

CURRICULUM VITAE**Zhen Fang Fu, D.V.M., M. Phil., Ph. D.**

Department of Pathology
College of Veterinary Medicine
The University of Georgia
501 D. W. Brooks Drive
Athens, GA30602
706-542-7021 (phone)
706-542-5828 (fax)
E-mail: zhenfu@uga.edu

Education:

- 1989-90 Postdoctoral fellow, The Wistar Institute, Philadelphia, PA19107, USA
- 1985-88 Doctor of Philosophy (Ph.D. in Virology), Massey University, New Zealand
- 1983-84 Master of Philosophy (M. Phil. Veterinary Sciences), Massey University, New Zealand
- 1978-81 Bachelor of Veterinary Science (BVSc), Equivalent to DVM, Huazhong Agricultural University, China

Professional appointments:

- 2010- China Special Expert Professor, “1000 plan” program, Huazhong Agricultural University, Wuhan, China
- 2010- Adjunct Professor, College of Pharmacy, Southwest University, Chongqing, China
- 2008-09 Administrative Fellow, The Office of the Vice President for Research, University of Georgia
- 2008- Chutian Scholar Professor, College of Veterinary Medicine, Huazhong Agricultural University, Wuhan, China
- 2008- Member, Faculty of Infectious Diseases, University of Georgia
- 2004- Adjunct Professor, College of Animal Medicine, China Agricultural University, Beijing, China
- 2003- Professor, Department of Pathology, College of Veterinary Medicine, University of Georgia

- 2002- Member, Biomedical Sciences and Health Institute (BSHI), University of Georgia
- 2000-02 Associate Professor, Department of Pathology, College of Veterinary Medicine, University of Georgia
- 2000- Graduate Faculty, Graduate School, University of Georgia
- 1999- Adjunct Professor, College of Veterinary Medicine, Huazhong Agricultural University, Wuhan, China
- 1998-00 Associate Professor, Department of Diagnostic Medicine/Pathobiology, College of Veterinary Medicine, Kansas State University
- 1993-98 Assistant Professor, Department of Microbiology and Immunology, Thomas Jefferson University
- 1991-92 Research Associate (faculty), The Wistar Institute, Philadelphia
- 1987 Teaching Assistant, Massey University, New Zealand
- 1982 Teaching Assistant, Nanjing Agricultural University, China

Teaching Experience:

- 2011- Public Health Electives (POPH 5230), UGA
- 2008- Infectious Diseases Electives (VPAT/IDIS 5900), UGA
- 2008- Public Health Electives (POPH 5180), UGA
- 2006- Principles of Virology (IDIS8591), UGA
- 2002-06 Viral Pathogenesis (VPAT/IDIS 8015, course coordinator), UGA
- 2001-10 Cellular Pathology (VPAT 8020), UGA
- 2001- Veterinary Virology (IDIS 6500), UGA
- 1998 Neurovirology (MI 685), Thomas Jefferson University
- 1998 Vaccinology (MI675), Thomas Jefferson University
- 1998 Virology Section of Microbiology (MI 600, course coordinator), Thomas Jefferson University

- 1995-98 Medical Virology (MI 531), Thomas Jefferson University
- 1995-98 Molecular Virology (MI 611), Thomas Jefferson University
- 1993-98 Microbiology (MI 600), Thomas Jefferson University
- 1993-98 Microbiology (MI 200), Thomas Jefferson University
- 1988 Virology laboratory, Massey University, New Zealand.
- 1986 Epidemiology Short Course, Huazhong Agricultural University, China.
- 1982 Microbiology laboratory, Nanjing Agricultural University, China.

Training of Graduate Students, Postdoctoral Fellows and Research Scientists:

Research Scientists:

Zhanqin Zhao, DVM, PhD, Visiting Scientist (2015-)

Yun Xue, DVM, PhD, Visiting Scientist (2014-)

Xiaojuan Xu, DVM, PhD, Visiting Scientist (2013-14)

Jingyue Bao, DVM, PhD, Visiting Scientist (2013-14)

Suhuan Liao, DVM, PhD, Visiting Scientist (2014-)

Xinggang Xu DVM, PhD, Visiting Scientist (2013-14)
Currently Associate Professor, Northwest University of Agriculture and Forestry

Tao Xiong DVM, PhD, Visiting Scientist (2013-14)
Currently Professor, Changjiang University

Deepak Kumar DVM, PhD (2012-13)
Currently, Research Scientist, Division of Animal Biotechnology, Indian Veterinary Research Institute, Izatnagar 243 122, India

Xueqing Liu PhD, Visiting Scientist (2013-14)
Currently Associate Professor, Huazhong Agricultural University

Gregory Salyards DVM, Intern in laboratory Animal Medicine (2011-12)
Currently resident, UC Davis, Resident, Laboratory Animal Medicine

Lihua, Wang, PhD, Visiting Scientist (2011)
Currently Associate Professor, China Center for Disease Control and Prevention

Pengcheng Yu, PhD, Visiting Scientist (2011)
Currently Assistant Professor, China Center for Disease Control and Prevention

Shaobo Xiao DVM, PhD, Visiting Scientist (2011)
Currently Professor, Huazhong Agricultural University, Wuhan, China.

Zerong Zhu, MD, PhD, Visiting Scientist (2011)
Currently Researcher, Wuhan CDC, China.

Bin Chen, DVM, MS, Visiting Scientist (2011)
Currently Researcher, Keqiang Biological Products, Wuhan, China.

Guiping Ren, PhD, Visiting Scientist (2011-12)
Currently Professor, Northeast Agricultural University, Haerbin, China.

Liurong Fang, DVM, PhD, Visiting Scientist (2011)
Currently Professor, Huazhong Agricultural University, Wuhan, China.

Peijun Zhang, DVM, Visiting scientist (2009)
Currently Professor, Beijing Academy of Agriculture and Forestry, Beijing, China.

Huiling Sun, DVM, PhD, Visiting scientist (2009)
Currently Associate Professor, Beijing Academy of Agriculture and Forestry, Beijing, China.

Lijun Tang, D.V.M, Visiting scientist (2008)
Currently Associate Director, Division of Food Hygiene, Hubei CDC

Yue, Chen, DVM, PhD, Visiting scientist (2007-2008)
Currently Professor, Director, Division of Animal Husbandry, Veterinary Medicine, Aquatic Science and Zoology, Department of Life Sciences, National Natural Science Foundation of China

Qiyao Xiao, MD, MS, Visiting scientist (2005-2006)
Currently Associate Director, Hunan Center for Disease Control, China

Vikas Dhingra, PhD, Assistant Research Scientist (2004-2005)
Currently Principal Scientist & Group Leader, Lancaster Laboratories (Thermo Fisher Scientific)

Kenji Morimoto, PhD, Visiting scientist (1992)
Currently Senior Scientist, National Health Institute, Tokyo, Japan

Postdoctoral fellows:

Ying Huang DVM, PhD, Postdoctoral Fellow (2012-present)

Clement Wesley Gnanadurai, PhD, Postdoctoral Fellow (2011-present)

Wenqi He, DVM, PhD, Postdoctoral fellow (2011-12)
Currently Associate Professor, College of Veterinary Medicine, Jilin University, China

Xuefeng Niu, DVM, PhD, Postdoctoral fellow (2009-12)
Currently Research Scientist, Zhongshan Medical School, Zhongshan University, Guangzhou, China

Fazal Mahmood, DVM, PhD, Postdoctoral fellow (2009-10)
Assistant Professor, Department of Veterinary Pathology, University of Agriculture, Faisalabad, Pakistan.

Guoqing Zhang, DVM, PhD, Postdoctoral fellow (2007-12)
Currently Research Scientist, Great North Agricultural Company.

Yuru Liu, DVM, PhD, Postdoctoral fellow (2006-09)
Currently Associate Scientist, Institute of Biophysics, The Chinese Academy of Sciences.

Harufusa Toriumi, PhD, Postdoctoral fellow (2004-07)
Currently postdoc in PDRC, UGA

Tesfai Tseggai, DVM, MS, Postdoctoral fellow (2004-06)
Currently International Animal Health Consultant, Food and Agriculture Organization (FAO)

Xiaofeng Guo, DVM, PhD, Postdoctoral fellow (2004-05)
Currently Professor and Associate Dean, Huanan Agricultural University, Guangzhou, China

Vikas Dhingra, PhD, Postdoctoral fellow (2003-04)
Currently Principal Scientist & Group Leader, Lancaster Laboratories (Thermo Fisher Scientific)

Ellen Xia-qing Li, MD, PhD, Postdoctoral fellow (2003-05)
Currently Research Coordinator at UGA

Yu-ming Kang, MD, PhD, Postdoctoral fellow (1999)
Currently Distinguished Professor at Xi'an Jiaotong University

Xiuzhen Yan, MD, PhD, Postdoctoral fellow (1999-01)
Currently Research Coordinator at UGA

Xianfu Wu, DVM, PhD, Postdoctoral fellow (1998-03)
Currently Microbiologist at CDC

Ming Jiang, MD, Postdoctoral fellow (1993-97)
Currently Research Coordinator at University of Pennsylvania

Hai Sheng, MD, Postdoctoral fellow (1991-94)

Currently Research Scientist at Johnson and Johnson

Ph.D. Students (Major Professor):

Dayong Tiang DVM, MS (2012-present), Huazhong Agricultural University, China

Xi Chen DVM, MS (2012-present), Huazhong Agricultural University, China

Youwen Li, DVM, MS (2012-present), Huazhong Agricultural University, China

Feng Deng DVM, MS (2012-present), Huazhong Agricultural University, China

Leqiang Sun, DVM (2011-), Huazhong Agricultural University, China

Wanyu Dong, DVM (2011-), Huazhong Agricultural University, China

Ran Zhang, DVM (2011-), Huazhong Agricultural University, China

Yang Yang DVM (2011-present), Huazhong Agricultural University, China

Christina Leyson, MS (2012-14), Infectious Diseases, UGA

Currently Graduate Student, UGA

Chien-tsun Huang, DVM (2010-14), UGA

Currently Pathology Resident, UGA.

Zhenguang Li DVM, MS (2011-14), co-major professor, Academy of Chinese Agricultural Sciences.

Currently Assistant Scientist, Institute of Special Products, Academy of Chinese Agricultural Sciences.

Qingqing Chai, DVM (2010-14), UGA

Currently Pot-doc, Northwestern University

Fulai Yu (2009-2013), Huazhong Agricultural University, China

Currently Research Scientist, Zhengda Company

Ming Zhou DVM, MS (2011-13), co-major professor, China Agricultural University, China

Currently Researcher at Huazhong Agricultural University, China

Hualei Wang, DVM, MS (2008-10), co-major professor, Jilin University, China

Currently Researcher in the Chinese Academy of Military Medical Sciences, Changchun, China

Yongjun Wen, DVM, MS (2007-10), co-major professor, Academy of Chinese Agricultural Sciences.

Currently Researcher in the Academy of Chinese Agricultural Sciences, Zuoqia, Jilin, China

Sarah Lacey, BS, MS (2006-10), (DVM/PHD), UGA

Currently Veterinary student at UGA.

Ling Zhao, DVM, MS (2004-09), UGA

Currently Professor, Huazhong Agricultural University, China

Luciana Sarmiento, DVM, MS, PhD (2002-06), UGA
Currently Microbiologist at USDA

Pinghua Liu, BS, MS,(2001-04), UGA
Currently Post-doctoral fellow in Taxes A&M University

Heather Foley, BS (1997-98), Thomas Jefferson University
Currently Research Scientist at Wuxi Biotech

Ph.D. Students (Committee member):

Anthony Gresko (2012-present), Infectious Diseases
Adrian Pickar (2012-present), Infectious Diseases
Christina L. Hutson (2012-present)
Leo K. Sage (2011-present), Infectious Diseases
Ha-Jung Roh (2009-13), Population Health
Tiffany Turner (2009-12), Infectious Diseases
Valerie Cadet (2009-12), Infectious Diseases
Rene Barber (2009-11), Infectious Diseases
Victoria Meliopoulos (2009-12), Infectious Diseases
Lauren Anderson (2008-12), Infectious Diseases
Tomislav Jelesijevic, DVM, MS (2007-12)
Wenliang Zhang, BS, MS (2007-09), Infectious Diseases
Christine Oshansky, BS (2004-09), Infectious Diseases
Ziv Raviv, DVM, MS (2004-07)
Mohamed Hamoud, DVM, MS (2002-06)
Kesavannair Praveen, DVM, MS (2002-05), Infectious Diseases
Angela Ellis, DVM (2002-08)
Mary Pantin-Jackwood, DVM, MS(2001-03)
Hongjie Pan, DVM, MS (2002)
Lei Fang, BS, MS (2000-05), Genetics
Matthew Koci, BS, MS (2000-03)
Dawn M. Serio (1994-98), Thomas Jefferson University

M.S. Students (Major Professor):

Xiwen Zhang DVM (2014-), UGA
Yingjuan Liu, DVM (2011-), Huazhong Agricultural University, China
Yurong Liu, DVM (2011-), Huazhong Agricultural University, China
Huiming Zhang, DVM (2011-), Huazhong Agricultural University, China
Qiufeng Mo, DVM (2011-), Huazhong Agricultural University, China
Xiaoquan Meng, DVM (2011-14), Huazhong Agricultural University, China
Xiaoli Zhong, DVM (2011-), Huazhong Agricultural University, China
Lan Yu, BS (2011-14), Huazhong Agricultural University, China
Songqing Zhou, DVM (2011-14), Huazhong Agricultural University, China
Lei Wang, DVM (2011-14), Huazhong Agricultural University, China

Yueyun Wang, DVM (2011-14), Huazhong Agricultural University, China
Fang Li, DVM (2011-14), Huazhong Agricultural University, China
Yi Kuang, MD (2004-09), UGA
Yan Jiang, DVM (2007-09), Co-major professor, Southwest University, China,
Chakravathy Reddy, DVM, MS (2002-05), UGA
Roland Davis, BS (1998-01) Co-major professor, Kansas State University
David Duricek, BS (1997-98), Thomas Jefferson University
Jun Yang, BS (1996-98), Thomas Jefferson University
Mennal Patel, BS (1994-95), Thomas Jefferson University

M.S. Students (Committee member):

Charles Hong, BS (2007-2008), UGA
Michael Tanner, BS (2002-2005), UGA
Rupalie L. Meegalla, BS(1996-1998), Thomas Jefferson University

Other Trainees:

Laurie Adams, (2010), Veterinary Student
Allison Roebing, (2010), Veterinary Student
Anna Jeffers, (2010) Merck Summer Veterinary Student, UGA
Joel Fong, (2009-2010), Undergraduate student
Alton Swenne, (2009), Veterinary Student
Alex Glover, (2008-09), Veterinary Student
Mark Gingrich, (2007-08), CURO undergraduate researcher
Marlena Pichon, (2005-06),CURO undergraduate researcher, UGA
Heather Sheppard, (2005), Merck Summer Veterinary Student, UGA
Darren Dickerson, (2004), Undergraduate researcher, UGA
Christopher Fagioli, (2004), Merck Summer Veterinary Student, UGA
Amanda Jones, (2003), Undergraduate researcher, UGA
Zhiwei Wang, (2003-05), Research Coordinator, UGA
Jeff Stortz (2002), Merck Summer Veterinary Student, UGA
Parul Shah (2001-02), CURO undergraduate researcher, UGA
Jennifer Donaldson, (2001), Merck Summer Veterinary Student, UGA
Cammy Lees, (1999-00), Howard Hughes Medical Research Scholar, Kansas State University
Tanya M. Tims, (1999), NIH Summer Veterinary student, Kansas State University
Jennifer L. Howe, (1998), NIH Summer Veterinary Student, Kansas State University
Jun Yang, (1993-95), Exchange visitor, Thomas Jefferson University
Ildiko Babka, (1991-92), MD student from the University of Budapest, Wistar Institute.

Patents:

1999 No. 5,935,570, Synthesis of immunologic, therapeutic, and prophylactic compounds
by Transformed Clavibacter

2002 No. 6,355,621, Antigenomic oligodeoxynucleotides for treatment of infection by

negative-stranded nonsegmented RNA viruses

2004 No. 6,706,523, Use of attenuated rabies virus with mutation of the nucleoprotein at the phosphorylation site for vaccination against rabies and gene therapy in the CNS.

Pending Induction of Innate as well as adaptive immune responses using chemokines, cytokines, and interferons in rabies vaccine development

孟小笠、傅振芳、赵凌等. 一种用于人兽共检的狂犬病病毒抗体胶体金检测试纸条及其制备方法. 申请号: 201310524072.1

傅振芳、周明、王雷、赵凌等. 一种重组狂犬病病毒口服疫苗株及其制备方法. 申请号: 2013102400185960

Scientific Journal Editorial Board:

2004-06 Board of Scientific Reviewers, American Journal of Veterinary Research
 2009- Associate Editor, BMC Veterinary Research
 2010- Journal of Infectious Diseases Letters
 2009- Associate Editor, Pakistan Veterinary Journal
 2012- Associate Editor, Virus Genes
 2013- Editorial board, Virologica Sinica
 2013- Editorial board, British Journal of Virology

Scientific Journal Ad Hoc Reviewer:

Acta Neuropathologica
 Antiviral Research
 Archives of Virology
 American Journal of Veterinary Research
 BMC Veterinary Research
 BMC Microbiology
 Clinical Infectious Diseases
 Clinical and Vaccine Immunology
 DNA and Cell Biology
 Emerging Infectious Diseases
 Epidemiology and Infection
 FEMS Immunology and Medical Microbiology
 Journal of American Veterinary Medical Association
 Journal of American Veterinary Medical Education
 Journal of Clinical Microbiology
 Journal of Infectious Diseases
 Journal of Medical Virology
 Journal of Molecular Epidemiology and Evolutionary Genetics of Infectious Diseases (**MEEGID**)
 Journal of NeuroVirology

Journal of Virological Methods
 Journal of Virology
 Journal of Wildlife Diseases
 Molecular and Cellular Proteomics
 Monoclonal Antibodies in Immunodiagnosis and Immunotherapy
 Plasmid
 PLoS ONE
 PLoS One Neglected Diseases
 PlosPathogen
 Proteomics
 Research in Veterinary Science
 Vaccine
 Vector-Borne and Zoonotic Diseases
 Veterinary Record
 Viral Immunology
 Virologica Sinica
 Virology Journal
 Virus Genes
 Virus Research

Grant Reviewer:

2010-14 Member, NIH Immunology IRG, Vaccines against Microbial Diseases VMD
 2010 Welcome Trust (*Ad Hoc* Reviewer)
 2007 U.S. Army Research Program (*Ad Hoc* Reviewer)
 2007 NIAID International Research in Infectious Disease (IRID) Program, (*Ad Hoc* Reviewer)
 2006-10 Member, Chinese National Science Foundation, Veterinary Medicine Group
 2005-09 *Ad Hoc* Reviewer, NIH Small Business Grant Study Section: Non-HIV Microbial Vaccine Development
 2004-10 *Ad Hoc* Reviewer, NIH Immunology IRG, Vaccines against Microbial Diseases VMD
 2003-04 *Ad Hoc* Reviewer, NIH Immunology IRG, Bacterial, Fungal, Parasitic, and Viral Vaccines
 2003 EmTech Bio. Seed Grants
 2003 *Ad Hoc* Reviewer, NIH, RFA 03-017, Microbiology and Immunology Review Branch

- 2003 US State Department Civilian Research and Development Foundation
- 2002 SBIR, Cooperative State Research, Education and Extension Service, USDA
- 2003-07 Veterinary Medical Agricultural Research, UGA
- 2002-07 Veterinary Medical Experimental Station Research, UGA
- 1999 National Science and Engineering Research Council, Canada
- 1998 American Kennel Club, Canine health Foundation

Awards, Honors, and Membership in Professional Societies:

- 2014 Session Chair, Rabies in wildlife, 2014 Annual Rabies Conference in China, May 27-28, 2014, Changchun, China.
- 2013 Chair, UNTGH Rabies Technical Advisory Board, Beijing, China
- 2013 Session Chair, Vaccine Development, 2013 Annual Rabies Conference in China, April 14-16, 2013, Chengdu, China.
- 2013 International Travel Award from The University of Georgia
- 2012 International Travel Award from The University of Georgia
- 2012- Chair, Animal Vaccine Group, Bill and Melinda Gates Foundation-China Ministry of Sciences and Technology joint program
- 2012- Member, Organizing Committee, Annual Rabies Conference in China
- 2012 Session Chair, Rabies pathogenesis, 2012 Annual Rabies Conference in China, May 16-19, 2012, Beijing, China.
- 2012 Member, UNTGH Rabies Technical Advisory Board, Beijing, China
- 2012 Session Chair, Novel Veterinary Vaccines, BIT's 4th Annual World Congress of Vaccine-2012(WCV-2012), March 26-28, 2012, Beijing, China.
- 2011 International Travel Award from The University of Georgia
- 2010 International Travel Award from The University of Georgia
- 2010 Session Chair, Neuropathogenesis of viral diseases, The 1st BIT World Congress of Virus and Infections (WCVI-2010), July 30 – August 3, 2010, Pusan, South Korea.

- 2010 Member, Organizing Committee, The 1st BIT World Congress of Virus and Infections (WCVI-2010), July 30 – August 3, 2010, Pusan, South Korea.
- 2010 Session Chair, Viral Modulation. Eleventh Southeastern Regional Virology Conference. Atlanta, Georgia. March 19-21, 2010.
- 2009 International Travel Award from The University of Georgia
- 2009 Co-chair, Rabies Meeting-Future Therapy, Quebec City, Canada, October, 2009
- 2009 Member, National Science Committee, XX International Conferences on Rabies in the Americas.
- 2009 Honorary Citizenship, Changzhou, China.
- 2009- Vice President, Huazhong Agricultural University North America Alumni Association
- 2008-09 Administrative Fellow, University of Georgia
- 2008- Member, International Society for NeuroVirology
- 2008 Award of Completion, Emory Onsite Biosafety Level 3 Safety Training
- 2007- Advisor, Chinese Academy of Preventive Medical Sciences on Rabies Control
- 2007- Member, Advisory Committee, National Veterinary Research & Quarantine Service of Republic of Korea
- 2007-08 President, Phi Zeta Veterinary Honor Society, Xi Chapter
- 2007 International Travel Award from The University of Georgia
- 2006-07 President, Athens America Chinese Association
- 2005 Pfizer Award of Research Excellence
- 2005 Co-chair, Rabies Meeting, Montebello, Canada
- 2005-2009 Member, Working Study Group, PATRIC, Virginia Institute of Technology, Blacksburg, VA
- 2004-06 Member, Board of Scientific Reviewers, American Journal of Veterinary Research
- 2003 Co-Chair, Rabies Pathogenesis Symposium, Philadelphia, PA

- 2003-04 Member, Organizing committee for BIHS Conference “Emerging Infectious Diseases, Threat to the Southeastern US”.
- 2002 International Travel Award from The University of Georgia
- 2000- Member, the Society of Phi Zeta
- 1998 Faculty Development Award from Kansas State University
- 1998 The Big 12 Faculty Fellowship Award from Kansas State University
- 1998-06 Member, American Veterinary Medical Association
- 1996 Co-Chair, Rabies Symposium, The 7th International Congress for Infectious Diseases. Hong Kong
- 1993- Member, American Society for Virology
- 1993-97 FIRST award, NIH
- 1990- Member, American Association for the Advancement of Science.
- 1986-88 University Grants Committee Postgraduate Scholarships (NZ)
- 1985-87 W. & R. Fletcher Ltd. Postgraduate Fellowship in Veterinary Science (NZ).
- 1983-84 Exchange Scholarship from the Ministry of Foreign Affairs (NZ).

Grants:

- 2014-18 PI, China NSF Project #31330078, 01/01/2014-12/31/19
Mechanism of rabies virus glycoprotein in pathogenesis and immune evasion.
Huazhong Agricultural University. ¥2,800,000.
- 2013-17 Co-PI, China Department of Agriculture (special fund for Agro-scientific research in the Public Interest,# 201303042), 01/01/2013-12/31/18, Huazhong Agricultural University. ¥2,000,000.
- 2012-13 PI, OVPR Office, UGA,07/01/12-06/30/13.
Graduate student assistance. \$48,000
- 2011-16 MPI, Virus clearance from the central nervous system, NIH R01AI093369-01, 06/01/11-05/31/16, \$4,850,126 (Subaward to Fu at UGA: \$1,435,000).
D. C. Hooper (Contact).

- 2011-13 Co-PI. Therapeutic Antibodies for Rabies. NIH **1 R43 AI 96620-01** 09/01/11-08/31/12, \$599,750 (Subaward to Fu at UGA: \$200,000).
- 2011-14 Co-PI, China Department of Sciences and Technology, 863 program, #2011AA10A212, 01/01/2011-12/31/14. Development of novel vaccines for neurotropic viruses. Huazhong Agricultural University. ¥2,800,000.
- 2009-11 PI, China NSF Overseas Collaboration Project #30928020, 01/01/2010-12/31/11 The role of chemokines in protection and pathogenesis of rabies. Huazhong Agricultural University. ¥400,000.
- 2007-12 PI, NIH 2R01 AI51560-04A2, 8/15/2007-7/31/2012
Developing avirulent rabies virus vaccines. \$1,180,000
- 2007-08 PI, Bridge Fund, OVPR Office, UGA, 07/01/07-06/30/08, \$45,000
- 2007-14 Co-Investigator, HHSN266200700006C: 03/30/2007 – 03/29/2014.
NIAID Center of Excellence for Influenza Research and Surveillance (contract), IPIRC- Task 2. Project 2. Tripp, RA (PI), Determination of inter- and intra-species transmissibility of influenza virus. \$9,022,484
- 2007 PI, Rabies Research and Conferences, Novartis, 12/10/07 – 12/10/09, \$5,000.
- 2006-07 PI, Bridge Fund, OVPR Office, UGA, 07/01/06-06/30/07, \$20,000
- 2006-07 PI: VMES, UGA, 07/01/06-06/30/07
Induction of innate immunity and enhancement of adaptive immunity for recombinant rabies virus vaccine. \$15,000
- 2006-07 PI, Beijing Wantai Biological Corporation, 12/01/06-06/30/07
Service Contract, \$25,000.
- 2005-06 PI, Changchun Changsheng Life Sciences Ltd, 12/01/05-05/31/06.
Training scientists in rabies diagnosis and rabies virus detection. \$6,000
- 2004-06 PI, OVPR Office, UGA, 09/01/04-02/28/06.
Post-doctoral training. \$25,000
- 2004-06 PI, Dean's Office, UGA, 09/01/04-02/28/06.
Post-doctoral training \$16,000
- 2004-06 Co-PI, NIH U01 AI05731 (SBIR), 05/01/04-04/30/06.
Human Mab cocktail for rabies post-exposure prophylaxis. Mattis (PI), Subaward to Fu at UGA: \$231,104.

- 2003-04 PI: NIH R01 AI51560 (supplemental)from NIH, 09/01/03-08/31/04
Developing avirulent rabies virus vaccines. \$88,320.
- 2003-04 PI, Matching fund, UGA, 09/01/03-08/31/04
Matching NIH supplemental funding \$27,500
- 2002-06 PI:NIH R01 AI51560, 03/01/02-02/28/06 (with one year not-cost extension).
Developing avirulent rabies virus vaccines.\$749,000.
- 2001-02 Co-PI: NIH AI 46198 (SBIR), 09/15/01-03-15/02
Non-invasive delivery of skin-targeted rabies vaccines. Tang (PI), \$100,000.
Subaward to Fu at UGA: \$34,000.
- 2000-03 PI: Fort Dodge Animal Health Laboratories, 06/01/00-05/31/04
Development of recombinant rabies virus vaccines for dogs and cat. \$175,000.
- 2000-02 PI: VMES, UGA. 07/01/00-06/30/02
Development of new generation rabies vaccines for dogs and cats. \$15,000.
- 1998-01 PI: 1433 (USDA), Kansas State University, 07/01/98-06/30/01
Development of new generation of DNA vaccines for disease control, \$48,000.
- 1996-01 Molecular Biologist: NIH AI R01 09706, 12/01/95-11/30/00.
Studies of rabies virus and rabies virus antigens. Koprowski(PI) \$2,472,841.
- 1993-99 PI: NIH R29 AI 33029,04/01/93-03/31/99(with one year not-cost extension)
Studying the interaction within rabies virus RNP complex. \$525,000.
- 1986 PI: British National Committee for Microbiology, 09/01/96-09/30/96
Travel grant, \$5,000.

Committee Membership:

- 2013- Member, College Promotion and Tenure Review Committee
- 2011- Member, Research Safety and Health Review Committee (RSHRC or “ReSHReC”)
- 2010-13 Member, Faculty mentoring committee for Dr. Tamas Nagy, Pathology, UGA.
- 2009 Chair, University Promotion and Tenure Review Committee (Health & Clinical Sciences)
- 2009- Member, NanoSEC Advisory Board, UGA
- 2009-12 Member, Biosafety Community Liaison Committee, UGA.

- 2009-13 Chair, Faculty mentoring committee for Dr. Kaori Sakamoto, Pathology, UGA.
- 2009 Member, Faculty Five-year post-tenure evaluation for Dr. Buffy Howerth, Pathology, UGA.
- 2008-10 Chair, Faculty mentoring committee for Dr. Elizabeth Uhl, Pathology, UGA.
- 2007-09 Member, Faculty mentoring committee for Dr. Stephen M. Tompkins, Infectious Diseases, UGA
- 2007-10 Member, University Promotion and Tenure Review Committee (Health & Clinical Sciences)
- 2007-08 Member, Task Force on Enhancing Research and Research Productivity at UGA
- 2007-08 President, Phi Zeta Veterinary Honor Society, Xi Chapter
- 2006-08 Member, University Council, UGA
- 2006-12 Chair, University Biosafety Committee, UGA
- 2006- Member, AHRC Steering Committee, College of Veterinary Medicine, UGA
- 2004-05 Chair, Graduate affairs Committee, College of Veterinary Medicine, UGA
Help established (including drafting and presenting to various university committees)
A New Proposal for a College-wide M.S. degree program in Veterinary and Biomedical Sciences for the College of Veterinary Medicine, UGA.
Organized Research Day for the College of Veterinary Medicine, UGA.
- 2004-06 Member, BSHI Curriculum Committee for Molecular Medicine and Infectious Diseases (Establishing a PhD program for Integrated Biomedical Program for BSHI, UGA)
- 2002-07 Graduate affairs Committee, College of Veterinary Medicine, UGA
- 2002-07 Research Committee, College of Veterinary Medicine, UGA
- 2000-02 Student/Faculty Liaison Committee, College of Veterinary Medicine, UGA
- 1999-00 Faculty Student Affairs Committee, College of Veterinary Medicine, KSU
- 1998-00 Biotechnology Committee, College of Veterinary Medicine, KSU
- 1994-98 Biosafety Committee, Jefferson Cancer Institute, Thomas Jefferson University
- 1991 Biotechnology Committee, The Wisatr Institute

BIBLIOGRAPHY**Books Edited or Published:**

1. **Fu, Z. F. (Editor)** 2005. The World of Rhabdoviruses. Published as series of Curr Top Microbiol Immunol (Volume 292), Springer.

Papers published:

2. Zhu B, Ye J, Nie Y, Ashraf U, Zohaib A, Duan X, **Fu ZF**, Song Y, Chen H, Cao S. 2015. MicroRNA-15b Modulates Japanese Encephalitis Virus-Mediated Inflammation via Targeting RNF125. *J Immunol*. 1500370. [Epub ahead of print]
3. Li F, Wang Y, Yu L, Cao S, Wang K, Yuan J, Wang C, Wang K, Cui M, **Fu ZF**. 2015. Viral Infection of the Central Nervous System and Neuroinflammation Precede Blood-Brain Barrier Disruption during Japanese Encephalitis Virus Infection. *J Virol*. 89:5602-14.
4. Yang Y, Huang Y, Gnanadurai CW, Cao S, Liu X, Cui M, **Fu ZF**. 2015. The inability of wild-type rabies virus to activate dendritic cells is dependent on the glycoprotein and correlates with its low level of the de novo synthesized leader RNA. *J Virol*. 89:2157-69.
5. Huang CT, Li Z, Huang Y, Zhang G, Zhou M, Chai Q, Wu H, **Fu ZF**. 2014. Enhancement of blood-brain barrier permeability is required for intravenously administered virus neutralizing antibodies to clear an established rabies virus infection from the brain and prevent the development of rabies in mice. *Antiviral Res*. 110:132-41.
6. Wang FX, Zhang SQ, Zhu HW, Yang Y, Sun N, Tan B, Li ZG, Cheng SP, **Fu ZF**, Wen YJ. 2014. Recombinant rabies virus expressing the H protein of canine distemper virus protects dogs from the lethal distemper challenge. *Vet Microbiol*. 174(3-4):362-371.
7. Chai Q, She R, Huang Y, **Fu ZF**. 2015. Expression of neuronal CXCL10 induced by rabies virus infection initiates infiltration of inflammatory cells, production of chemokines/cytokines and enhancement of Blood-brain Barrier permeability. *J Virol*. 89(1):870-6.
8. Yu FL, Zhang GQ, Zhong, XF, Han, N, Song YF, Zhao L, Cui M, Rayner S, **Fu ZF**. 2014. Comparison of complete genome sequences of dog rabies viruses isolated from China and Mexico reveals key amino acid changes that may be associated with virus replication and virulence. *Arch. Virol*. 159:1593-1601.
9. Wu Q, Yu F, Xu J, Li Y, Chen H, Xiao S, **Fu ZF**, Fang L. 2014. Rabies-virus-glycoprotein-pseudotyped recombinant baculovirus vaccine confers complete protection against lethal rabies virus challenge in a mouse model. *Vet. Microbiol*. 88:4698-4710.
10. Chai Q, He WQ, Zhou M, Lu H, **Fu ZF**. 2014. Enhancement of Blood-brain Barrier Permeability and Reduction of Tight Junction Protein Expression Are Modulated by

Chemokines/Cytokines induced by Rabies Virus Infection. *J Virol.* 88:4698-4710.

11. Liu X, Yang Y, Sun Z, Chen J, Ai J, Dun C, **Fu ZF**, Niu X, Guo X. 2014. A Recombinant Rabies Virus Encoding Two Copies of the Glycoprotein Gene Confers Protection in Dogs against a Virulent Challenge. *PLoSOne.* 9(2):e87105.
12. Gnanadurai CW, Zhou M, He W, Leyson CM, Huang CT, Salyards G, Harvey SB, Chen Z, He B, Yang Y, Hooper DC, Dietzchold B, **Fu ZF**. 2013. Presence of virus neutralizing antibodies in cerebral spinal fluid correlates with non-lethal rabies in dogs. *PLoS Negl Trop Dis.* 7(9):e2375.
13. Gnanadurai CW, Lyon DC, Jackson AC, **Fu ZF**. 2013. Chapter 13: Rabies. In *Mononegaviruses of Veterinary Importance. Volume 1: Pathobiology and Molecular Diagnosis* (Munir Ed). CAB International. Pp 209-223.
14. Jackson AC, Fu ZF. 2013 *Pathogenesis. Rabies: Scientific basis of the disease and its management. Third Edition* (Jackson Ed). Academic Press. Pp 299-350.
15. Zhou M, Zhang G, Ren G, Gnanadurai CW, Li Z, Chai Q, Yang Y, Leyson CM, Wu W, Cui M, **Fu ZF**. 2013. Recombinant rabies viruses expressing GM-CSF or flagellin are effective vaccines for both intramuscular and oral immunizations. *PLoS One.* 8(5):e63384.
16. Niu X, Tang L, Tsegai T, Guo Y, **Fu ZF**. 2013. Wild-type rabies virus phosphoprotein is associated with viral sensitivity to type I interferon treatment. *Arch Virol.* 158:2297-305.
17. Zhou M, Zhou Z, Kia GS, Gnanadurai CW, Leyson CM, Umoh JU, Kwaga JP, Kazeem HM, **Fu ZF**. 2013. Complete genome sequence of a street rabies virus isolated from a dog in Nigeria. *Genome Announc.* doi:pii: e00214-12. 10.1128. Epub 2013 Feb 21.
18. Zai J, Mei L, Wang C, Cao S, **Fu ZF**, Chen H, Song Y. 2013. N-glycosylation of the premembrane protein of Japanese encephalitis virus is critical for folding of the envelope protein and assembly of virus-like particles. *Acta Virol.* 57:27-33.
19. Zhang G, Wang H, Mahmood F, **Fu ZF**. 2013. Rabies virus glycoprotein is an important determinant for the induction of innate immune responses and the pathogenic mechanisms. *Vet. Microbiol.* 162:601-613.
20. Chen Z, Zhou M, Gao X, Zhang G, Ren G, Gnanadurai CW, **Fu, ZF**, He, B. 2013. A novel rabies vaccine based on a recombinant parainfluenza virus 5 expressing rabies virus glycoprotein. *J Virol.* 87:2986-93
21. Ye J, Zhu B, **Fu ZF**, Chen H, Cao S. 2013. Immune evasion strategies of flaviviruses. *Vaccine.* 31:461-71.
22. Chen Z, Xu P, Salyards GW, Harvey SB, Rada B, **Fu, ZF.**, He, B. 2012. Evaluating a Parainfluenza Virus 5-Based Vaccine in a Host with Pre-Existing Immunity against

- Parainfluenza Virus 5. PLoS ONE 7(11): e50144.
23. Zhang G, **Fu ZF**. 2012. Complete genome sequence of a street rabies virus from Mexico. *J Virol.* 86:10892-3
 24. Yu F, Zhang G, Xiao S, Fang L, Xu G, Yan J, Chen H, **Fu ZF**. 2012. Complete genome sequence of a street rabies virus isolated from a rabid dog in China. *J Virol.* 86:10890-1.
 25. Zhu B, Ye J, Lu P, Jiang R, Yang X, **Fu ZF**, Chen H, Cao S. 2012. Induction of antigen-specific immune responses in mice by recombinant baculovirus expressing premembrane and envelope proteins of West Nile virus. *Virol J.* 9:132.
 26. Chen, X., Yu, J., Li, M, Zhao, G., Wang, W., Guo, W., Deng, X., Zhang, Y., **Fu, Z. F.**, Qin, X., Zhang, Y. 2012. Pathogenicity of a natural reassortant Hantavirus CGRn9415 in newborn rats and newborn mice. *J. Gen. Virol.* 93:1017-22.
 27. Wang H, Zhang G, Wen Y, Yang S, Xia X, **Fu ZF**. 2011. Intracerebral Administration of Recombinant Rabies Virus Expressing GM-CSF Prevents the Development of Rabies after Infection with Street Virus. *PLoS One.*6(9):e25414.
 28. Wen, Y., Wang, H., Wu, H., Yang, F., Tripp, R. A., Hogan, R. J., **Fu, Z. F.** 2011. Rabies virus expressing dendritic cell-activating molecules enhances the innate and adaptive immune response to vaccination. *J. Virol.*85:1634-44.
 29. Niu, X., Wang, H., **Fu, Z. F.** 2011. The role of chemokines in rabies pathogenesis and protection. *Adv Virus Res.* 79:73-89.
 30. Zhao, L., Toriumi, H., Wang, H., Kuang, Y., Guo, X., Morimoto, K., **Fu, Z. F.** 2010. Expression of MIP-1a (CCL3) by a recombinant rabies virus enhances its immunogenicity by inducing innate immunity and recruiting dendritic cells and B cells. *J. Virol.* 84:9642-9648.
 31. Jiang, Y., Luo, Y, Michel, F., Hogan, R.J., He Y., and **Fu, Z. F.** 2010. Characterization of conformation-specific monoclonal antibodies against rabies virus nucleoprotein. *Arch. Virol.* 155:1187-92.
 32. Zhang YZ., Plyusnin A., **Fu ZF**. 2010. Hantavirus infections in animals and humans in China. *EID.* 16:1195-203.
 33. Lin X., Yang P., Shi N., Wang W., Huang X., Guo W., Fan F., Liao X., Li M., Tan Y., Chen Y., Plyusnin A., **Fu ZF**, Zhang Y. 2010. Hantavirus Infection in Small Mammals and Humans in the Coastal Region of Zhejiang Province, China. *J. Med. Virol.* 82:987-95.
 34. Zhao L., Toriumi H, Kuang Y, Chen H, **Fu ZF** 2009. The roles of chemokines in rabies virus infection: over-expression may not always be beneficial. *J. Virol.* 83:11808–11818

35. Kuang Y, Lackay SN, Zhao L, **Fu ZF** 2009. Role of chemokines in the enhancement of BBB permeability and inflammatory infiltration after rabies virus infection. *Virus Res.* 144:18–26.
36. Liu Y, Haas D, Poore S, Isakovic S, Gahan M, Mahalingam S, **Fu ZF**, Tripp RA 2009. Human metapneumovirus establishes persistent infection in the lungs of mice and is reactivated by glucocorticoid treatment. *J. Virol.* 83:6837-48.
37. Zhang, YZ., Xiong, CL., Lin, XD., Zhou, DJ., Jiang, RJ., Xiao, QY., Xie, XY., Yu, XX., Tan, YJ., Li, MH., Ai, QS., Zhang, LJ., Zou, Y., Huang, C., **Fu, ZF.**2009. Genetic Diversity of Chinese Rabies Viruses: Evidence for the Presence of Two Distinct Clades in China. *Infect Genet Evol.* 9:87-96.
38. Zhao, L., **Fu, Z. F.** 2009. Isolation of viral RNA from cultures. In *Handbook of Nucleic Acid Purification*, edited by Dongyou Liu. CRC Press, 2009, pp41-60.
39. **Fu, Z. F.**, Wang, S-L., Zhang, Y-Z. 2009. Chapter 2: Rabies virus infection and immunity. In *Rabies* edited by Yu Yongxin. Pp31-40.
40. **Fu, Z. F.**, Wang, S-L., Zhang, Y-Z. 2009. Chapter 3: Pathogenic mechanism of rabies. In *Rabies* edited by Yu Yongxin. Pp41-55.
41. Zou, Y, Hu, J, Wang, ZX, Wang, DM, Li, MH, Ren, GD, Duan, ZX, **Fu, ZF**, Plyusnin, A, Zhang, YZ. 2008. Molecular diversity and phylogeny of Hantaan virus in Guizhou, China: evidence for Guizhou as a radiation center of the present Hantaan virus. *J Gen Virol.* 89:1987-97.
42. Zhang, Y-Z., Xiong, C-L., Kuzmin, I., Niezgod, M, **Fu, Z. F.**, Rupprecht, CE. 2008. Investigation of the role of healthy dogs as carriers of rabies virus. *Vector-Borne and Zoonotic Diseases.* 8:313-20.
43. Zou, Y, Hu, J, Wang, ZX, Wang, DM, Yu, C, Zhou, JZ, **Fu, ZF**, Zhang, YZ. 2008. Genetic characterization of hantaviruses isolated from Guizhou, China: Evidence for spillover and reassortment in nature. *J Med Virol.*80:1033-1041
44. Tang, L., Kuang, Y., Zhao, L., Yang, W., Fu, ZF, 2008. The construction of a mouse model for rabies infection. *Journal of Chinese Experimental Animals.* 16:330-333.
45. Lackay, S., Kuang, Y., **Fu, Z. F.** 2008. Rabies in small animals. *Vet. Clin. North Am. Small Anim. Pract.* 38:851-61.
46. **Fu, Z.F.** 2008. Rabies situation in Far East Asia. *Developments in Biologicals: Toward the elimination of rabies in Eurasia.* Dev Biol (Basel). 131:55-61.
47. **Fu, Z. F.**, Li, X.L., Dhingra, V. 2008. Pathogenic rabies virus alters host protein expression in the central nervous system: *Developments in Biologicals: Toward the elimination of rabies in Eurasia.* Dev Biol (Basel). 131:83-91.

48. Zhang, Y-Z., Yan, Y-Z., Zou, Y., Li Y., Li, M-H., Chen, X., Chen, H-X., Yao, L-S., Hui, G-W., Du, Z-S., **Fu, Z. F.** 2007. Detection of phylogenetically distinct Puumala-like viruses from red-grey vole *Clethrionomys rufocanus* in China. *J. Med. Virol.* 79:1208-1218.
49. Zhang, Y-Z., Zou, Y., Yao, L-S., Hu, G-W., Du, Z-S., Jin, L-Z., Liu, Y-Y., Wang, H-X., Chen, X., Chen, H-X., **Fu, Z. F.** 2007. Isolation and Characterization of Hantavirus Carried by *Apodemus peninsulae* in Jilin, China. *J. Gen. Virol.* 88:1295-1301.
50. Xiong, CL., Hao, ZY., Lu, SQ., Li, MH., Zhang, YZ., **Fu, ZF.**2007. Analysis of the glycoprotein sequences of two rabies viruses isolated from Henan Provinces. *China J. Epidemiol.* 28: 261-267.
51. Xiong, CL., Chen YZ., Li, MH., Tang, CC., Shen, JJ., Jiang, RJ., Zhang, YZ., **Fu, ZF.**2007. Analysis of the nucleoprotein and glycoprotein sequences of rabies viruses isolated from Yancheng, Jiangsu Provinces. *China J. Zoonosis*, 23: 584-588.
52. Dhingra, V., Li, Xi., Liu, Y., **Fu, Z. F.** 2007. Proteomic profiling reveals that rabies virus infection results in differential expression of host proteins involved in ion homeostasis and synaptic physiology in the central nervous system. *J. NeuroVirol.* 13:107-17.
53. Zhang, Y., Yu, Y., Dong, G., **Fu, Z. F.**2007. The epidemiologic characteristics of rabies in China and the recommendations for rabies control. *Chin J Prev Med*, 41:165-168.
54. Zhang, Y-Z., Xiong, CL., Zou, Y., Li, MH., Xiao, QY., Wang, XD., Tang, MC., Yang, AB., Qi, BY., **Fu, Z. F.** 2006. Epidemiological studies of rabies in Dongkou, Hunan Province. *China J. Epidemiol.* 27:583-588;
55. Sarmiento, L., Tsegai, T., Dhingra, V., **Fu, Z. F.** 2006. Rabies virus-induced apoptosis involves caspase-dependent and caspase-independent pathways. *Virus Res.*, 121:144-151.
56. Zhang YZ, Xiong CL, Zou Y, Wang DM, Jiang RJ, Xiao QY, Hao ZY, Zhang LZ, Yu YX, **Fu ZF.** 2006. Molecular characterization of rabies virus isolates in China during 2004. *Virus Res.* 121:179-188.
57. Guo, X.F., Fu, Z. F. 2006. Moving the Glycoprotein Gene of Rabies Virus to Promoter-Proximal Position and the Generation of the Virus. *Journal of South China Agricultural University*
58. Zhang, Y-Z., Xiong, C-L., Zou, Y., Wang, D-M., Yu, C., Zhou, J-Z., Wang, Z-X., Zhang, Y-R., **Fu, Z. F.** 2006. An epidemiological study of rabies in Anlong County, Guizhou. *Virologica Sinica.* 21: 395-401.
59. Zhang, Y-Z., Xiong, C-L., Zou, Y., Li, M-H., Xiao, Q.Y., Wang X-D., Tang, M-S., Yang, A-B., Zhu, X-S., Qin, B.Y., **Fu, Z. F.** 2006. An epidemiological study on rabies in Wugan and Dongkou counties, Hunan. *Chin. J. Epidemiol.* 27:583-588.

60. Zhang, Y-Z., Qu, Y-G., Yang, D-M., Li, Y., **Fu, Z. F.** 2006. The genotypes and phylogenetic analysis of hantaviruses. *Chin. J. Zoonoses.* 22:193-201.
61. Li, X., **Fu, Z. F.**, Alvarez, R., Tripp, R.A. 2006. Respiratory Syncytial Virus Infects Neuronal Cells and Processes that Innervate the Lung by a RSV G Protein Dependent Process. *J. Virol.* 80:537-40.
62. Xiao Q.Y., **Fu, Z. F.** 2006. Viral zoonotic infections. *Chin. J. Epidemiol.*, 27:1089-1093.
63. Xiong, C-L., Zhang, Y-Z., Lu, SQ., **Fu, Z. F.** 2006. Biological characteristics of rabies virus. *Chin. J. Epidemiol.*, 27:914-917.
64. Xu, L., Guo, ZZ., Zhang, Y-Z., Xiong, C-L., **Fu, Z. F.** 2006. Progress for research of rabies virus glycoprotein in China. *China J. Zoonosis.* 22: 876-879.
65. Sarmiento, L., Li, X., Howerth, E., Jackson, A. C., **Fu, Z. F.** 2005. Glycoprotein-mediated induction of apoptosis limits the spread of attenuated rabies viruses in the CNS of mice. *J. NeuroVirol.* 11:571-81.
66. Zhang, Y-Z., Xiong, C-L., Xiao, D-L., Jiang, R-J., Wang, Z-X., Zhang, L-Z., **Fu, Z. F.** 2005. Human Rabies in China in the past 54 years. *EID*, 11:1983-1984.
67. Wang, Z.W., Wang, Y, Sarmiento, L., Li, E.X., Dhingra, V., Tseggai, T., Jiang, B., **Fu, Z. F.** 2005. Pathogenic rabies virus evades, while attenuated rabies virus activates, the host innate immune responses in the CNS. *J. Virol.* 79:12554-12565.
68. Dhingra, V., Li, Q., Allison, A. B., Stallknecht, D. E., **Fu Z. F.** 2005. Proteomic Profiling and Neurodegeneration in West-Nile-Virus-Infected Neurons. *J. Biomed. Biotech.* 3:271-179.
69. Li, X., Samento, L., **Fu, Z. F.** 2005. Degenerative Changes of Mouse Neuronal Processes after Rabies Infection. *J. Virol.* 79:10063-10068.
70. **Fu, Z. F.** 2005. Genetic comparison of the rhabdoviruses from animals and plants. *Curr Top Microbiol Immunol.* Fu, Z. F. (Editor) 292:1-24.
71. Dhingra, V., Gupta, M., Andacht, T., **Fu, Z. F.** 2005. New frontiers in proteomics research: a perspective. *Int J Pharm.* 299:1-18.
72. **Fu, Z. F.**, Jackson, A. C. 2005. Neuronal dysfunction and death in rabies virus infection. *J Neurovirol.* 11:101-6
73. Jackson, A.C., **Fu, Z.F.** 2005. Pathogenesis of rabies – Editorial. *J Neurovirol.* 11:74-75.

74. Liu, P., Yang, J., Wu, X., and **Fu, Z.F.** 2004. The interactions amongst rabies virus nucleoprotein, phosphoprotein, and the genomic RNA in virus-infected and transfected cells. *J Gen Virol.* 85: 3725-3734.
75. Alanazi, F., **Fu, Z.F.**, Lu, D.R. 2004. Effective transfection of rabies DNA vaccine in cell culture using an artificial lipoprotein carrier system". *Pharm. Res.* 21:675-682.
76. Wu X, Lei X, **Fu ZF.** 2003. Rabies virus nucleoprotein is phosphorylated by cellular casein kinase II. *Biochem. Biophysic. Res. Comm.* 304:333-338.
77. Jackson, A.C., Warrell MJ, Rupprecht CE, Ertl HC, Dietzschold B, O'Reilly M, Leach RP, **Fu ZF**, Wunner WH, Bleck TP, Wilde, H. 2003. Management of rabies in humans. *Clin Infect Dis.* 36:60-3.
78. Yan, X, Mohankumar PS, Dietzschold B, Schnell MJ, **Fu, Z. F.** 2002. The rabies virus glycoprotein determines the distribution of different rabies virus strains in the brain. *J Neurovirol.* 8:345-52.
79. Lees, C.Y., Briggs, D.J., Davis, R.D., Moore, S.M., Gordon, C., Xiang, X., Ertl, H.C.J., Tang, D.C. and **Fu,Z.F.** 2002. Immunization by topical application of a recombinant adenovirus expressing rabies virus glycoprotein induces protective immunity to viral challenge in mice. *Vet Microbiol.* 85:295-303.
80. Wu, X., Gong, X., Foley H.D., Schnell, M. J. and **Fu, Z.F.** 2002. Both viral transcription and replication are reduced when the rabies virus nucleoprotein is not phosphorylated. *J Virol.* 76:4153-61.
81. Yan, X., Prosnjak, M, Curtis, M.T., Weiss, M.L., Faber, M., Dietzchold, B. and **Fu, Z.F.** 2001. Silver-haired bat rabies virus variant does not induce apoptosis in the brain of experimentally infected mice. *J. NeuroVirol.* 7:518–527.
82. Tims, T., Briggs, D.J., Davis, R.D., Moore, S.M., Xiang, Z., Ertl, H.C.J., and **Fu, Z.F.** 2000. Adult dogs receiving a rabies booster dose with a recombinant adenovirus expressing rabies virus glycoprotein develop high titers of neutralizing antibodies. *Vaccine.* 18:2804-2807.
83. **Fu, Z.F.** 2000. Differentiating characteristics of the silver-haired bat rabies variant: Clues to the current epidemiology. In *Rethinking Rabies Risks, Sharpening clinical skills for a reemerging threat.* Basgoz N (Ed), SCIENS Worldwide Medical Education, pp13-15.
84. Yang, J.; Koprowski, H.; Dietzschold, B.; **Fu, Z.F.** 1999. Phosphorylation of rabies virus nucleoprotein regulates rabies virus RNA transcription and replication by modulating leader RNA. *J. Virol,* 73:1661-1664.
85. Yang, J.; Hooper, D.C.; Wunner, W.H.; Koprowski, H.; Dietzschold, B.; **Fu, Z.F.** 1998. The specificity of rabies virus RNA encapsidation by nucleoprotein. *Virology,* 242:107-117.

86. Modelska, A., Dietzschold, B., **Fu, Z.F.**, Steplewski, K., Hooper, D.C., Koprowski, H. and Yusibov, V. 1998. Immunization against rabies with plant-derived antigen. *Proc. Natl. Acad. Sci. USA*. 95:2481-2485.
87. Morimoto, K., Hooper, D.C., Carbaugh, H., **Fu, Z.F.**, Koprowski, H. and Dietzschold, B. 1998. Rabies virus quasispecies: Implication for pathogenesis. *Proc. Natl. Acad. Sci. USA*. 95:3152-3156.
88. Richt, J.A.; Alexander, R.C., Herzog, S.; Hooper, D.C.; Kean, R.; Spitsin, S.; Bechter, K.; Schuttler, R.; Feldmann, H.; Heiske, A.; **Fu, Z.F.**; Dietzschold, B.; Rott, R.; Koprowski, H. 1997. Failure to detect Borna disease virus infection in peripheral blood leukocytes from humans with psychiatric disorders. *J. Neurovirol.* 3: 174-178.
89. **Fu, Z.F.**; Dietzschold, B.; Plotkin, S. A.; Rupprecht, C. E. 1997. Improved vaccines against rabies. In "New Generation Vaccines" Second Edition. Levine, M. M., Woodrow, G. C., Kaper, J. B., Cobon, G. S. (eds). pp607-617.
90. **Fu, Z.F.** 1997. Rabies and rabies research: past, present and the future. *Vaccine* 15:20-24.
91. Morimoto, K.; Hooper, D.C.; Bornhorst, A.; Corisdeo, S.; Bette, M.; **Fu, Z.F.**; Schafer, M.K.H.; Koprowski, H.; Weihe, E.; Dietzschold, B. 1996. Intrisc response to Borna disease virus infection of the central nervous system. *Proc. Natl. Acad. Sci. USA*, 93:13345-13350.
92. Morimoto, K.; Patel, P., Corisdeo, S.; Hooper, D.C.; **Fu, Z.F.**; Rupprecht, C.E.; Koprowski, H.; Dietzschold, B. 1996. Characterization of a unique variant of bat rabies virus responsible for newly emerging human cases in North America. *Proc. Natl. Acad. Sci. USA*, 93:5653-5658.
93. **Fu, Z.F.**; Wickstrom, E.; Jiang, M; Corisdeo, S.; Yang, J.; Dietzschold, B.; Koprowski, H. 1996. Inhibition of rabies virus infection by an oligonucleotide complementary to rabies virus genomic RNA. *Antisense Research and Development*, 6:87-93.
94. **Fu, Z.F.**; Dietzschold, B. 1996. Recent advances in the study of rabies. In "Microbe Hunters: Then and Now". Koprowski, H. and Oldstone, M. (eds). Medi-Ed Press, Bloomington, Illinois. pp57-66.
95. Diezschold, B.; Rupprecht, C.E.; **Fu, Z.F.**; Koprowski, H. 1996. Rhabdoviruses. In: *Fields' Virology*. Third edition, Fields, B., Knipe, D. Howley, P.M. et al. (eds). Reven Press, pp1137-1159.
96. McGarvey, P.B.; Hammond, J.; Dienelt, M.M.; Hooper, D.C.; Micheals, F.H.; **Fu, Z.F.**; Dietzschold, B.; Koprowski, H. 1995. Expression of the rabies virus glycoprotein in transgenic tomatoes. *Bio/Technology*, 13:1484-1487.
97. Harmir, A. N.; Moser, G.; **Fu, Z.F.**; Dietzschold, B.; Rupprecht, C. E. 1995. Immunohistochemical test for rabies: identification of a diagnostically superior monoclonal

- antibody. *Vet. Rec.***136**:295-296.
98. Bagasra, O.; Michaels, F. H.; Zheng, Y. M., Bobroski, L. E.; Spitsin, S.V.; **Fu, Z. F.**; Tawadros, R.; Koprowski, H. (1995) Activation of the inducible form of nitric oxide synthase in the brain of patients with multiple sclerosis. *Proc. Natl. Acad. Sci. USA*,**92**:12041-12045.
99. Akaike, T.; **Fu, Z.F.**; Zheng, Y.M.; Vogel, W.H.; Koprowski, H.; Dietzschold, B. 1995. Effect of neurotropic virus infection on activities of neuronal and inducible nitric oxide synthase in the rat brain. *J. NeuroVirol.***1**:118-126.
100. Hooper, D. C.; Pierard, I.; Modelska, A.; Otvos, L.; **Fu, Z.F.**; Koprowski, H.; Dietzschold, B. 1995. Using the rabies ribonucleocapsid complex to enhance oral immunization. *J. NIH Res.* **7**:50-51.
101. Traenhardt, O.; Freuzfelder, E.; Hillebrandt, M.; Marcus, I.; Ramakrishnan, K.; **Fu, Z.F.**; Dietzschold, B. 1994. Long-term humoral and cellular immunity after vaccination with cell culture rabies virus vaccines in man. *Clin. Immunol. Immunopathol.***71**:287-292.
102. Hooper, D. C.; Pierard, I.; Modelska, A.; Otvos, L.; **Fu, Z.F.**; Koprowski, H.; Dietzschold, B. 1994. Rabies ribonucleocapsid as an oral immunogen and immunological enhancer. *Proc. Natl. Acad. Sci. USA*,**91**:10908-10912.
103. Dorfman, N.; Dietzschold, B.; **Fu, Z.F.**; Koprowski, H.; Notkins, A.L. 1994. Development of human monoclonal antibodies to rabies. *Hybridoma*.**13**:397-402.
104. **Fu, Z.F.**; Zheng, Y.M.; Wunner, W.H.; Koprowski, H.; Dietzschold, B. 1994. Both the N- and C-terminal domains of the nominal phosphoprotein of rabies virus is involved in binding to the nucleoprotein. *Virology***200**:590-597.
105. **Fu, Z.F.**; Wunner, W.H.; Dietzschold, B. 1994. The role of rabies virus nucleoprotein in the induction of protective immunity against rabies. *Curr. Top. Microbiol. Immunol.***187**:161-172.
106. **Fu, Z.F.**; Amsterdam, J.D.; Kao, M.; Shankar, V.; Koprowski, H.; Dietzschold, B. 1993. Detection of Borna disease virus reactive antibodies from patients with affective disorders by Western immunoblot technique. *J. Affect. Disord.***27**:61-68.
107. **Fu, Z.F.**; Rupprecht, R.; Dietzschold, B.; Saikumar, P.; Niu, H.S.; Babka, I.; Wunner, W.H.; Koprowski, H. 1993. Oral vaccination of raccoons (*Procyon lotor*) with baculovirus-expressed rabies virus glycoprotein. *Vaccine***11**:925-928.
108. **Fu, Z.F.**; Weihe, E.; Zheng, Y.M.; Schafer, M. K-H., Sheng, H., Corisdeo, S., Rauscher, F.; Koprowski, H.; Dietzschold, B. 1993. Differential effect of rabies and Borna disease viruses on immediate early and late response gene expression in the brain. *J. Virol.***67**:6674-6681.
109. Kao, M.; Hamir, A.; Rupprecht, C.R.; **Fu, Z.F.**; Shankar, V.; Koprowski, H.; Dietzschold, B. 1993. Detection of antibodies against Borna disease virus in sera and cerebrospinal fluid of

- horses in the United States. *Vet. Rec.* **132**:241-244.
110. Koprowski, H.; Zheng, Y.M.; Heber-Katz, E.; Fraser, N.; Rocke, L.; **Fu, Z.F.**; Hanlon, C.; Dietzschold, B. 1993. In vivo expression of inducible nitric oxide synthase in experimentally-induced neurological diseases. *Proc. Natl. Acad. Sci. USA.* **90**:3024-7.
111. Zheng, Y.M.; Schafer, M. K-H., Weihe, E.; Sheng, H., Corisdeo, S., **Fu, Z.F.**; Koprowski, H.; Dietzschold, B. 1993. Severity of neurological signs and the degree of inflammatory lesions in the brains of rats with Borna disease correlates with the induction of nitric oxide synthase. *J. Virol.* **67**:5786-5791.
112. Dietzschold, B.; Kao, M.; Zheng, Y.M.; Chen, Z.Y.; **Fu, Z.F.**; Maul, G.; Rupprecht, C.E.; Koprowski, H. 1992. Delineation of putative mechanisms involved in antibody-mediated clearance of rabies virus from the CNS. *Proc. Natl. Acad. Sci. USA.* **89**:7252-7256.
113. Nesbit, M.; **Fu, Z.F.**; McDonald-Smith, J.; Steplewski, Z.; Curtis, P.J. 1992: Production of functional monoclonal antibody recognizing human colorectal carcinoma in insect cells from a baculovirus expression system. *J. Immunol. Methods* **151**:201-208.
114. Robertson, I.D.; Blackmore, D.K.; Hampson, D.J.; **Fu, Z.F.** 1991. A longitudinal study of natural infection of piglets with *Streptococcus suis* types 1 and 2. *Epidemiol. Inf.* **107**:119-126.
115. **Fu, Z.F.**; Dietzschold, B.; Schumacher, C.; Wunner, W.H.; Ertl, H.J.C; Koprowski, H. 1991: Baculovirus-expressed rabies virus nucleoprotein is efficacious as a vaccine. *Proc. Natl. Acad. Sci. USA.* **88**: 2001-2005.
116. **Fu, Z.F.**; Ertl, H.J.C.; Dietzschold, B. 1991: Utilization of recombinant baculovirus expressed rabies N protein for pre-exposure prophylaxis against rabies. *In: Vaccine 91, Modern Approaches to New Vaccines Including Prevention of AIDS* (R.M. Chanock, H.S. Ginsberg, F.Brown, and R.A. Lerner, Eds.). Cold Spring Harbor Laboratory Press, NY, pp. 305-312.
117. **Fu, Z.F.**; Hampson, D.J.; Wilks, C.R. 1990: Transfer of antirotavirus antibody from sows to piglets and its protection against rotavirus infection. *Res. Vet. Sci.*, **48**:365-373.
118. Saifuddine, Md.; Wilks, C.R.; Christensen, N.H.; **Fu, Z.F.**; Rice, M. 1989: Isolation of a reovirus from a broiler chicken flock with high early mortality. *N. Z. vet. J.*, **37**:12-14.
119. **Fu, Z.F.**; Hampson, D.J.; Blackmore, D.K. 1989: Detection and survival of group A rotavirus in the environment of a piggery. *Vet. Rec.*, **125**:576-578.
120. **Fu, Z.F.**; Hampson, D.J. 1989: Natural transmission of group A rotavirus within a pig herd. *Res. Vet. Sci.*, **46**:312-317.
121. **Fu, Z.F.**; Blackmore, D.K.; Hampson, D.J.; Wilks, C.R. 1989: Epidemiology of typical and atypical rotavirus infections in New Zealand pigs. *N. Z. vet. J.*, **37**:102-106.

122. **Fu, Z.F.** 1989: Evaluation of a commercial ELISA test for the detection of group A rotavirus in pig faeces. *N. Z. vet. J.*,**37**:39-40.
123. Jones, D. M.; Dickson, L. R.; **Fu, Z.F.**; Wilks, C.R. 1989: Rotavirus infection in foals and its association with diarrhoea. *N. Z. vet. J.*,**37**:166-168.
124. Hampson, D.J.; **Fu, Z.F.**; Smith, W.C. 1988: Pre-weaning supplementary feed and subsequent intestinal hypersensitivity to pig weaner diets. *Res. Vet. Sci.*,**44**:309-341.
125. Hampson, D.J.; **Fu, Z.F.**; Bettelheim, K.A.; Wilson, M.W. 1988: Managerial influences on the two strains of haemolytic *Escherichia coli* in weaned pigs. *Epidem. Inf.*,**100**:213-220.
126. Hampson, D.J.; **Fu, Z.F.**; Robertson, I.D. 1987: Investigation of the source of haemolytic *Escherichia coli* infecting weaned pigs. *Epidem. Inf.*,**99**:149-153.
127. **Fu, Z.F.**; Hampson, D.J. 1987: Group A rotavirus excretion patterns in naturally infected pigs. *Res. Vet. Sci.*,**43**:297-300.
128. **Fu, Z.F.**; Denby, L.; Lien, D.; Robinson, A.J. 1987: An enzyme-linked immunosorbent assay (ELISA) for measurement of antibodies against EHV-2 in equine sera. *Acta Virologica*,**31**:468-474.
129. **Fu, Z.F.** 1987: Detection of an atypical (possibly group C) rotavirus in New Zealand pigs. *N. Z. vet. J.*,**35**:115-116.
130. Hampson, D.J.; Moller, K.; Robertson, I.D.; **Fu, Z.F.** 1986: Porcine parvovirus infection in a commercial piggery. *N. Z. vet. J.*,**34**:74.
131. **Fu, Z.F.**, Robinson, A. J. 1986. Equine herpesvirus type 1 infection - a reply. *N Z Vet J.* 34:136.
132. **Fu, Z.F.**; Robinson, A.J.; Horner, G.W.; Dickinson, L.G.; Grimmett, J.B.; Marshall, R.B. 1986: Respiratory disease in foals and the epizootiology of equine herpesvirus type 2 infection. *N. Z. vet. J.*,**34**:152-155.
133. **Fu, Z.F.**; Robinson, A.J.; Dickinson, L.G.; Grimmett, J.B. 1986: Equine herpesvirus type 1 (EHV-1) infection and vaccination with an inactivated EHV-1 vaccine. *N. Z. vet. J.*,**34**:14-15.
134. Jolly, P.D.; **Fu, Z.F.**; Robinson, A.J. 1986: Viruses associated with respiratory disease of horses in New Zealand: An update. *N. Z. vet. J.*,**34**:46-50.

PRESENTATIONS AND ABSTRACTS**Invited Presentations in Universities, Institutions, Industries, and Conferences:**

- 1 **Fu, Z. F. 2014.** The Experiences and Lessons of Rabies Control in the Developing Countries. Keynote Address. 2014 Annual Rabies Conference in China. May 27-28, 2014, Changchun, China
- 2 **Fu, Z. F. 2013.** Rabies virus infection and immunity: Mechanisms of immune evasion. One Health Rabies Symposium. November 14, 2013, Athens, GA
- 3 **Fu, Z. F. 2013.** Immune Activation and Evasion by Rabies Viruses. Technical Keynote Address. XXIV Rabies in the America Conference. October 27-31. 2013, Toronto, Canada
- 4 **Fu, Z. F. 2013.** The Experiences and Lessons of Rabies Control in the United States. Keynote Address. 2013 Annual Rabies Conference in China. April 11-14, 2013, Chengdu, China
- 5 **Fu, Z. F. 2013.** Developing new generation of oral rabies vaccines for dogs. BIT 5th Annual World Congress of Vaccine-2013. March 18-20, 2013, Hangzhou, China
- 6 **Fu, Z. F. 2012.** Rabies virus can be cleared from the central nervous system by induction of anti-rabies immunity and enhancement of blood brain barrier permeability. The 5th International Symposium on Emerging Viral Diseases. Oct. 24-27, 2012, Wuhan, China
- 7 **Fu, Z. F. 2012.** Development of Preventive and Therapeutic Vaccines for rabies. Department of Infectious Diseases, College of Veterinary Medicine, University of Georgia, October 1, 2012, Athens GA.
- 8 **Fu, Z. F. 2012.** Rabies: An Ancient Disease Continues To Be A Public Health Threat Today. World Rabies Day-Public Health Club. College of Veterinary Medicine, University of Georgia, September 28, 2012, Athens GA.
- 9 **Fu, Z. F. 2012.** Canine rabies control in the countryside in China: what can we learn from Latin America? Guangxi Association of Veterinary Medicine. June 7, 2012, Nanning, China
- 10 **Fu, Z. F. 2012.** Successful control of DOG Rabies in the Americas. 2012 Annual Rabies Conference in China, May 16-19, 2012, Beijing, China.
- 11 **Fu, Z. F. 2012.** Mechanisms by which viruses can be cleared from the central nervous system. Louisiana State University College of Veterinary Medicine, May 2, 2012. Barton Rouge.
- 12 **Fu, Z. F. 2012.** Most recent research development in rabies research. Guangxi Institute of Veterinary Research. April 3, 2012, Nanning, China

- 13 Fu, Z. F. 2012.** The advanced research in veterinary medicine. Huazhong Agricultural University, March 30, 2012. Wuhan, China
- 14 Fu, Z. F. 2012.** Developing Live Avirulent Rabies Virus Vaccines for Animals and Humans. BIT's 4th Annual World Congress of Vaccine-2012(WCV-2012), March 26-28, 2012, Beijing, China.
- 15 Fu, Z. F. 2012.** PRRSV-Development of novel therapies, The possible use of Cell-spot technology for developing monoclonal antibodies. Bilimeiyinwei Symposium for the Swine Industry in China, March 23-24, 2012. Yangjiang, Shenzheng, China
- 16 Fu, Z. F. 2012.** Clearance of Rabies Viruses from the Central Nervous System. University of Illinois Chicago Medical School, March 19, 2012. Chicago
- 17 Fu, Z. F. 2011.** Virus clearance from the CNS. China-British Forum for Doctoral Students in Veterinary Medicine Sponsored by the Ministry of Education. Huazhong Agricultural University, October 25, 2011. Wuhan, China
- 18 Fu, Z. F. 2011.** Graduate education in the USA. Graduate Forum, Huazhong Agricultural University, October 20, 2011. Wuhan, China
- 19 Fu, Z. F. 2011.** Clearance of rabies virus from the CNS by using recombinant virus expressing chemokines/cytokines. In the Distinguished Guest Seminar in Biomedical Sciences, Paul L. Foster School of Medicine, Texas Tech University Health Sciences Center, April 26, 2011. El Paso, Texas.
- 20 Fu, Z. F. 2011.** Possible treatment of clinical rabies using recombinant rabies virus expressing cytokines/chemokines. Huazhong Agricultural University, April 3, 2011. Wuhan, China
- 21 Fu, Z. F. 2010.** Rabies virus-induced innate immunity: the roles in pathogenesis and protection. Wuhan Institute of Virology, Academia Sinica. December 24, 2010. Wuhan, China
- 22 Fu, Z. F. 2010.** The roles of chemokines in the clearance of rabies virus from the central nervous system. Graduate Student Research Forum, Huanan Agricultural University, December 20, 2010. Guangzhou, China.
- 23 Fu, Z. F. 2010.** The role of innate immunity in rabies pathogenesis and protection. Jilin University. December 14, 2010. Changchun, China
- 24 Fu, Z. F. 2010.** NIH fellowships and Career awards. College of Arts and Sciences, UGA. September 10, 2010. Athens, GA
- 25 Fu, Z. F. 2010.** Excessive expression of chemokines in the CNS is detrimental to the host during rabies virus infections. The 1st BIT World Congress of Virus and Infections (WCVI-2010), July 30 – August 3, 2010, Pusan, South Korea.

- 26 **Fu, Z. F. 2010.** Controlling animal rabies is the first step toward the elimination of human rabies. National Veterinary Scholar Symposium. August 5-7, 2010. Athens, GA.
- 27 **Fu, Z. F. 2010.** Recombinant rabies viruses expressing dendritic cell-activation molecules are efficacious as avirulent vaccines. The 44th Joint Working Conference on Viral Diseases. The Japan-United States Cooperative Medical Science Program. Sapporo, Japan, June 28-30, 2010.
- 28 **Fu, Z. F. 2010.** Complete genome sequencing from two dog rabies viruses indicates that there are two clades of rabies viruses circulating in terrestrial mammals worldwide. The 44th Joint Working Conference on Viral Diseases. The Japan-United States Cooperative Medical Science Program. Sapporo, Japan, June 28-30, 2010.
- 29 **Fu, Z. F. 2010.** Immune Activation and Evasion by Rabies Viruses, China Agricultural University, Beijing, China. June 25, 2010.
- 30 **Fu, Z. F. 2010.** Developing vaccines and therapeutics for rabies virus infections. Huazhong Agricultural University, Wuhan, China. June 4, 2010.
- 31 **Fu, Z. F. 2010.** Development of New Therapeutics for Clinical rabies. Southwest University, Chongqing, China. May 31, 2010.
- 32 **Fu, Z. F. 2009.** Enhancement of RABV pathogenicity by chemokines is due to induction of high and persistent innate immune responses. The XX International Conference on Rabies in the Americas, Quebec City, Canada, October 18-23, 2009.
- 33 **Fu, Z. F. 2009.** Molecular pathogenesis of rabies, College of Veterinary Medicine, Xinjiang Agricultural University, Urumqi, July 17, 2009.
- 34 **Fu, Z. F. 2009.** Rabies in the far east: how can we bring rabies under control? The 2nd International Symposium on Emerging Infectious Diseases, Ulaanbaatar, Mongolia. July 8-10, 2009.
- 35 **Fu, Z. F. 2009.** Diagnostic approaches for rabies. The 2nd International Symposium on Emerging Infectious Diseases, Ulaanbaatar, Mongolia. July 8-10, 2009.
- 36 **Fu, Z. F. 2009.** The roles of chemokines in rabies virus attenuation and protection. Institute of Blood Transfusion Research, Chinese Academy of Military Medical Sciences, Beijing, July 17, 2009.
- 37 **Fu, Z. F. 2009.** Rabies Pathogenesis: The tales of two mechanisms. Department of Physiology and Pharmacology, College of Veterinary Medicine, University of Georgia, February 9, 2009.
- 38 **Fu, Z. F. 2008.** The two tails of RV-induced innate immune responses: How to harness the innate immune responses for vaccine development? XIX International Conference on Rabies in the Americas, Atlanta, GA, September 29, 2008.

- 39 **Fu, Z. F.** 2008. Chemokines, the beneficial and detrimental aspects in rabies pathogenesis and protection. Veterinary Research Institutes, Chinese Academy of Military Medical Sciences, Changchun, July 25, 2008.
- 40 **Fu, Z. F.** 2008. Innate immune responses: the double-edged sword in rabies pathogenesis. University of Manitoba, Winnipeg, Canada, April 23, 2008.
- 41 **Fu, Z. F.** 2008. Rabies: An Ancient Disease Continues To Be A Public Health Threat Today. The Global Health Symposium, University of Georgia. Athens, GA. April 21-22, 2008.
- 42 **Fu, Z. F.** 2008. Rabies control strategies in the world. China may want to follow South America, Center for Animal Disease Control and Prevention, Ministry of Agriculture, Beijing, March 20, 2008.
- 43 **Fu, Z. F.** 2007. Rabies control in China: A matter of science or policy. The University of Georgia Science and Security Lecture series. November 13, 2007.
- 44 **Fu, Z. F.** 2007. Rabies control strategies in the United States. China Rabies Control Strategy Symposium. Chinese Academy of Preventive Medicine, Beijing, July 23, 2007.
- 45 **Fu, Z. F.** 2007. Developing virus vaccines with the ability to stimulate innate immune responses. Dalian Jingtang-Andi Bio-Products Co., Ltd. Dalian, June 6, 2007.
- 46 **Fu, Z. F.** 2007. Rabies control in China: looking forward in the next two decades. College of Veterinary Medicine, Huanan Agricultural University, Guangzhou, June 4, 2007.
- 47 **Fu, Z. F.** 2007. Pathogenic and attenuated rabies viruses induce differential host protein expression in the central nervous system: Implication of neuronal dysfunction. Towards the elimination of rabies in Eurasia (Joint OIE/WHO/EU International conference). Paris, May 27-30, 2007.
- 48 **Fu, Z. F.** 2007. The rabies situation in Far East Asia. Towards the elimination of rabies in Eurasia (Joint OIE/WHO/EU International conference). Paris, May 27-30, 2007.
- 49 **Fu, Z. F.** 2007. Investigation of the molecular pathogenic mechanism of rabies using genomics and proteomics approaches. Mississippi State University, April 25, 2007.
- 50 **Fu, Z. F.** 2007. Rabies Pathogenesis: the tales of two stories with street and fixed rabies viruses. Nanjing University, Nanjing, China, January 29, 2007.
- 51 **Fu, Z. F.** 2006. Strategies for rabies control in China. China Institute of Veterinary Drug Control. Beijing China, September 29, 2006.
- 52 **Fu, Z. F.** 2006. Developing virus vaccines with the ability to stimulate the innate immune responses. The Ninth Internal and Overseas Life Scientific Forum. Sponsored by Chinese

Academy of Military Medical Sciences and Chinese Natural Science Foundation. Beijing, China, September 25-28, 2006.

- 53 **Fu, Z. F.** 2006. Developing novel rabies virus vaccines by expressing innate immune molecules. South Korea National Veterinary Research and Quarantine Services, Anyang, South Korea, September 19, 2006.
- 54 **Fu, Z. F.** 2006. Pathogenic mechanisms of street and fixed rabies virus-induced encephalitis. South Korea National Veterinary Research and Quarantine Services, Anyang, South Korea, September 18, 2006.
- 55 **Fu, Z. F.** 2006. Current rabies vaccines: their availability and usage in China. Vaccines for viral infections in developing countries. Yokohama, Japan, Sponsored by NIH, July 27-28, 2006.
- 56 **Fu, Z. F.** 2006. Pathogenic rabies virus infection alters the expression of host proteins involved in ion homeostasis and synaptic physiology in the central nervous system. Fortieth Joint Working Conference on Viral Diseases. Sendai, Japan, Sponsored by NIH, July 24-26, 2006.
- 57 **Fu, Z. F.** 2006. Street and fixed rabies viruses induce encephalitis using different pathogenic mechanisms. Hunan CDC, Changsha, China, July 3, 2006.
- 58 **Fu, Z. F.** 2006. Developing rapid fluorescent inhibition test for measuring rabies neutralizing antibodies. Hunan CDC, Changsha, China, July 3, 2006.
- 59 **Fu, Z. F.** 2006. Fixed rabies virus induces innate immune responses while pathogenic rabies virus evades the host innate immunity. China CDC, Virology Institute, Beijing, China, June 26, 2006.
- 60 **Fu, Z. F.** 2006. Differential host responses to street and fixed rabies virus infections. Beijing Academy of Agricultural and Horticultural Sciences, Beijing, China, June 23, 2006.
- 61 **Fu, Z. F.** 2006. Host Responses to Rabies Virus Infection: A Genomic and Proteomic Profiling Investigation. Department of Cellular Biology, University of Georgia, March 21, 2006.
- 62 **Fu, Z. F.** 2005. Rabies virus infection and innate immunity. Rabies symposium. Montabello, Canada. October 15, 2005.
- 63 **Fu, Z. F.** 2005. Rabies in China: a continuing public health threat in the 21st century. Emory Vaccine Dinner Club, Emory University. October 5, 2005.
- 64 **Fu, Z. F.** 2004. Pathogenic rabies virus evades the host innate immune responses. Wuhan Institute of Biological Products. December 21, 2004.

- 65 **Fu, Z. F.** 2004. Rabies Control in the United States. Henan CDC Annual Conference in Rabies Control. December 14, 2004.
- 66 **Fu, Z. F.** 2004. Investigation of rabies pathogenesis using functional genomics and proteomics. College of Animal Medicine, China Agricultural University, December 13, 2004.
- 67 **Fu, Z. F.** 2003. Neuronal dysfunction in rabies virus infection. Symposium of Rabies Pathogenesis. The Wistar Institute, Philadelphia, October 25-26.
- 68 **Fu, Z. F.** 2003. Apoptosis induced by neurotropic viruses: Protection or Pathogenesis? China Agricultural University, August 15, 2003.
- 69 **Fu, Z. F.** 2003. History of rabies virus vaccines: Glimpse into future vaccine development. Beijing Academy of Agricultural and Horticultural Sciences, Beijing, China, August 13, 2003.
- 70 **Fu, Z. F.** 2003. Rabies virus-induced apoptosis: A mechanism of pathogenesis or protection? Wuhan Institute of Biological Products, Ministry of Health, China. July 29, 2003.
- 71 **Fu, Z. F.** 2003. Apoptosis induced by neurotropic viruses: Protection or Pathogenesis? Huazhong Agricultural University, July 28, 2003.
- 72 **Fu, Z. F.** 2002. Rabies virus-induced apoptosis: A mechanism of pathogenesis or protection?. The Poultry Disease Research Center, The University of Georgia, Nov. 11, 2002.
- 73 **Fu, Z. F.** 2002. Genomic RNA Encapsidation of Negative- stranded RNA Viruses: An old problem revisited. Oxford, England, August 5, 2002.
- 74 **Fu, Z. F.** 2002. Attenuation of rabies virus by mutation of the nucleoprotein. Third World Congress on Vaccines and Immunisations. Opatija Adriatic Riviera, Croatia, June 4-9, 2002.
- 75 **Fu, Z. F.** 2002. Study of Rabies Virus Nucleoprotein: Its Structure and Function. The Center for Disease Control. March 7, 2002.
- 76 **Fu, Z. F.** 2001. Apoptosis and pathogenicity. Rabies in the Americas. XII International Meeting on Advances in Rabies Research and Control in the Americas. Peterborough, Ontario, Canada, November 12-16, 2001.
- 77 **Fu, Z. F.** 2001. Inhibition of Rabies Virus Infection with Antigenomic Oligonucleotides. Meeting of the Working Group on Treatment Options in the Management of Human Rabies. Toronto, Ontario, Canada-November, 2001.
- 78 **Fu, Z. F.** 2001. Characterization of bat rabies viruses: New concepts for an ancient disease. Department of Dermatology, University of Alabama at Birmingham, Birmingham, March 6, 2001.
- 79 **Fu, Z. F.** 2000. Silver-haired rabies virus variant does not induce apoptosis in the CNS of

experimentally infected animals. US-Japan Thirty-fourth Joint Working Conference on Viral Diseases, Inuyama, Japan, July 20-22, 2000.

- 80 **Fu, Z.F.** 2000. Immunization by topical application of a recombinant adenovirus expressing rabies virus glycoprotein induces protective immunity to viral challenge in mice. US-Japan Thirty-fourth Joint Working Conference on Viral Diseases, Inuyama, Japan, July 20-22, 2000.
- 81 **Fu, Z.F.** 2000. Rabies pathogenesis: Myths and Facts. University of Nebraska at Lincoln. April 7, 2000.
- 82 **Fu, Z.F.** 1999. Rabies in the Midwestern States. Presented as part of the Donald C. Kelly Lecture. January 27, 1999.
- 83 **Fu, Z. F.** 1999. Development of Modern Vaccines. Beijing Academy of Agricultural and Horticultural Sciences, Beijing, China, August 2, 1999.
- 84 **Fu, Z. F.** 1999. Molecular Pathogenesis of Rabies. Beijing Academy of Agricultural and Horticultural Sciences, Beijing, China, August 4, 1999.
- 85 **Fu, Z. F.** 1999. Reverse genetics – a tool used for the study of negative-stranded RNA viruses. Beijing Academy of Agricultural and Horticultural Sciences, Beijing, China, August 6, 1999.
- 86 **Fu, Z. F.** 1999. Virology and virus research in the next millenium. Beijing Academy of Agricultural and Horticultural Sciences, Beijing, China, August 17, 1999.
- 87 **Fu, Z. F.** 1999. Recombinant rabies vaccine (VRG): From the laboratory to the field. The National Control Institute for Veterinary Bioproducts & Pharmaceuticals, Ministry of Agriculture, Beijing, China, August 18, 1999.
- 88 **Fu, Z.F.** 1998. Sequence analysis of rabies virus isolated from dogs and bats. 135th Annual Convention, American Veterinary Medical Association. Baltimore, Maryland, July 25-29, 1998.
- 89 **Fu, Z. F.** Molecular Pathogenesis of Rabies. 1998 Inter-Campus Virology Meeting. Lincoln, Nebraska, October 18-19, 1998.
- 90 **Fu, Z. F.** Human rabies. Philadelphia College of Osteopathic Medicine, November 30, 1998.
- 91 **Fu, Z.F.** 1997. Emerging and reemerging infectious diseases: Virology towards the 21th century?. Wuhan Institute of Biological Products, Ministry of Health, China. November, 1997.
- 92 **Fu, Z.F.** 1997. Molecular pathogenesis of rabies: a new concept. Wuhan Institute of Biological Products, Ministry of Health, China. November, 1997.
- 93 **Fu, Z.F.** 1997. Overreview of modern vaccines. Wuhan Institute of Biological Products, Ministry of Health, China. November, 1997.

- 94 **Fu, Z.F.** 1997. The tale of two termini- Rabies virus transcription and replication. Kansas State University. December, 1997.
- 95 **Fu, Z.F.** 1996. Rabies: lessons from the past and a glimpse of the future. the 7th International Congress for Infectious Diseases. Hong Kong. June, 1996.
- 96 **Fu, Z.F.** 1996. Rabies pathogenesis and epidemiology. Thailand rabies symposium. Bangkok, Thailand. June, 1996.
- 97 **Fu, Z.F.** 1996. Rabies control strategies. ATCC Workshop on Viral Diseases. Rockville, Maryland. July, 1996.
- 98 **Fu, Z.F.** 1996. Inhibition of rabies virus infection in the CNS. Delaware Valley Investigators of Nucleic Acid Structure Monthly Meeting. October, 1996.
- 99 **Fu, Z.F.** 1996. Rabies virus vaccination. Fort Dodge Animal Health, IA. November, 1996.
- 100 **Fu, Z.F.** 1995. Recent advances in the study of rabies. "Microbe Hunters: Then and Now". May, 1995, Center Des Pensieres, Annecy, France.
- 101 **Fu, Z.F.** 1995. Interaction of rabies virus nucleoprotein and genomic RNA. Twenty-ninth Joint Working Conference on Viral Disease. August, 1995, Santa Fe, New Mexico.

Presentations and Abstracts in Conferences:

- 102 Huang, Y., Yang, Y., Gnanadurai, CW, **Fu, Z. F.** 2014. Failure of wild-type rabies virus to activate dendritic cells is one of the important mechanisms for immune evasion. 33nd Annual Meeting, American Society for Virology. June 19-23, 2014. Colorado State University, Fort Collins, CO.
- 103 Gnanadurai, CW, Yang, Y., Huang, Y., Leyson, CM, Cooper, T, Harvey, S, **Fu, Z. F.** 2014. Differential host immune responses after infection with wild-type or lab-attenuated rabies viruses in dogs. 33nd Annual Meeting, American Society for Virology. June 19-23, 2014. Colorado State University, Fort Collins, CO.
- 104 Li, Z., Huang, CT., Huang, Y., Zhang, GQ, Zhou, M., Chai, QQ, Wu, H., **Fu, Z. F.** 2014. Developing a combination of virus neutralizing antibodies and MCP-1 for rabies post-exposure prophylaxis. 2014 Annual Rabies Conference in China. May 27-28, 2014, Changchun, China.
- 105 Zhou, M., Wang, L., Zhou, S., Wang, Z., Cui, M., Zhao, L., **Fu, Z. F.** 2014. Development of oral rabies virus vaccines expressing dog GM-CSF. 2014 Annual Rabies Conference in China. May 27-28, 2014, Changchun, China
- 106 Cui, M., Yuan, JL, Wang, C, Zhang, N, Wang, K, Wang, KL, Hu, PD, Lin, XW, Yang, H, **Fu,**

- Z. F.** 2014. Inhibition of T cell response by Japanese Encephalitis Virus: A mechanism of immune evasion. The American Association of Immunologists AAI Annual Meeting. May 2-6, 2014, Pittsburg, Pennsylvania.
- 107** Chai, QQ, Fu, ZF. 2014. Enhancement of blood-brain barrier permeability and reduction of tight junction protein expression are initiated by expression of neuronal CXCL10 induced by rabies virus infection. Neuroscience Symposium. April 19, 2014. Georgia Regency University, August, Georgia.
- 108** Huang, CT., Li, Z., Zhang, GQ, Zhou, M., **Fu, Z. F. 2013.** Peripheral antibodies with a compromised BBB, even in the absence of B cells, are sufficient to clear CNS Rabies Virus. 2013 Annual Conference of American College of Veterinary Pathologists. November 16-20, 2013. Montreal, Canada,
- 109** Chai, QQ., He, W.Q., **Fu, Z. F.** 2013. Enhancement of BBB permeability and reduction in the expression of tight junction proteins are not due to rabies virus infection per se but virus-induced cytokines/chemokines. XXIV Rabies in the America Conference. October 27-31. 2013, Toronto, Canada
- 110** Gnanadurai, CM, Zhou, M, **Fu, Z. F.** 2013. Presence of Virus Neutralizing Antibodies in Cerebral Spinal Fluid Correlates with Non-Lethal Rabies in Dogs. XXIV Rabies in the America Conference. October 27-31. 2013, Toronto, Canada
- 111** Chai, QQ., He, W.Q., **Fu, Z. F.** 2013. Enhancement of BBB permeability and reduction in the expression of tight junction proteins are not due to rabies virus infection per se but virus-induced cytokines/chemokines. 32nd Annual Meeting, American Society for Virology. The Pennsylvania State University, University Park, PA. July 20-24, 2013.
- 112** Chen, Z., Ye, J., **Fu, Z. F.**, Chen HC., Cao SB. 2013. Interaction between Japanese encephalitis virus NS3 and host adenine nucleotide translocase 2. 32nd Annual Meeting, American Society for Virology. The Pennsylvania State University, University Park, PA. July 20-24, 2013.
- 113** Kumar, D., Zhou, M., Gnanadurai, CW. **Fu, Z. F.** 2013. Generation of G-deleted mutant of rabies virus by reverse genetics. The 29th Annual Clinical Virology Symposium and Annual Meeting of the Pan American Society for Clinical Virology. April 26-May 1, 2013. Daytona Beach, Florida.
- 114** Zhou M., Zhang G., Ren GP, **Fu, Z. F.** 2013. Developing recombinant oral rabies vaccines for dogs. 2013 Annual Rabies Conference in China. April 11-14, 2013, Chengdu, China
- 115** Chai, Q.Q., He, **Fu, Z.F.** 2013. Enhancement of the Blood-brain Barrier is not Due to the Rabies Virus infection but the Rabies Virus-induced Cytokine/Chemokines Expression. One Health Symposium. March 21-24, 2013. Athens, Georgia.
- 116** GnanaduraI, CW, Zhou, M., He, W., Leyson, CM., Huang, CT., Salyards, G., Harvey, SB.,

- Chen, Z., He, B., Yang Y., Hooper, D. C., Dietzchold, B., **Fu, Z. F.** 2013. Presence of Virus Neutralizing Antibodies in Cerebral Spinal Fluid Correlates with Non-Lethal Rabies in Dogs. One Health Symposium. March 21-24, 2013. Athens, Georgia
- 117** Huang, CT, Li, ZG, Zhang, GQ, Zhou, M., **Fu, Z. F.** 2012. Antibodies combined with MCP-1. 2012 Annual Conference of American College of Veterinary Pathologists, Seattle, WA, December 3-6, 2012.
- 118** Huang, CT, Zhang, GQ, Zhou, M., **Fu, Z. F.** 2012. Neutralization antibodies in combination of MCP-1 are as effective as live-attenuated rabies virus in clearing rabies virus from the central nervous system. The 32nd Annual Meeting of American Society for Virology, Madison, Wisconsin, July 21-25, 2012.
- 119** Chen, ZH, Zhang, GQ, Ren, GP, Zhou, M, Smith, J., Gao, X, **Fu, ZF**, He, B. 2012. Developing A Novel Oral Rabies Vaccine Based on Parainfluenza Virus 5. The 32nd Annual Meeting of American Society for Virology, Madison, Wisconsin, July 21-25, 2012.
- 120** Wang, H.L., Zhang, G.Q., Wen, Y.J., Jin, H.L., Yang, S.T., Chen, H.C., Xia, X.Z., **Fu, Z. F.** 2012. Recombinant rabies viruses expressing chemokines/ cytokines can be used effectively to prevent the development of rabies in a mouse model. 2012 Annual Rabies Conference in China, May 16-19, 2012, Beijing, China.
- 121** Ren, G.P., Zhou, M., Zhang, G.Q., **Fu, Z.F.** 2012. Recombinant rabies viruses expressing GM-CSF or flagellin are effective vaccines for both parental and oral immunizations. 2012 Annual Rabies Conference in China, May 16-19, 2012, Beijing, China.
- 122** Zhang, G.Q., Wang, H.L., Mahmood, F., **Fu, Z.F.** 20 12. Glycoprotein of street rabies virus plays a role in evading host innate immune responses. Annual Rabies Conference in China, May 16-19, 2012, Beijing, China.
- 123** Yu, F.L., Zhang, G.Q., Cui, M., Xiao, S.B., Fang, L.R., Song, Y.F., Chen, H.C., **Fu, Z.F.** 2012. Characterization of complete genome sequences of two dog rabies viruses demonstrates the molecular diversity of rabies viruses in China and Asia. Annual Rabies Conference in China, May 16-19, 2012, Beijing, China.
- 124** Wen, Y.J., Wu, H., **Fu, Z.F.** 2012. The innate immunity function during infection of rabies virus. Annual Rabies Conference in China, May 16-19, 2012, Beijing, China.
- 125** Yin, W.W., Jie, D., Leger, A., **Fu, Z.F.**, Wang, C.L., Li, G.Z., Guo, F.S., Edwards, J., Tang, Q., Tu, C.C., Vong, S. 2012. Gaps remain in China's ability in eliminating rabies. Annual Rabies Conference in China, May 16-19, 2012, Beijing, China.
- 126** Chai, Q.Q., He, W.Q., **Fu, Z.F.** 2012. Enhancement of blood-brain-barrier (BBB) permeability after infection with lab-attenuated rabies virus is associated with modulation of tight-junction proteins. Regional Conference of Virology. March 10-11, 2012. Atlanta, GA.

- 127** Huang, C-T., Zhou, M., Zhang, G.Q., **Fu, Z.F.** 2012. Neutralization antibodies in combination of MCP-1 are effective in clearing rabies virus from the central nervous system. Regional Conference of Virology. March 10-11, 2012. Atlanta, GA.
- 128** Niu, X-f., Zhang, G.Q., **Fu, Z.F.** 2012. Rabies Virus Phosphoprotein is Associated with the Sensitivity/Resistance to Type I Interferon Treatment. Regional Conference of Virology. March 10-11, 2012. Atlanta, GA.
- 129** Zhou, Ming., Zhang, G.Q., Ren, G.P., **Fu, Z.F.** 2012. Recombinant rabies viruses expressing GM-CSF or flagellin are effective vaccines for both parental and oral immunizations. Regional Conference of Virology. March 10-11, 2012. Atlanta, GA.
- 130** Zhang, G.Q., Wang, H.L., Mahmood, F., **Fu, Z.F.** 2012. Both the rate of rabies virus replication and the expression of its glycoprotein are important in the induction of innate immune responses and pathogenicity. Regional Conference of Virology. March 10-11, 2012. Atlanta, GA.
- 131** Chai, Q.Q., **Fu, Z.F.** 2011. Enhancement of blood-brain-barrier (BBB) permeability after infection with lab-attenuated rabies virus is associated with the up-regulation of ICAM. Veterinary Research Day, College of Veterinary Medicine, University of Georgia. October 13, 2011. Athens, GA.
- 132** Huang, C-T., **Fu, Z.F.** 2011. Neutralization antibodies in combination of MCP-1 are as effective as live-attenuated rabies virus in clearing rabies virus from the central nervous system. Veterinary Research Day, College of Veterinary Medicine, University of Georgia. October 13, 2011. Athens, GA.
- 133** Niu, X-f., Fu, Z.F. 2011. Rabies virus phosphoprotein is associated with sensitivity/resistance to type I interferon treatment. Veterinary Research Day, College of Veterinary Medicine, University of Georgia. October 13, 2011. Athens, GA.
- 134** Wang, H., Zhang, G., Wen, Y., **Fu, Z. F.** 2010, Enhancement of Blood Brain Barrier (BBB) is the most important factor in preventing animals from developing rabies. Veterinary Research Day, College of Veterinary Medicine, University of Georgia. October 14, 2010. Athens, GA.
- 135** Wang, H., Zhang, G., Wen, Y., **Fu, Z. F.** 2010, Enhancement of Blood Brain Barrier (BBB) is the most important factor in preventing animals from developing rabies. Veterinary Research Day, College of Veterinary Medicine, University of Georgia. October 14, 2010. Athens, GA.
- 136** Wang, H., Zhang, G., Wen, Y., **Fu, Z. F.** 2010, Both Enhancement of Blood Brain Barrier (BBB) and the adaptive immunity are the most important factors in preventing animals from developing rabies. Blood-Brain-Barrier Symposium, Cold Spring Harbor laboratory. December 8-11, 2010. Cold Spring Harbor, New York.

- 137** Wang, H., Zhang, G., Wen, Y., **Fu, Z. F.** 2010, Enhancement of Blood Brain Barrier (BBB) is the most important factor in preventing animals from developing rabies. Veterinary Research Day, College of Veterinary Medicine, University of Georgia. October 14, 2010. Athens, GA.
- 138** Zhang, G, Wang, H., Mahmood, F., **Fu, Z. F.** 2010. Glycoprotein of street rabies virus plays a role in evading host innate immune responses. Veterinary Research Day, College of Veterinary Medicine, University of Georgia. October 14, 2010. Athens, GA.
- 139** Jeffers, A., Wang, H., **Fu, Z. F.** 2010. Virus Neutralizing antibodies are important markers for rabies protection after infection with wildtype virus. National Veterinary Scholar Symposium. August 5-7, 2010. Athens, GA.
- 140** **Fu, Z. F.**, Zhao, L., Wen, Y., Wang, H. 2010. Developing novel rabies virus vaccines by expressing dendritic cell-activation molecules. The 13th Annual Conference on Vaccine Research. April 26-28, 2010. Bethesda, MD.
- 141** Fong, J., Wen, Y., Niu, X., **Fu, Z. F.** 2010. Determination of interferon sensitivity of wild-type and lab-adapted rabies viruses. CURO Symposium 2010, University of Georgia, Athens. March 29, 2010.
- 142** Wen, Y. **Fu, Z. F.** 2010. Rabies virus expressing dendritic cell-activation molecules enhance the innate and adaptive immune response. Eleventh Southeastern Regional Virology Conference. Atlanta, Georgia. March 19-21, 2010.
- 143** Wang, H., Zhao, L., Wen, Y. **Fu, Z. F.** 2010. Expression of MIP-1 α by a recombinant rabies virus reduces pathogenicity, but enhances the protective immune responses. Eleventh Southeastern Regional Virology Conference. Atlanta, Georgia. March 19-21, 2010.
- 144** Zhang, G., **Fu, Z. F.** 2010. Characterization of the complete genome sequences from two dog rabies viruses Eleventh Southeastern Regional Virology Conference. Atlanta, Georgia. March 19-21, 2010.
- 145** Zhao, L., Toriumi, H., Kuang, Y., **Fu, Z. F.** 2008. Innate immunity against rabies virus infections: Not all chemokines are beneficial. XIX International Conference on Rabies in the Americas, Atlanta, GA, September 28 – October 3, 2008.
- 146** Kuang, Y., Zhao, L., Lackay, S., **Fu, Z. F.** 2008. Expression of chemokine IP-10 correlates with the induction of BBB permeability changes in laboratory-adapted RV infection. XIX International Conference on Rabies in the Americas, Atlanta, GA, September 28 – October 3, 2008.
- 147** Zhang, Y-Z., Xiong, C-L., Lin, X-D., Zhou, D-J., Tan, Y-J., Yu, X-X., Jiang, R-J., Xiao, Q-Y., Xie, X-Y., Li, M-H., Ai, Q-S., Zhang, L-J., Zou, Y., Huang C., **Fu, Z. F.** 2008. Genetic diversity of rabies viruses in China: Evidence for the presence of two distinct clades of rabies viruses in China. XIX International Conference on Rabies in the Americas, Atlanta, GA, September 28 – October 3, 2008.

- 148 Zhao, L., Toriumi, H., Kuang, Y., **Fu, Z. F.** 2008. Developing avirulent rabies virus vaccines by expressing chemokines. American Society for Virology, Ithaca, New York, July 12-16, 2008.
- 149 Toriumi, H., Zhao, L., Kuang, Y., **Fu, Z. F.** 2007. Expression of chemokine in rabies virus genome attenuates rabies virulence and enhances its immunogenicity. International meeting on Rabies in the Americas XVIII, Guanajuato, Mexico. September 30-October 5, 2007.
- 150 Dhingra, V., **Fu, Z. F.**, 2005. Proteomic analysis reveals neuronal dysfunction in pathogenic rabies virus-infected mice. Veterinary Research Day, University of Georgia, October 24, 2005.
- 151 Sheppard, H., Wang, Z.W., Kuang, Y., **Fu, Z. F.**, 2005. Attenuated virus induced more expression of chemokines in the CNS of mice than pathogenic rabies virus as detected by real time-PCR. Veterinary Research Day, University of Georgia, October 24, 2005.
- 152 Sarmiento, L.V., Dhingra, V., **Fu, Z. F.**, 2005. Apoptosis limits the spread of rabies virus via caspase-dependent and independent pathways. Veterinary Research Day, University of Georgia, October 24, 2005.
- 153 Zhang, Y. Z., Xiong, C. L., Xiao, Q. Y., Wang, D. M., Jiang, R.J., Zhou, D. J., Hao, Z. Y., Xu, G. Z., Shi, N.F., **Fu, Z. F.** 2005. Detection of rabies virus in both saliva and brains of asymptomatic Dogs in China. The XVI International Conference: Rabies in the Americas. Ottawa, Canada, October 16-19, 2005.
- 154 Chakravarthy R. Ch, Pak, K.Y., Mattis, J.A., **Fu, Z. F.** 2005. Evaluation of Prophylactic Efficacy of Human Anti-Rabies Monoclonal Antibodies in Mouse model. The XVI International Conference: Rabies in the Americas. Ottawa, Canada, October 16-19, 2005.
- 155 Wang, Z.W., Jiang, B., **Fu, Z. F.**, 2005. Pathogenic rabies virus evades the innate immune responses while attenuated rabies virus activates the innate immune responses. The XVI International Conference: Rabies in the Americas. Ottawa, Canada, October 16-19, 2005.
- 156 Sheppard, H., Wang, Z.W., Kuang, Y., **Fu, Z. F.**, 2005. Attenuated virus induced more expression of chemokines in the CNS of mice than pathogenic rabies virus as detected by real time-PCR. Veterinary Scholar Research Day, University of Georgia, July 26, 2005.
- 157 Zhang, Y. Z., Xiong, C. L., Xiao, Q. Y., Wang, D. M., Zhou, D. J., Hao, Z. Y., Xu, G. Z., Dong, X., Luo, Y. X., **Fu, Z. F.** 2005. An epidemiological study of human rabies in China, 2004. XIII International Congress of Virology, San Francisco, CA., July 23-28, 2005.
- 158 **Fu, Z. F.**, Wang, Z.W., Y, Jiang, B., 2005. Pathogenic rabies virus evades the innate immune responses by down-regulation of the glycoprotein expression. XIII International Congress of Virology, San Francisco, CA., July 23-28, 2005.

- 159** Sarmento, L., **Fu, Z. F.** 2005. Apoptosis inhibits the spread of rabies virus in the CNS. XIII International Congress of Virology, San Francisco, CA., July 23-28, 2005.
- 160** Sarmento, L., Faggioni, C., **Fu, Z. F.** 2004. Induction of apoptosis in the spinal cord by attenuated rabies viruses limits virus spread to the brain. The XV International Conference Rabies in the Americas. Santo Domingo, Dominican Republic, October 31 to November 4, 2004.
- 161** Li, X., Sarmento, L., **Fu, Z. F.** 2004. Destruction of neuronal processes in mouse hippocampus after rabies virus infection. The 23rd Annual Meeting of the American Society for Virology. McGill University, Montreal, Quebec, Canada, July 10-14, 2004.
- 162** **Fu, Z. F.**, Wang, Z.W., Sarmento, L., Wang, Y, Jiang, B., 2004. Differential activation of the innate immune and anti-viral responses in animals infected with wildtype and attenuated rabies viruses. The 23rd Annual Meeting of the American Society for Virology. McGill University, Montreal, Quebec, Canada, July 10-14, 2004.
- 163** Dhingra, V., Li, X., **Fu, Z. F.** 2004. Differential expression of host proteins in animals infected with wildtype and attenuated rabies viruses.. The 23rd Annual Meeting of the American Society for Virology. McGill University, Montreal, Quebec, Canada, July 10-14, 2004.
- 164** Liu, P., Wu, X., **Fu, Z. F.** 2004. Rabies virus phosphoprotein and nucleoprotein interaction. 2004 Southeastern Regional Virology Conference, Atlanta, GA, April 10-12.
- 165** Wang, Z.W., Wang, Y, Sarmento, L., Jiang, B., **Fu, Z. F.** 2004. Investigation of rabies pathogenesis using functional genomics. 2004 Southeastern Regional Virology Conference, Atlanta, GA, April 10-12.
- 166** Sarmento, L., Li, X., **Fu, Z.F.** 2004. Rabies virus glycoprotein is responsible for the induction of apoptosis. 2004 Veterinary Research Day Proceedings. College of Veterinary Medicine, March 29-30.
- 167** Liu, P., Duan, J., **Fu, Z. F.** 2004. Mapping the domains on the nucleoprotein of rabies virus required for N-N, N-P, N-RNA interactions and for viral transcription and replication. 2004 Veterinary Research Day Proceedings. College of Veterinary Medicine, March 29-30.
- 168** Wang, Z.W., Wang, Y, Jiang, B., Sarmento, L., **Fu, Z. F.** 2004. Pathogenic rabies virus suppresses host innate immune responses. 2004 Veterinary Research Day Proceedings. College of Veterinary Medicine, March 29-30.
- 169** Dhingra, V., Wang, Z. W., Li, Q., Allison, A., Stalkneck, D., **Fu, Z. F.** 2004. investigation of host response in West Nile Virus infected neurons using microarray and two-dimensional differential in gel electrophoretic analysis. 2004 Veterinary Research Day Proceedings. College of Veterinary Medicine, March 29-30.

- 170** Sarmiento, L., Li, X., **Fu, Z.F.** 2003 Rabies virus glycoprotein is responsible for the induction of apoptosis. The XIV International Conference Rabies in the Americas. Thomas Jefferson University, Philadelphia, October 19-24.
- 171** Liu, P., Yang, J., Wu, X., **Fu, Z. F.** 2003. Rabies virus phosphorylation interacts with nucleoprotein to prevent it from phosphorylation and thus keeping it in a specific configuration for genomic RNA encapsidation. XII International Conference on Negative-stranded viruses. Pisa, Italy, June 14-19th, 2003.
- 172** Liu, P., Wu, X., **Fu, Z. F.** 2003. Rabies virus phosphorylation interacts with nucleoprotein to keep it in a specific configuration for genomic RNA encapsidation. 2003 Veterinary Research Day Proceedings. College of Veterinary Medicine, March 24-25.
- 173** Stortz, J.,**Fu, Z. F.** 2002. Purification of rabies virus N and P proteins using isoelectric focusing. 2002 Georgia Veterinary Scholar Symposium, College of Veterinary Medicine, University of Georgia, August 1, 2002.
- 174** **Fu, Z. F.**, Wu, X. F., Duan, J. H. 2002. Rabies virus N interacts with P to confer the specificity of genomic RNA encapsidation by eliminating the encapsidation of non- specific RNA. XII International Congress of Virology. Paris, **France**, July 27 to August 1, 2002.
- 175** **Fu, Z. F.** 2002. Attenuation of rabies virus by mutation of the nucleoprotein. Third World Congress on Vaccines and Immunisations. Opatija Adriatic Riviera, **Croatia**, June 4-9, 2002.
- 176** Shah, P., **Fu, Z. F.** 2002. Induction of apoptosis by rabies virus proteins. 2002 CURO symposium, The University of Georgia, April, 2002.
- 177** Wu, X., **Fu, Z. F.** 2002. Both viral transcription and replication are affected when the rabies virus nucleoprotein is not phosphorylated. 2002 Southeastern Regional Virology Conference, Atlanta, GA, April 12-14.
- 178** Lei, X., **Fu, Z.F.** 2002. CK-II phosphorylates rabies virus nucleoprotein. 2002 Southeastern Regional Virology Conference, Atlanta, GA, April 12-14.
- 179** Wu, X., **Fu, Z. F.** 2002. Unphosphorylated rabies virus nucleoprotein inhibits both viral transcription and replication. 2002 Veterinary Research Day Proceedings. College of Veterinary Medicine, March 11-12.
- 180** Lei, X., **Fu, Z.F.** 2002. Cloning, expression, purification and phosphorylation of rabies virus nucleoprotein. 2002 Veterinary Research Day Proceedings. College of Veterinary Medicine, March 11-12.
- 181** Donaldson, J., **Fu, Z. F.** 2001. Recombinant rabies virus with mutation of the phosphorylated serine to alanine reverted to its virulent genotype in vivo. 2001 Georgia Veterinary Scholar Program and 2001 Merck-Merial Veterinary Scholar Symposium, College of Veterinary Medicine, University of Georgia, August 1-5, 2001.

- 182 Fu, Z.F.** 2001. Apoptosis and pathogenicity. Rabies in the Americas. XII International Meeting on Advances in Rabies Research and Control in the Americas. Peterborough, Ontario, Canada, November 12-16, 2001.