laura Borkenhagen (MSc-GH Student)	September 2016 – December 2017
Sarah Philo (MSc-GH Student)	September 2016 – April 2018
Myagmarsukh Yondon (Visiting Scholar)	May 2017 – December 2017
Duke Kunshan University	
*mentored senior signature work project  †graduated with distinction	
Emma Wang (MSc-GH Student)	May 2016 – December 2017
Hudson Berkhouse (MSc-GH Student)	February 2017 – December 2017
Sankalpa Bhattarai (MSc-GH Student)	August 2018 – May 2020
Ege Duman (UG Student)	November 2018 – May 2022
May Thongthum (UG Student)	February 2019 – May 2022
Hsien-Yao Chee (UG Student)	February 2019 – May 2022
Yan Fei Mao (UG Student)	February 2019 – May 2022
Bevan Penn (UG Student)*	May 2020 – May 2022
Minxing Huang (UG Student)*	January 2021 – May 2022
Qi "Emma" Guo (UG Student)*†	January 2021 – May 2022
Bolin Song (UG Student)*†	January 2021 – May 2022
Catherine Brenner (UG Student)*	January 2021 – May 2022
Caroline Robbins (UG Student)*	January 2021 – May 2022
Jasmine Xiao (UG Student)*	January 2021 – May 2023

Erin Grieg (UG Student)\*†

Caroline Palmer (UG Student)\*

#### **University of Florida**

# \*Undergraduate Honors Student

#### **†PhD Committee Chair**

#### ††PhD Committee Member

THE Committee Member	
May Thongthum (PhD-OH Student)†	August 2022 – Present
Agatha Winiarski (MHS-OH Student)	August 2022 – Present
Marissa Castronovo (MPH-EH Student)	August 2022 – Present
Andres Manrique (PhD-EH Student)++	September 2022 – Present
Emily DeRuyter (PhD-OH Student)††	November 2022 – Present
Fawaz Alwohaib (MPH-EH Student)	January 2023 – Present
Atia Bonna (MSc-EPI Student)	January 2023 – Present
Vivian Curtis (UG Student)	January 2023 – Present
Grace Ferwerda (UG Student)	January 2023 – Present
Katelyn Haber (UG Student)*	January 2023 – Present
Elijah Hendley (UG Student)	January 2023 – Present
Ryan Jin (UG Student)*	January 2023 – Present
Veronika Offor (UG Student)*	January 2023 – Present
Caroline Phillips (UG Student)	January 2023 – Present
Chloe Seifert (UG Student)	January 2023 – Present
Joanne Wang (UG Student)	January 2023 – Present
Alvin Wu (UG Student)	January 2023 – Present
Kaiyu Zhou (UG Student)	January 2023 – Present
Rigan Louis (PhD-Nursing Student)++	April 2023 – Present
Acosta Daniel (PhD-OH Student)++	March 2023 – Present
Mackenzie Connell (PhD-EH Student)††	May 2023 – Present

# **UNIVERSITY SERVICE**

#### Duke Kunshan University, Kunshan, Jiangsu, China

- and managed, comment	
Organizational Structure Committee (Member)	July 2018 – August 2018
Institutional Animal Care and Use Committee (Chair)	December 2018 – June 2022
Global Health Major Coordinator	May 2018 – June 2022
Signature Work Committee (Member)	May 2020 – June 2022
Lab Safety Working Group	August 2021 – June 2022

# University of Florida, Gainesville, Florida, USA

Program Director – MHS in One Health	June 2022 – Present
Program Committee	June 2022 – Present

#### PROFESSIONAL MEETINGS AND PRESENTATIONS

#### **Emerging Pathogens Institute Research Day**

University of Florida, Gainesville, FL

February 2011

**Anderson BD**, Barr KL, Heil GL, Friary JA, and Gray GC. Characterization of the Emerging Killer Cold Virus Adenovirus type 14a. (*Poster*).

#### **Public Health and Health Professions Research Day**

March 2011

University of Florida, Gainesville, FL

**Anderson BD**, Barr KL, Heil GL, Friary JA, and Gray GC. Characterization of the Emerging Killer Cold Virus Adenovirus type 14a. (*Poster*).

#### **International Conference of Emerging Infectious Diseases**

March 2012

CDC, Atlanta, GA

**Anderson BD**, Barr KL, Heil GL, Friary JA, and Gray GC. A Comparison of Viral Fitness and Virulence between Emergent Human Adenovirus 14p1 and Prototype 14p Strains. (*Poster*).

### **Emerging Pathogens Institute Research Day**

February 2013

University of Florida, Gainesville, FL

**Anderson BD**, Burks JP, Heil GL, Hoang H, Zhang J, Yoon KJ, Gray GC. Evaluation of Quidel® Influenza Assays in Swine Influenza Viruses. (*Poster*).

# **International Conference for Neglected Influenza Viruses**

March 2013

Dublin, Ireland

**Anderson BD**, Burks JP, Heil GL, Hoang H, Zhang J, Yoon KJ, Gray GC. Evaluation of Quidel® Influenza Assays in Swine Influenza Viruses. (*Poster*).

#### **Public Health and Health Professions Research Day**

April 2013

University of Florida, Gainesville, FL

**Anderson BD**, Burks JP, Heil GL, Hoang H, Zhang J, Yoon KJ, Gray GC. Evaluation of Quidel® Influenza Assays in Swine Influenza Viruses. (*Poster*).

# **Clinical Virology Symposium**

May 2013

Daytona Beach, FL

**Anderson BD**, Burks JP, Heil GL, Hoang H, Zhang J, Yoon KJ, Gray GC. Evaluation of Quidel® Influenza Assays in Swine Influenza Viruses. (Poster).

#### **Emerging Pathogens Institute Research Day**

February 2014

University of Florida, Gainesville, FL

Ma MJ, Yang XX, Xian X, **Anderson BD**, Heil GL, Qian YH, Lu B, Cao WC, Gray GC. *Comparison of Commercial Influenza A Assays in Detecting Avian Influenza H7N9 among Poultry Cloacal Swabs, China*. (*Poster*).

#### **Public Health and Health Professions Research Day**

April 2014

University of Florida, Gainesville, FL

Ma MJ, Yang XX, Xian X, **Anderson BD**, Heil GL, Qian YH, Lu B, Cao WC, Gray GC. *Comparison of Commercial Influenza A Assays in Detecting Avian Influenza H7N9 among Poultry Cloacal Swabs, China*. (*Poster*).

#### **Clinical Virology Symposium**

April 2014

Daytona Beach, FL

Ma MJ, Yang XX, Xian X, **Anderson BD**, Heil GL, Qian YH, Lu B, Cao WC, Gray GC. *Comparison of Commercial Influenza A Assays in Detecting Avian Influenza H7N9 among Poultry Cloacal Swabs, China*. (*Poster*).

# **International Symposium for One Health Research**

November 2014

Guangzhou, China

**Anderson BD**, Ma M, Xia Y, Wang T, Shu B, Lednicky JA, Lu J, Gray GC. A One Health Approach for Studying Swine Virus Transmission in Pig Farms, China. (Poster).

# 3<sup>rd</sup> International Symposium on Neglected Influenza Viruses

March 2015

Athens, GA

**Anderson BD**, Ma M, Xia Y, Wang T, Shu B, Lednicky JA, Gray GC. A One Health Approach for Studying Swine Influenza Virus Transmission in Pig Farms, China. (Poster).

## 2015 International Conference on Emerging Infectious Diseases

August 2015

Atlanta, GA

**Anderson BD**, Ma M, Xia Y, Wang T, Shu B, Lednicky JA, Gray GC. A One Health Approach for Studying Swine Influenza Virus Transmission in Pig Farms, China. (Poster).

## 2016 Options IX for The Control of Influenza

August 2016

Chicago, IL

**Anderson BD**, Ma M, Xia Y, Wang T, Shu B, Lednicky JA, Ma MJ, Lu J, Gray GC. Bioaerosol Sampling an Effective Approach to Studying Influenza A virus in Chinese Swine Farms. (Oral Presentation).

#### 2016 Options IX for The Control of Influenza

August 2016

Chicago, IL

Gray GC, Ma MJ, Song S, Liu Y, Wang J, Bi Z, Chen S, Qian Y, Lu B, Wang G, Moore T, **Anderson BD**, Cao WC. Influenza A Virus Transmission within Swine Farms, China. (Poster).

#### **2016** One Health European Interregional Conference

September 2016

Bucharest, Romania

**Anderson BD**. Bioaerosol Sampling: A One Health Approach for the Detection of Emerging Infectious Diseases. (Oral Presentation).

# 2016 American Society of Tropical Medicine & Hygiene Annual Meeting

November 2016

Atlanta, GA, USA

Bazartseren B, Jiang RR, von Fricken ME, Sukhbaatar L, Nymadawa P, Bekhochir B, **Anderson BD**, Jiang JF, Gray GC. Distribution and Molecular Characteristics of Rickettsiae Found in Ticks Across Central Mongolia. (*Poster*).

# 2016 American Society of Tropical Medicine & Hygiene Annual Meeting

November 2016

Atlanta, GA, USA

von Fricken ME, Sukhbaatar L, Bazartseren B, Bekhochir B, Nymadawa P, **Anderson BD**, Lantos PL, Gray GC. Seroprevalence of Rickettsia and Anaplasma Exposure in Humans and Livestock Across a Central Stretch of Mongolia. (*Poster*).

# The 13th One Medicine Symposium

December 2016

Durham, NC, USA

**Anderson BD**. Bioaerosol Sampling as a Tool for the Routine Surveillance of Infectious Diseases in North Carolina Agricultural Settings. (Oral Presentation).

## **Population-Environment Dynamics and Health Course**

February 2017

Duke Global Health Institute, Durham, NC, USA

**Anderson BD**. Animal Production in the Modern Age. (Invited Lecturer).

#### **Workshop: Protecting Swine from Infectious Disease Threats**

June 2017

Agromedicine Institute, Greenville, NC, USA

**Anderson BD**. Surveillance Methods for Monitoring Swine Pathogens. (Oral Presentation). **Anderson BD**. Establishing an Air Sampling Surveillance System. (Oral Presentation).

ID Week October 2017

San Diego, CA, USA

Ma MJ, Wang GL, **Anderson BD**, Bi ZQ, Wang XJ, Qian YH, Wang CX, Zhao T, Wu MN, Chen SH, Song SX, Lednicky JA, Cao WC, Gray GC, Evidence for Cross-species Influenza A Virus Transmission within Swine Farms, China. (Oral Presentation).

#### 2018 Global Health True Leaders 2.0 Conference

July 2018

West Nusa Tenggara, Indonesia

**Anderson BD**. One Health: a New Frontier of Global Health Research and Training. (Keynote Speaker).

# **2018 International Conference on Emerging Infectious Diseases**

August 2018

Atlanta, GA

**Anderson BD**, Zhang D, Yondon M, and Gray GC. Viral Growth Characteristics of Clinical Isolates Identified as Human Adenovirus Type 1 (HAdV-1) with Molecular Homology to Feline Adenovirus. (Poster).

#### **Duke Kunshan University Global Heath Seminar Series**

September 2018

Kunshan, China

Anderson BD. "Virus in the Air?": New Tools for Hunting Emerging Diseases. (Invited Speaker).

# Global Health Youth Leadership: Frontiers in Health Science Research Forum

October 2018

Kunshan, China

**Anderson BD**. Using the One Health Approach to Address Complex Global Health Challenges. (Invited Speaker).

#### **Global Health Initiative Keynote Lecture**

February 2019

University of Indonesia, Depok, Indonesia

Anderson BD. Global Health in a 4.0 Era. (Invited Speaker).

#### **Global Health Humanities Workshop**

March 2019

Duke Kunshan University, Kunshan, China

**Anderson BD**. Workshop organizer and moderator.

#### **Global Health Humanities Workshop**

March 2019

Duke Kunshan University, Kunshan, China

**Anderson BD**. Workshop organizer and moderator.

# **FPHUI Writing and Publication Workshop**

July 2019

University of Indonesia, Depok, Indonesia

Anderson BD. Writing a Scientific Research Manuscript. (Invited Speaker).

#### Youth Leadership in Global Health Summer Institute

August 2019

Duke Kunshan University, Kunshan, China

Anderson BD. Global Health and One Health 101. (Invited Speaker).

Clements KL and Anderson BD. Global Health and Media. (Invited Speaker).

# 6<sup>th</sup> International Symposium for One Health Research

September 2019

Ulaanbaatar, Mongolia

**Anderson BD**. Establishing Bioaerosol Surveillance in Swine Farms as an Early Warning System for Infectious Disease Outbreaks. (Invited Speaker).

#### **FPHUI Research Proposal Workshop**

January 2020

University of Indonesia, Depok, Indonesia

Anderson BD. Preparing a Research Proposal. (Invited Speaker).

#### **FPHUI Research Proposal Workshop**

January 2020

University of Indonesia, Depok, Indonesia

**Anderson BD**. Preparing a Research Proposal. (Invited Speaker).

#### Panel Discussion - The Coronavirus: Human, Social and Political Implications

March 2020

John Hope Franklin Humanities Institute, Durham, NC, United States

**Anderson BD**. (Invited Speaker).

#### Eijkman Conference 2020 (postponed due to COVID-19)

August 2020

Eijkman Institute, Jakarta, Indonesia

Anderson BD. Viral Respiratory Pathogens: Emergence and Epidemiology. (Invited Speaker).

#### 2020 American Society of Tropical Medicine & Hygiene Annual Meeting

November 2020

Virtual Poster, United States

Binder RA, Alarja NA, Robie ER, Kochek KE, Xiu L, Rocha-Melogno L, Abdelgadir A, Goli SV, Farrell AS, Coleman KK, Turner AL, Lautredou CC, Lednicky JA, Lee MJ, Polage CR, Simmons RA, Deshusses MA, **Anderson BD**, Gray GC. Environmental and Aerosolized SARS-CoV-2 Among Hospitalized COVID-19 Patients. (Poster).

#### SingHealth Duke-NUS Global Health Institute Global Health Seminar Series

January 2021

Virtual Presentation, Singapore

**Anderson BD**. Emerging Infectious Diseases: Implementing a One Health Approach. (Invited Speaker).

# **Duke Kunshan University Junior Faculty Research Symposium**

February 2021

Duke Kunshan University, Kunshan, China

**Anderson BD**. A Study Proposal: Non-invasive Pathogen Surveillance among Chinese Swine Farms. (Invited Speaker).

#### **Emerging Pathogens Institute Town Hall**

September 2022

University of Florida, Gainesville, FL, United States

Anderson BD. Faculty Introductions (Invited Speaker).

#### **Environmental and Global Health Seminar Series**

October 2022

University of Florida, Gainesville, FL, United States

**Anderson BD**. Emerging Infectious Diseases: Implementing a One Health Approach (Invited Speaker).

#### **CPET Mini Medical School – Tracking Health and Disease**

November 2022

University of Florida, Gainesville, FL, United States

Anderson BD. One Health Approaches to Zoonotic Disease Epidemiology (Invited Speaker).

#### **Coronavirus Multispecies Reading Group**

November 2022

Oxford University, Oxford, United Kingdom

**Anderson BD**. Metagenomic Analysis of Endemic Viruses in Oral Secretions from Chinese Pigs (Invited Speaker).

#### **Livestock Innovation Lab Faculty Meeting**

February 2023

University of Florida, Gainesville, FL, United States

**Anderson BD**. Using a One Health Approach to Conduct Infectious Disease Surveillance in Livestock Production Settings (Invited Speaker).

#### **Quest 2 Course: Healthy Wildlife, Healthy People**

March 2023

University of Florida, Gainesville, FL, United States

**Anderson BD**. Emerging Infectious Diseases: Implementing a One Health Approach (Invited Lecturer).

#### **MANUSCRIPTS**

#### Published/In Press (\*Mentees)

- 1. Miller CW, Fletcher RJ, **Anderson BD**, and Nguyen LD (2012). Natal social environment influences habitat selection later in life. Animal Behaviour 83: 473-477.
- 2. **Anderson BD**, Barr KL, Heil GL, Friary JA, and Gray GC. A Comparison of Viral Fitness and Virulence between Emergent Adenovirus 14p1 and Prototype Adenovirus 14p Strains. J Clin Virol. 2012 Jul;54(3):265-8.
- 3. Barr KL, **Anderson BD**, Heil GL, Friary JA, Gray GC, Focks DA. Dengue Serotypes 1-4 Exhibit Unique Host Specificity In Vitro. Virus Adaptation and Treatment. 2012:4 pg. 65-73.
- 4. Barr KL, Messenger AM, **Anderson BD**, Friary JA, Heil GL, Reese K, Gray GC. Recovery of Live Virus after Storage at Ambient Temperature Using ViveST™. J Clin Virol. 2013 Jan;56(1):57-61.
- 5. Barr KL, **Anderson BD**. Dengue Viruses Exhibit Strain-specific Infectivity and Entry Requirements In Vitro. Virus Adaptation and Treatment. 2013:5 pg. 1-9.

- Khurelbaatar N, Krueger WS, Heil GL, Darmaa B, Ulziimaa D, Tserennorov D, Baterdene A, Anderson BD, Gray GC. Sparse Evidence for Equine or Avian Influenza Virus Infections among Mongolian Adults with Animal Exposures. Influenza and Other Respiratory Viruses 2013 Aug 13. doi:10.1111/irv.12148.
- 7. Verguet S, Murphy S, **Anderson BD**, Johansson KA, Glass R, Rheingans R. Public Finance of Rotavirus Vaccination in India and Ethiopia: an Extended Cost-effectiveness Analysis. Vaccine 2013 Oct 1;31(42):4902-10.
- 8. **Anderson BD**, Ma MJ, Ma MM, Lu J, Gray GC. Emerging Adenovirus Threats: Should China Develop an Adenovirus Vaccine? Chinese Journal of Preventive Medicine. 2014. 48(12):1030-4.
- 9. Gray GC, Krueger WS, Chum C, Putnam SD, Wierzba TF, Heil GL, **Anderson BD**, Yasuda CY, Williams M, Kasper MR, Saphonn V, Blair PJ. Little Evidence of Subclinical Avian Influenza Virus Infections among Rural Villagers in Cambodia. PLoS ONE. 2014. doi:10.1371/journal.pone.0097097
- Khurelbaatar N, Krueger WS, Heil GL, Darmaa B, Ulziimaa D, Tserennorov D, Baterdene A, Anderson BD, Gray GC. Little Evidence of Avian or Equine Influenza Virus Infection Among a Cohort of Mongolian Adults with Animal Exposures, 2010-2011. PLoS One. 2014 Jan 21;9(1):e85616. doi:10.1371/journal.pone.0085616.
- 11. Ma MJ, Yang XX, Xia X, **Anderson BD**, Heil GL, Gray GC, Cao WC. Comparison of Commercial Influenza A Virus Assays in Detecting Avian Influenza H7N9 among Poultry Cloacal Swabs, China. Clin Virology (2014). doi:10.1016/j.jcv.2014.01.009
- 12. Messenger AM, Barr KL, Weppelmann TA, Barnes AN, **Anderson BD**, Okech BA, Focks DA. Seroprevalence of Dengue Virus in Key West, Florida: A Post Epidemic Survey. Vector-Borne and Zoonotic Diseases. 2014. 14(11):783-787. doi:10.1089/vbz.2014.1665.
- 13. Rheingans R, Anderson JD, **Anderson BD**, Chakraborty P, Atherly D, Pindolia D. Estimated impact and cost-effectiveness of rotavirus vaccination in India: Effects of geographic and economic disparities. Vaccine. 2014. doi:10.1016/j.vaccine.2014.05.073
- 14. Yondon M, Zayat B, Nelson M, Heil GL, **Anderson BD**, Lin X, Halpin RA, McKenzie PP, White SK, Wentworth DE, Gray GC. Equine Influenza A(H3N8) Virus Isolated from Bactrian Camel, Mongolia. Emerging Infectious Diseases. 2014. 20(12). doi:10.3201/eid2012.140435.
- 15. Lu Zhuang, Zhi-yi Zhang, Xiao-ping An, Hang Fan, Mai-Juan Ma, Anderson BD, Jia-fu Jiang, Wei Liu, Wu-chun Cao, Yi-gang Tong. An Efficient Strategy of Screening for a Broad Range of Pathogens Carried by Insect Vectors Using Small RNA Deep Sequencing Data. PLoS ONE. 2014. doi:10.1371/journal.pone.0090831
- 16. Gray GC, Anderson BD, LaBeaud AD, Heraud JM, Fevre EM, Andriamandimby SF, Cook EA, Dahir S, Glanville WA, Heil GL, Khan SU, Muiruri S, Mutuku F, Olive M, Thomas LF, Merrill HR, Merril ML, Richt JA. Seroepidemiological Study of Rift Valley Fever Virus Infection among Persons with Intense Ruminant Exposure, Madagascar and Kenya. Am J Trop Med Hyg. 2015 Dec 9;93(6):1364-70. doi:10.4269/ajtmh.15-0383. Epub 2015 Oct 12.

- 17. Khan SU, **Anderson BD**, Heil GL, Liang S, Gray GC. A Systematic Review and Meta-Analysis to Measure Seroprevalence of influenza A (H9N2) Virus Infection in Humans. The Journal of Infectious Diseases 2015. doi:10.1093/infdis/jiv109.
- 18. Ma M, **Anderson BD**, Wang T, Chen Y, Zhang D, Gray GC, Lu J. Serological Evidence and Risk Factors for Swine Influenza Infections among Chinese Swine Workers. PLoS ONE 10(5): e0128479. doi:10.1371/journal.pone.0128479.
- 19. Memish ZA, Alsahly A, Masri M, Heil GL, **Anderson BD**, Peiris M, Khan SU, Gray GC. Sparse Evidence of MERS-CoV Infection among Animal Workers Living in Southern Saudi Arabia during 2012. Influenza and Other Respiratory Viruses. 2014. doi:10.1111/irv.12287.
- Memish ZA, Masri MA, Anderson BD, Heil GL, Merrill HR, Khan SU, Alsahly A, Gray GC. Elevated antibodies against Rift Valley fever virus among humans with exposure to ruminants in Saudi Arabia. The American Journal of Tropical Medicine and Hygiene. 2015. doi:10.4269/ajtmh.14-0575.
- 21. Wang T, Wang M, Shu B, Chen X, Luo L, Wang J, Cen Y, **Anderson BD**, Merril ML, Merril H, Lu J. Evaluation of Inapparent Dengue Infections During an Outbreak in Southern China. PLOS Neglected Tropical Diseases. 2015 Mar 31;9(3):e0003677. doi:10.1371/journal.pntd.0003677.
- 22. Anderson BD, Ma M, Yao X, Tao W, Bo S, Lednicky JA, Ma MJ, Lu J, and Gray GC. Bioaersol Sampling in Modern Agriculture: A Novel Approach for Emerging Pathogen Surveillance? J Infect Dis. 2016 May 6. pii: jiw180. doi:10.1093/infdis/jiw180.
- 23. Barr KL, **Anderson BD**, Prakoso D, and Long MT. Working with Zika and Usutu Viruses in Vitro. PLOS Neglected Tropical Diseases. 2016 August 19. doi:10.1371/journal.pntd.0004931.
- 24. Lantos PM, Hoffman K, **Anderson BD**, and Gray GC. Are people living near modern swine production facilities at increased risk of influenza virus infection? Clinical Infectious Diseases. (2016). doi:10.1093/cid/ciw646.
- 25. Xie T\*, **Anderson BD**, Daramragchaa U, Chuluunbaatar M, and Gray GC. A Review of Evidence that Equine Influenza Viruses are Zoonotic. Pathogens. 2016 Jul 12;5(3). pii: E50. doi:10.3390/pathogens5030050.
- 26. **Anderson BD**, Lednicky JA, Torremorell M, and Gray GC. The Use of Bioaerosol Sampling for Airborne Virus Surveillance in Swine Production Facilities: a Mini Review. Front. Vet. Sci., 27 July 2017. doi:10.3389/fvets.2017.00121.
- 27. Boldbaatar B, Jiang R, Fricken MV, Lkhagvatseren S, Nymadawa P, Bekhochir B, Wang YW, Anderson BD, Jiang JF, and Gray GC. Distribution and Molecular Characteristics of Rickettsiae Found in Ticks across Central Mongolia. Parasites & Vectors. 2017; 10:61. doi:10.1186/s13071-017-1981-3.
- 28. Collins LF, **Anderson BD**, and Gray GC. A Case of Influenza A (H3N2) Complicated by Community-Acquired Pneumonia and Death in a Young Healthy Adult during the 2013-2014 Season. Front. Public Health 5:1. doi:10.3389/fpubh.2017.00001.

- 29. Nguyen TT, Poh MK, **Anderson BD**, and Gray GC. Bioaerosol Sampling in clinical setting: A Promising Non-invasive Approach for Detecting Emerging Respiratory Viruses. Open Forum Infect Dis 2017; 4 (1): ofw259. doi:10.1093/ofid/ofw259.
- 30. Poh MK, Nguyen TT, Su Y, Pena EM, Ogden BE, **Anderson BD**, and Gray GC. Bioaerosol Sampling for Airborne Respiratory Viruses in an Experimental Medicine Pig Handling Facility, Singapore. Southeast Asian J Trop Med Public Health. Vol 48 no. 4 July 2017.
- 31. Wu J, Lu J, Shi W, Lin J, Wang M, Chen X, Liu K, Xie Y, Luo L, **Anderson BD**, Lednicky JA, Gray GC, and Wang T. Aerosolized Avian Influenza A (H5N6) Virus Isolated from a Live Poultry Market, China. Journal of Infection. 2016 Aug 9. pii: S0163-4453(16)30205-5. doi:10.1016/j.jinf.2016.08.002.
- 32. Xie T\*, Liu W, **Anderson BD**, Liu X, and Gray GC. A System Dynamics Approach to Understanding the One Health Concept. PLOS ONE. 12(9): e0184430. Doi:10.1371/journal.pone.0184430.
- 33. **Anderson BD**, Ma MJ, Wang GL, Bi ZQ, Lu B, Wang XJ, Wang CX, Chen SH, Qian YH, Song SX, Li M, Zhao T, Wu MN, Borkenhagen LK, Cao WC, and Gray GC. Prospective Surveillance for Influenza A Virus in Chinese Swine Farms. Emerg Microbes Infect. 2018 May 16;7(1):87. doi: 10.1038/s41426-018-0086-1.
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- 52. Umar S, **Anderson BD**, Chen K\*, Wang GL, Ma MJ, and Gray GC. Metagenomic Analysis of Endemic Viruses in Oral Secretions from Chinese Pigs. Vet Med Sci. 2022 Sep 1. doi: 10.1002/vms3.869.

# **Under Development/Under Review/In Revision (\*Mentees)**

- 1. **Anderson BD**, Binder RA, Alarja N, Xiu L, and Gray GC. Could Pigs be an Amplifying Intermediate Host for SARS-CoV-2? Vector-Borne and Zoonotic Diseases. Revision Submitted 1/31/21. (*Under Review*).
- 2. Bhattarai S\*, Chee HY\*, Prasettya AJ, Wiyarta E, and **Anderson BD**. The Epidemiology of Human Respiratory Viruses in Indonesia: A Mini Review. Frontiers in Public Health. (*Under Review*).
- 3. Zhang F, Tang X, Zhang Y, Long Q, Liu X, Li J, Gong J, Wu B, Hu Y, Su K, Shi Q, **Anderson BD**, Qiu J, and Huang A. Investigation of a Cluster of COVID-19 Cases with Four Generations of Transmission in Chongqing, China. 4/21/2020. Available at SSRN: https://ssrn.com/abstract=3582820 or http://dx.doi.org/10.2139/ssrn.3582820
- 4. **Anderson BD**, Zhang D\*, Yondon M\*, Umar S\*, Duman EK\*, and Gray GC. Viral Growth Characteristics of Clinical Isolates Identified as Human Adenovirus Type 1 (HAdV-1) with Molecular Homology to Feline Adenovirus. Journal of Clinical Virology. (*Under Development*).
- 5. Thongthum M\*, Mao YF\*, Umar S\*, and **Anderson BD**. Systematic Review of Swine Pathogens in China. Journal TBD. (*Under Development*).
- 6. **Anderson BD**, Yondon M\*, Zhang D\*, Bailey ES, Bhattarai S, Henshaw N, and Gray GC. Molecular Epidemiology and Viral Characteristics of Human Adenovirus at a Large Tertiary Hospital, USA. Journal TBS. (*Under Development*).
- 7. **Anderson BD**, Yao X\*, Ma M\*, Tao W, Bo S, Lednicky JA, Ma MJ, Lu J, and Gray GC. Sparse Evidence of Porcine Reproductive and Respiratory Syndrome Virus (PRRSV) in Swine Production Facilities, China. Journal TBD. (*Under Development*).

- 8. Wibowo A, **Anderson BD**. Promoting Global Health through Public Health Education to Strengthen Indonesia's Health System. Journal TBD. (*Under Development*).
- 9. **Anderson BD**, Presettya A, Wibowo A. Implementing a Virtual Training Program during the COVID-19 Pandemic. Journal TBD. (*Under Development*).

#### **BOOK CHAPTERS**

- 1. **Anderson BD**, Gray GC. Emerging and Reemerging Infectious Diseases. Reference Module in Biomedical Sciences. Elsevier. 18-Oct-2014 doi: 10.1016/B978-0-12-801238-3.00165-3.
- 2. **Anderson BD**, Barnes AN, Umar S, Guo C, Thongthum T, Gray GC. Reverse Zoonotic Transmission (Zooanthropozoonosis): An Increasing Threat to Animal Health. Zoonoses Infections Affecting Humans and Animals 2<sup>nd</sup> ed. (*In Press*).

#### RESEARCH SUPPORT

#### **AWARDED**

#### **Dissertation Research Award**

UF Department of Environmental and Global Health (PI: Anderson) 2014-2015

**Amount:** \$11,000

Role: Principle Investigator

#### **Establishing Environmental Bioaerosol Surveillance in North Carolina Swine Farms**

Agromedicine Institute (PI: Anderson) 2017-2018

**Amount:** \$5,000

Role: Principle Investigator

# Using Swine Fecal Slurry Samples to Detect Novel Pathogens: A New Research Partnership Between Duke University and Duke Kunshan University

Duke University (PI: Gray) 2018-2019

Amount: \$25,000 Role: Co-Investigator

#### **Global Health Humanities Workshop**

Duke Kunshan University Humanities Research Center 2019

Amount: ¥20,000

Role: Workshop Organizer

# Epidemiological Surveillance of Enterovirus among a Pediatric Population at a Clinical Setting in Jakarta, Indonesia

Duke Kunshan University FSTA Award (PI: Anderson) 2019-2020

**Amount:** ¥27,000

Role: Principle Investigator

# One Health Pilot Study for Emerging Swine Zoonotic Pathogens, Wuhan, China

DKU-Wuhan Collaboration (Co-Pl's: Yu and Gray) 2019-2020

Amount: ¥150,000 Role: Co-Investigator

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Jiangsu Shuangchuang PhD World Prestigious University Award

Jiangsu Government (PI: Anderson) 2019-2021

**Amount:** ¥150,000

Role: Principle Investigator

**Health Humanities Lab** 

Duke Kunshan University Humanities Research Center 2020

Amount: \$20,000 Role: Co-Director

The Implementation of National Action Plans on Antimicrobial Resistance in Bangladesh, Cambodia, China, Hong Kong, the Philippines, and Singapore: Challenges and Lessons Learned for Policy Makers

Asia Pacific Observatory on Health Systems and Policies, World Health Organization 2020-2022

**Amount:** \$60,000

Role: Co-Principle Investigator and Team Lead (China)

**Global Health Diplomacy Training Program** 

WHO Indonesia Country Office

2020

Amount: \$24,000 Role: Co-Director

**Detecting Routine and Novel Respiratory Viruses in China and Vietnam** 

Duke Global Health Institute (PI: Gray) 2021-2022

Amount: \$50,000 Role: Co-Investigator

Detecting Routine and Novel Respiratory Viruses in China and Vietnam (supplemental funding)

Duke Kunshan University FSTA Award (PI: Anderson) 2021-2022

**Amount:** ¥32,750

Role: Principle Investigator

Implementation of National One Health Curriculum and Joint Risk Assessment

World Health Organization Indonesia (PI: Wibowo) 2021-2022

**Amount:** IDR 2,000,000,000 (\$138,500)

Role: Technical Coordinator

Joint Lab Initiative

Kunshan Government Research Award (PI: Wu) 2021-2022

**Amount:** ¥1,000,000

**Role:** Co-Principle Investigator

Cross-reactivity of SARS-CoV-2 with Coronavirus Isolated from Humans in Haiti

NIH NIAID – R21AI164007 (PI: Morris) 06/21/2021 – 05/31/2023

Amount: \$10,887.74 Role: Co-Investigator

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#### **CERTIFICATIONS**

# Certified in Public Health Through Dec 2023

National Board of Public Health Examiners (NBPHE)

#### **BSL-3+ Laboratory Certification and Trainer**August 2015 – May 2022

Duke University Regional Biocontainment Laboratory

BSL-3+ Laboratory Certification August 2022 – Present

University of Florida Emerging Pathogens Institute

#### PROFESSIONAL ORGANIZATIONS

Florida Public Health Association (FPHA)	2012 - 2014
NCSU Comparative Medicine Institute (Associate Member)	2016 - 2017
International Society of Infectious Diseases (ISID)	2012-2019
American Public Health Association (APHA)	Est. 2014
International Society for Influenza and other Respiratory Virus Diseases (ISIRV)	Est. 2015
NC Agromedicine Institute (Full Member)	Est. 2016
American Society of Tropical Medicine and Hygiene	Est. 2019
Royal Society of Tropical Medicine and Hygiene	Est. 2021

#### **AWARDS AND HONORS**

Duke Kunshan University, Durham, NC

2019 Jiangsu Shuangchuang PhD World Prestigious University Award

#### Duke University, Durham, NC

2015 Duke Scholars in Molecular Medicine (Infectious Disease)

### University of Florida, Gainesville, FL

- 2019 College of Public Health and Health Professions Outstanding Alumni Award
- 2014 Department of Environmental and Global Health Team Builder Award
- 2014 College of Public Health and Health Professions Excellence in Collaboration
- 2012 Department of Environmental and Global Health Doctoral Scholarship (\$24,000.00)
- 2012 Master of Public Health Exemplary Student Award
- 2012 Department of Environmental and Global Health Outstanding Student Award
- 2012 College of Public Health and Health Professions Outstanding Research Award
- 2011 College of Public Health and Health Professions Pre-Doctoral Fellowship (\$11,000.00)
- 2010 College of Agricultural and Life Sciences Commencement Speaker
- 2010 College of Agricultural and Life Sciences Alumni and Friends Leadership Award Finalist
- 2009 College of Agricultural and Life Sciences Alumni and Friends Scholarship Recipient
- 2009 Department of Entomology and Nematology Murphrey Scholarship Recipient
- 2008 Department of Entomology and Nematology Murphrey Scholarship Recipient

# Santa Fe College, Gainesville, FL

- 2008 Santa Fe College Student Hall of Fame Inductee
- 2008 Florida Community College Athletic Association All-Academic Team
- 2008 Santa Fe College's Leadership Institute Leader of the Year Award
- 2008 Who's Who Among American Junior Colleges
- 2007 Santa Fe College Student Senator Hall of Fame Inductee