Search Committee  
Colorado State University  
Fort Collins, CO 80523  

Attn: Ms. Patsy Harlan  
Patsy.Harlan@colostate.edu  

October 11, 2015  

To the members of the search committee:  

I am pleased and excited to place myself in consideration for the position of Executive Director of the Infectious Disease Research Center (IDRC) at Colorado State University. I look forward to meeting hiring officials, staff and faculty of the IDRC, and officials of the University to present my qualifications for this critically important position. I believe that you will see that I am a uniquely experienced research leader with a track record that aligns with the expectations described in the position announcement. Please note that Mr. Patrick Hunnicutt of Occam Global initially contacted me regarding the position.  

The IDRC at CSU is an environment that requires a professional that wears many hats. Scientific program manager, facilities integrity and operations manager, regulatory compliance leader, marketing, communications leader, and public relations manager. While these positions are very different in their specific needs, they all share a common goal – the safe, and productive use of the facilities and capabilities of the IDRC and the communication of the vital importance of the center to preserving public health and national security to the community in and around CSU, and the wider public in the region, state, and nation. Colorado State and the IDRC are world-class institutions, and I will make it my first and only priority to maintain and extend the reputation, productivity, and usefulness of the center to it's stakeholders in government, academia, commercial business, and the community.  

How can one person do so much, you should be asking me. I will tell you that it is by teaming with the right people, encouraging common objectives, finding and honing best practices, and by communicating honestly and openly about challenges that may come before they occur to prepare your team for hurdles. While that may sound like the requirements for a new initiative, and less about day to day operations, I believe that in any large and complex organization, these factors are critically important for continued success and growth. With 25 years of experience in research, product development, biosafety level three facilities design/construction/programming and management, I feel that I have the knowledge, skills and abilities to lead the IDRC as it's next Executive Director.  

In previous positions in contract research (including my current position) and academic research, I have developed and managed large and complex programs
focused on discovery and development of medical countermeasures for biodefense and emerging infectious diseases. I have acted as RO or ARO for select agent programs, overseen the development of biological safety programs, trained research and administrative professionals in infectious diseases, facilities operations and programming, and interacted with public officials on issues relating to the presence of new or existing research and development facilities in their jurisdictions. I feel all these experiences have prepared me well for the position of IDRC’s Executive Director.

In addition, I have worked as a contract research leader focused on revenue generation, cost containment, and resource allocation for research, research facilities, personnel, and projects. I feel that this experience is vital to the oversight responsibility for the IDRC’s incubator facility as well as the GMP manufacturing facility. Over my career, I have dealt with clients and other stakeholders in government, NGO’s, and the private commercial sector to maximize productivity of facilities related to product development. I look forward to utilizing these skills to enhance the visibility and the return on investment of the IDRC’s capabilities. I believe that the unique capabilities in both facilities and human resources at CSU and the IDRC can grow to occupy a significant position in the government resources, as well as a resource for the private sector in their efforts to build public-private partnerships to advance technology relevant to the mission of the IDRC and the university.

As I have stated above, I have worked for the last 25 years in biomedical research with increasing responsibility in multiple organizations. My current position at SRI International, and most recent positions at Tulane University School of Medicine, Southern Research Institute required my expertise to build and manage large research and development programs with heavy reliance on biosafety, biocontainment, and bio-surety programs that support NIAID mission to develop diagnostics, therapeutics, and vaccines for emerging pathogens and agents with bioterror potential. I have also worked closely with private industry, from small start ups to biotech to large pharma to advance technology in medical countermeasures for emerging infectious diseases and biodefense. In all these positions, I was responsible for design, construction, and programming of biosafety level three and animal biosafety level three laboratories in compliance with CDC and USDA Select Agent Program requirements. I also managed research efforts in these facilities focused in influenza viruses, SARS and MERS coronaviruses, Hantaviruses, arenaviruses, poxviruses, equine encephalitis viruses, West Nile virus, 

*Bacillus anthracis*, *Yersinia pestis*, Botulinum toxin, Staph Enterotoxin B (SEB), and Ricin. In addition, I have managed research with BSL-2 agents of importance to public health as a member of the senior scientific staff or faculty at these institutions.

I have served effectively in research program administration in these fields, managing research and research support activities. As a contract laboratory working closely with NIH, DoD, EPA, DOE, and others, I have had a long working relationship with the US Government, focused on common objectives and outcomes for research and development in biodefense and emerging infectious diseases. I have worked in a complex electronic
environment with an understanding of project management, databases, and repositories
managing select agent programs and inventories, contract research programs, and other
extramurally funded research in infectious diseases. I am experienced at the use of
multiple software and hardware tools to monitor scientific activities as well and facilities
operations with regard to security, surety, safety, and compliance with regulatory
requirements by USDA, CDC, DoD, EPA, and FDA. With many years of research and
management experience, I have a wealth of skill in working with a variety of
stakeholders, from laboratory technicians and students, to government program
managers, elected and appointed officials, and investors. I believe my ability to work
with a broad cross section of interested parties focused on research and development
results makes me a valuable resource in the position of Executive Director of the IDRC at
CSU. It is these knowledge, skills, and abilities that I bring to the Institute and its
stakeholders. With a reputation in both science and program management, facilities
oversight, and research for both government and non-government sponsors, I am sure of
my ability to oversee efforts to advance medical countermeasures discovery,
development, and deployment using wisely the resources of the Institute.

I look forward to speaking with the decision makers about my qualifications for the
position of Executive Director. Please contact me at the information below with any
questions or request for additional information. Thank you for your time and
consideration.

Best regards,

[Signature]

Thomas G. Voss, Ph.D.
Executive Director, Discovery Biology,
Director, Center for Infectious Diseases,
140 Research Drive,
Harrisonburg, VA 22802
Resume'  

An infectious disease professional with expertise in emerging infectious diseases, biodefense, and national security. A contract researcher with experience working with multiple stakeholders, clients, and the community to manage facilities, programs, and projects in safe and compliant manner. An excellent communicator of scientific and technical information. A responsible manager that works across disciplines and expertise to find the right solution to the challenge at hand. A team player that focuses on best practices to get results.

Work:

SRI International  
Discovery Biology Section  
Center for Infectious Diseases  
140 Research Drive  
Harrisonburg, VA 22802

Education:

1982-1990  
B.S. - Microbiology, University of Texas, Arlington, TX

1991-1994  
Ph.D. - Microbiology and Immunology, Tulane University School of Medicine, New Orleans, LA. 
Dissertation Title: Modulation of Cellular Ion Transport During Human Immunodeficiency Virus Infection

Experience:

9/2015-Present  
Executive Director, Discovery Biology  
Director SRI Center for Infectious Disease Research, SRI International, Biosciences Division  
140 Research Drive, Harrisonburg, VA 22802

1/2015-Present  
Director, Infectious Disease Research, SRI International  
Discovery Biology Section, Biosciences Division  
140 Research Drive, Harrisonburg, VA 22802

2013-2015  
Director, Laboratory of Virology, SRI International Center for Immunology and Infectious Diseases  
140 Research Drive, Harrisonburg, VA 22802
Resume

Thomas G. Voss, Ph.D.

Present

Adjunct Professor, George Mason University, Biomedical Research Laboratory, 10650 Pyramid Place, MS 115 Manassas, VA 20110

2012 – 2013

Associate Professor (with tenure). Tulane School of Medicine Department of Microbiology and Immunology, New Orleans, LA

2005 to 2011

Assistant Professor. Tulane School of Medicine Department of Microbiology and Immunology, New Orleans, LA

2004 – 2005

Vice-President. Homeland Security and Emerging Infectious Disease Division, The Southern Research Institute, Birmingham AL

2002 – 2004

Director. Homeland Security Department, The Southern Research Institute, Frederick MD

2000 – 2001

Manager. Emerging Pathogens Group, The Southern Research Institute, Frederick MD

2000

Senior Research Virologist. Cell Biology and Immunology Department, The Southern Research Institute, Birmingham, AL

1999-2000

Product Specialist. Advanced Imaging Microscopy Carl Zeiss, Inc., Thornwood NY

1998-1999

Biological Operations Manager. Chemical and Biological Defense Division, The Southern Research Institute, Birmingham, AL

1996-1998

Visiting Scientist (Group Leader). Measles Virus Section, Respiratory and Enteric Virus Branch, US Centers for Disease Control and Prevention, Atlanta GA

1995-1996

Postdoctoral Fellow. Internal Medicine Division, University Hospital, Zurich, Switzerland

1994-1995

ASM/NCID Postdoctoral Research Associate. Pathogenesis Section, Special Pathogens Branch, US Centers for Disease Control and Prevention, Atlanta GA

Other Activities (consulting)

2009 to Present

Subject Matter Expert (Virology, Immunology, biodefense, vaccine development, antiviral development)
GLG Associates
Washington DC, USA
Resume

2008 to 2010
Director of Viral Therapeutics
Associate Director, Center For Excellence in Passive Therapeutics
UND Research Foundation, Grand Forks, ND 58201

2007-2010
Senior Scientist/Subject Matter Expert, National Security Division, Mantech SRS, Huntsville AL

2014- Present
Member, James Madison University Institutional Biological Safety Committee, Harrisonburg, VA USA

2011
Reviewer, FY12/13 DTRA Chemical and Biological Technologies Directorate Phase II program build process.

2010- 2013
Member, Mentorship Committee for Dr. John Schieffelin, Department of Pediatrics, Tulane School of Medicine.

2008-2010
Member, University Faculty Senate - Basic Sciences, Tulane University

2008-2013
Member, Faculty Advisory Committee, Tulane School of Medicine

2007 – 2008
Reviewer, State of Pennsylvania Research Initiatives

2005-Present
Section Editor, Virology Journal (on-line)

2005 – 2013
Advisor- development of Biological Safety Level Three (BSL-3) laboratories at Tulane (TNPRC and TSOM campuses)

2005-2010
Member, Institutional Biological Safety Committee (IBC), Tulane School of Medicine

2006 – 2010
Member, Institutional Animal Care and Use Committee (IACUC), Tulane National Primate Research Center

2006- 2013
Member, Tulane Resource Allocation Committee (TRAC), Tulane National Primate Research Center

2008

2004
Reviewer, National Academy of Sciences report on Security of Department of Defense Mail System

2002
Member, World Health Organization Working Group on SARS-CoV Vaccines, Geneva Switzerland
Resume’

Thomas G. Voss, Ph.D.

Honors

2008- Present  International Society for Influenza and Other Respiratory Viruses
2001 – Present  International Society for Antiviral Research
2005           American Society for Microbiology, National Member
1985           American Society for Microbiology, Texas Branch Member
1991           American Society for Microbiology, South Central Branch Member

2007 – 2010    Secret Level Security Clearance (DISCO)
2006 – 2010    Scientific Advisory Board, AVI Biopharma, Corvallis OR
2003           Top 40 under 40 Award Winner, Birmingham Business Journal
1996           Oak Ridge Institute for Science Education Fellowship Award Recipient
1994           ASM/NCID Postdoctoral Research Associates Award Recipient
1991           Tulane University Doctoral Research Fellow Award Recipient
1991           Tulane University Graduate School Tuition Scholarship Recipient
CURRICULUM VITAE

THOMAS GREGORY VOSS, PH.D.

ACADEMIC DEGREES:

1982-1990  B.S. - Microbiology, University of Texas, Arlington, TX

1991-1994  Ph.D. - Microbiology and Immunology,
            Tulane University School of Medicine, New Orleans, LA.
            Dissertation Title: Modulation of Cellular Ion Transport
            During Human Immunodeficiency Virus Infection

PROFESSIONAL EXPERIENCE AND APPOINTMENTS:

9/2015-Present  Executive Director, Discovery Biology
                Director SRI Center for Infectious Disease Research,
                SRI International, Biosciences Division
                140 Research Drive, Harrisonburg, VA 22802

1/2015-Present  Director, Infectious Disease Research, SRI International
                Discovery Biology Section, Biosciences Division
                140 Research Drive, Harrisonburg, VA 22802

2013-2015  Director, Laboratory of Virology, SRI International
            Center for Immunology and Infectious Diseases
            140 Research Drive, Harrisonburg, VA 22802

Present  Adjunct Professor, George Mason University, Biomedical
CURRICULUM VITAE

THOMAS G. VOSS PH.D.

Research Laboratory, 10650 Pyramid Place, MS 1J5
Manassas, VA 20110

2012 – 2013
Associate Professor (with tenure), Tulane School of Medicine
Department of Microbiology and Immunology, New Orleans, LA

2005 to 2011
Assistant Professor, Tulane School of Medicine Department of
Microbiology and Immunology, New Orleans, LA

2004 – 2005
Vice-President, Homeland Security and Emerging Infectious Disease
Division, The Southern Research Institute, Birmingham AL

2002 – 2004
Director, Homeland Security Department, The Southern Research
Institute, Frederick MD

2000 – 2001
Manager, Emerging Pathogens Group, The Southern Research
Institute, Frederick MD

2000
Senior Research Virologist, Cell Biology and Immunology
Department, The Southern Research Institute, Birmingham, AL

1999-2000
Product Specialist, Advanced Imaging Microscopy Carl Zeiss,
Inc., Thornwood NY

1998-1999
Biological Operations Manager, Chemical and Biological Defense
Division, The Southern Research Institute, Birmingham, AL

1996-1998
Visiting Scientist (Group Leader), Measles Virus Section,
Respiratory and Enteric Virus Branch, US Centers for Disease
Control and Prevention, Atlanta GA

1995-1996
Postdoctoral Fellow, Internal Medicine Division, University
Hospital, Zurich, Switzerland

1994-1995
ASM/NCID Postdoctoral Research Associate, Pathogenesis
Section, Special Pathogens Branch, US Centers for Disease
Control and Prevention, Atlanta GA

CONSULTING ACTIVITIES

2009 to Present
Subject Matter Expert (Virology, Immunology, biodefense,
vaccine development, antiviral development)
GLG Associates
Washington DC, USA

2008 to 2010
Director of Viral Therapeutics
Associate Director, Center For Excellence in Passive Therapeutics
UND Research Foundation, Grand Forks, ND 58201

2007-2010  Senior Scientist/Subject Matter Expert, National Security
Division, Mantech SRS, Huntsville AL

PROFESSIONAL SOCIETIES AND HONORS:

2008- Present  International Society for Influenza and Other Respiratory Viruses
2001 – Present  International Society for Antiviral Research
2005  American Society for Microbiology, National Member
1985  American Society for Microbiology, Texas Branch Member
1991  American Society for Microbiology, South Central Branch
       Member

2007 – Present  Secret Level Security Clearance (DISCO)
2006 – 2010  Scientific Advisory Board, AVI Biopharma, Corvallis OR
2003  Top 40 under 40 Award Winner, Birmingham Business Journal
1996  Oak Ridge Institute for Science Education Fellowship Award
       Recipient
1994  ASM/NCID Postdoctoral Research Associates Award Recipient
1991  Tulane University Doctoral Research Fellow Award Recipient
1991  Tulane University Graduate School Tuition Scholarship Recipient

PROFESSIONAL ACTIVITIES:

2104- Present  Member, James Madison University Institutional Biological Safety
       Committee, Harrisonburg, VA USA

2011  Reviewer, FY12/13 DTRA Chemical and
       Biological Technologies Directorate Phase II program build
       process.

2010- 2013  Member, Mentorship Committee for Dr. John Schieffelin,
       Department of Pediatrics, Tulane School of Medicine.

2008-2010  Member, University Faculty Senate - Basic Sciences, Tulane
       University

2008-2013  Member, Faculty Advisory Committee, Tulane School of Medicine

2007 – 2008  Reviewer, State of Pennsylvania Research Initiatives

2005-Present  Section Editor, Virology Journal (on-line)
2005 – 2013  Advisor: development of Biological Safety Level Three (BSL-3) laboratories at Tulane (TNPRC and TSOM campuses)

2005-2010  Member, Institutional Biological Safety Committee (IBC), Tulane School of Medicine

2006 – 2010  Member, Institutional Animal Care and Use Committee (IACUC), Tulane National Primate Research Center

2006- 2013  Member, Tulane Resource Allocation Committee (TRAC), Tulane National Primate Research Center


2004  Reviewer, National Academy of Sciences report on Security of Department of Defense Mail System

2002  Member, World Health Organization Working Group on SARS-CoV Vaccines, Geneva Switzerland

AD HOC REVIEWER:

2003  Journal of Antiviral Research
2008  Journal of Infectious Diseases
2009  Georgia Research Alliance
2010  PloS Neglected Tropical Diseases

RESEARCH SUPPORT SUMMARY:

Active/Pending: Awarded  4/1/2015-3/31/2020
1-R44-AI118063 - 01 (Dr. Doron Greenbaum, Phelix Therapeutics PI)
1.20 Calendar months (10%)
NIAID  $1,200,000
Project Title: Cathepsin L Inhibitors as Pan-Coronavirus Therapeutics

The major goal of this program is the development of small molecules targeting Cathepsin L, a host protein involved in regulation of endosome-mediated entry of coronaviruses important in human health. We will screen potential lead compounds against MERS-CoV, SARS-CoV, and human coronaviruses 229E, and OC43. We will also evaluate the safety and efficacy of lead compounds in animal models of SARS (ferret), MERS (mink), and hCOV229E (ferret) to determine the most effective lead compound against all coronaviruses in vivo. Finally, a dry powder formulation of the lead compound will be evaluated in animals using each of the three challenge viruses.
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1R43AI112221-01 (S. Hopkins, Prime PI) 6/15/2014 – 05/31/2015
4.80 calendar (40%)
NIH/NIAID $225,000.00
Peptide Inhibitors of Coronavirus Entry

The major goals of this project are to develop and validate in vitro and in vivo assays and models to contribute to the development of an entry inhibiting peptide designed against coronaviruses including SARS and MERS. The Voss laboratory at SRI is a subcontractor to the prime award winner. Dr. Voss is PI on the subcontract.

HHSN272201400003C (R. Wilson, Prime PI) 2/20/2014 – 12/30/2016
4.80 calendar (40%)
NIH/NIAID $2,532,416.00
Development of Therapeutic Medical Countermeasures for Biodefense and Emerging Infectious Diseases

The major goals of this project are to develop and validate in vitro and in vivo assays and models to contribute to the development of FF-3 and entry inhibiting peptide designed against influenza virus. The Voss laboratory at SRI is a subcontractor to the prime award winner. Dr. Voss is PI on the subcontract.

1R01AI099210 - 01A1 (Sharon Isern, PI) 07/10/13 – 6/30/2017
1.20 calendar (10%)
NIH/NIAID $334,970.00
Design of a human monoclonal antibody-informed dengue vaccine

The major goal of this project is to evaluate the efficacy of peptide-based vaccines for dengue, expressing peptides in a yellow fever virus vaccine backbone. Peptides are selected based on use of cloned human monoclonal antibodies. The Voss laboratory is a subcontractor performing all animal-based activities on the project. Dr. Voss is subcontract PI.

Active/Pending: Active
Name of Individual: Thomas G. Voss
Project # (Principal Investigator): RFP NIH-NIAID-DMID (Co-PI with Chad Roy, Tulane National Primate Research Center)
Source: NIH/NIAID
Title of Project: Animal Models of Infectious Diseases (NHP Models)
Dates of Approved/Proposed Funding: 05/01/2010 – 04/30/2017
Total Direct Costs/Percent Effort (maximum possible award): $20,000,000.00/20%
participating laboratory based on the pre-TOR capabilities and each is reviewed for technical capabilities, cost, and schedule issues relating to the overall NIAID mission.

Active/Pending: Active
Name of Individual: Thomas G. Voss
Project # (Principle Investigator): RFP NIH-NIAID-DMID (David Kelvin, Toronto General Research Institute, TGRI)
Source: NIH/NIAID
Title of Project: Animal Models of Infectious Diseases (Small animal models)
Dates of Approved/Proposed Funding: 05/01/2010 – 04/30/2017
Total Direct Costs/Percent Effort (maximum possible award): $20,000,000.00/20%

This project is an indefinite delivery/indefinite quantity (IDIQ) award from NIAID to develop small animal models for the evaluation of novel diagnostics, therapeutics, and vaccines. The mechanism for the award “pre-qualifies” a laboratory team based on laboratory capabilities and expertise in animal models for therapeutic, vaccine, and diagnostic development. Awards are made based on Task Order Requests (TOR) to each participating laboratory based on the pre-TOR capabilities and each is reviewed for technical capabilities, cost, and schedule issues relating to the overall NIAID mission.

Active/Pending: Active
Name of Individual: Thomas G. Voss
Project # (Principle Investigator): RFP NIH-NIAID-DMID (Peter Palese, Mt Sinai School of Medicine)
Source: NIH/NIAID
Title of Project: Animal Models of Infectious Diseases (small animal models)
Dates of Approved/Proposed Funding: 05/01/2010 – 04/30/2017
Total Direct Costs/Percent Effort (maximum possible award): $20,000,000.00/20%

This project is an indefinite delivery/indefinite quantity (IDIQ) award from NIAID to develop small animal models for the evaluation of novel diagnostics, therapeutics, and vaccines. The mechanism for the award “pre-qualifies” a laboratory team based on laboratory capabilities and expertise in animal models for therapeutic, vaccine, and diagnostic development. Awards are made based on Task Order Requests (TOR) to each participating laboratory based on the pre-TOR capabilities and each is reviewed for technical capabilities, cost, and schedule issues relating to the overall NIAID mission.

Active/Pending: Completed
Name of Individual: Thomas G. Voss
Project # (Principle Investigator): Medical Countermeasures Innovation (Ray Cummings, Ph.D., PATH Seattle WA)
Source: HHS/BARDA (subcontract to PATH)
Title of Project: Development of Novel Formulations of Influenza Vaccines
Dates of Approved/Proposed Funding: 08/15/11 – 09/30/2012
Total Direct Costs/Percent Effort: $144,000.00/20%
This project is aimed at development of novel formulations of whole inactivated or live, attenuated influenza vaccines for pandemic and epidemic response. Using novel, temperature stable formulations, we are evaluating the immunogenicity of whole, inactivated vaccine in mice and live attenuated vaccine in ferrets using serologic and cellular responses as a measure of protective correlates.

**Active/Pending: Completed**
**Name of Individual:** Thomas G. Voss
**Project # (Principle Investigator):** R43 AI078654-01A2 (Gary Fuji, Molecular Express, Inc.)
**Source:** NIH/NIAID
**Title of Project:** Surrogate Endpoints for Correlating Protective Immunity to Influenza
**Dates of Approved/Proposed Funding:** 08/31/2009 – 12/31/2011
**Total Direct Costs/Percent Effort:** $335,549.00/20%

This project is currently funded effort to develop a universal influenza vaccine using a liposome-based platform and the ectodomain region of the influenza A M2 protein (M2e), an envelope protein that is highly conserved in most circulating Influenza A viruses. Using the ferret model, we have shown protective immune responses in ferrets using this vaccine are currently performing studies to enhance dose and route of vaccination, and to assess heterologous protection with pandemic, seasonal, and avian viruses in the ferret model.

**Active/Pending: Completed**
**Name of Individual:** Thomas G. Voss
**Project # (Principle Investigator):** DTRA RFP (Patrick Iversen, AVI BioPharma)
**Source:** DoD/DTRA (TMTI)
**Title of Project:** Rapid Development of Pandemic Influenza Antivirals
**Dates of Approved/Proposed Funding:** 07/01/2009 – 12/31/2011
**Total Direct Costs/Percent Effort:** $293,000.00/10% (x 11 modules) = $3,220,300.00 total project costs

This project is aimed at the non-clinical development of AVI-7100, a phosphomorpholino oligonucleotide (PMO) based translation inhibitor targeting the conserved intergenic region of the Matrix 1 (M1) and Matrix 2 (M2) gene of influenza A viruses. We have shown that this compound, when delivered by parenteral routes is well tolerated and active at reducing influenza illness and viral burden in the upper and lower respiratory tract in ferrets challenged with pandemic (swine origin) H1N1 influenza virus. It is also active against seasonal influenza and Oseltamivir phosphate resistant virus in ferrets highlighting it value in the broad spectrum treatment of influenza in humans. These studies and the results achieved have allowed application of an Investigational New Drug Application by the sponsoring organization and the performance of Phase I Clinical Trials in Human volunteers (currently in progress).

**Active/Pending: Completed**
**Name of Individual:** Thomas G. Voss
CURRICULUM VITAE

THOMAS G. VOSS PH.D.

Project # (Principle Investigator): DTRA RFP (Patrick Iversen, AVI BioPharma)
Source: DoD/DTRA (TMTI)
Title of Project: Rapid Development of Antiviral Compounds for Dengue
Dates of Approved/Proposed Funding: 07/01/2009 – 09/30/2010
Total Direct Costs/Percent Effort: $281,000.00/10%

This project is aimed at the non-clinical development of AVI-660, a phosphomorpholino
oligonucleotide (PMO) based translation inhibitor targeting the conserved 3’
untranslated region of the dengue virus genome. We have shown that this compound,
when delivered by parenteral routes is well tolerated and active at reducing Dengue
illness and viral burden in ferrets challenged with Dengue virus. These studies have
allowed the development and validation of the ferret as a model of human dengue fever
and dengue hemorrhagic fever, a novel and important model of infection and disease.

Active/Pending: Completed
Name of Individual: Thomas G. Voss, Virology Core Director
Project # (Principle Investigator): BAA NIH NIAID-DMID -08-20 (James D. Talton,
Ph.D., Nanotherapeutics, Inc.)
Source: NIH-NIAID-DMID
Title of Project: Inhaled Cidofovir Dry Powder Formulation for Post-exposure
Prophylaxis and Treatment of Aerosolized Smallpox
Dates of Approved/Proposed Funding: 07/01/09 – 9/15/11
Total Direct Costs/Percent Effort: $1,500,000.00/20%

This project is aimed at development of microencapsulated formulations of Cidofovir for
the treatment of smallpox using the monkeypox model of infection as a surrogate. Though
effective, Cidofovir treatment leads to acute nephrotoxicity when delivered intravenously
and these studies are aimed at the development and validation of a inhalation-delivered
formulation that can reduce disease or viral burden with lower toxic side effects.

Active/Pending: Completed
Name of Individual: Thomas G. Voss
Project # (Principle Investigator): SBIR Application (Russell Wilson, Autoimmune
Technologies, LLC.)
Source: NIH/NIAID
Title of Project: Development of Peptide Based Inhibitors for Influenza
Dates of Approved/Proposed Funding: 09/01/2011 – 08/30/2013
Total Direct Costs/Percent Effort: $1,250,000.00/20%

This project was aimed at the development of fusion peptide based inhibitors of viral
entry and egress as therapeutics for influenza virus infection using cell culture and ferret
models of infection. The program, in collaboration with the laboratory of Dr. Robert
Garry in the Tulane School of Medicine, is focused on characterization of the peptide
virus interactions in vitro and in vivo and the ability of this 18-mer to prevent infection,
reduce disease severity, and prevent transmission in the ferret model. We are also
selecting for and characterizing resistant viruses, examining efficacy in vaccinated
animals, and examining efficacy in reducing co-morbidity factors such as secondary bacterial pneumonia in ferrets. These studies have led to the submission of an Investigational New Drug (IND) application to the US FDA and the performance of a Phase I Clinical Trial in Humans for this candidate compound.

Active/Pending: Completed
Name of Individual: Thomas G. Voss, Animal Core Director
Project # (Principle Investigator): LABOR RCCEP-05 (2007-10) (Robert F. Garry)
Source: State of Louisiana Board of Regents
Title of Project: Research Commercialization and Educational Enhancement Program (RCEEP) Design, delivery, and development of Therapeutic Peptides
Dates of Approved/Proposed Funding: 09/01/07 -7/31/11
Total Direct Costs/Percent Effort: $749,000/25%

As a member of the Tulane-LSU peptide Therapeutic Consortium, my laboratory provided animal model expertise and effort for the development of multiple peptide based therapeutics under development by consortium member labs. We performed studies with antimicrobial, anti-inflammatory, analgesic, and chemotherapy-toxicity inhibiting peptides in small animal models.

Active/Pending: Completed
Name of Individual: Thomas G. Voss
Project # (Principle Investigator): Tulane # 631418 (Voss)
Source: Autoimmune Technologies, Inc.
Title of Project: Development of peptide-based inhibitors of West Nile Virus
Dates of Approved/Proposed Funding: 09/01/08 -6/31/10
Total Direct Costs/Percent Effort: $42,500/5%

Using small peptides aimed at West Nile virus fusion inhibition, we performed in vitro and animal studies to examine safety and efficacy of a panel of peptides.

Active/Pending: Completed
Name of Individual: Thomas G. Voss
Project # (Principle Investigator): Tulane # 631322 (Voss)
Source: Autoimmune Technologies, Inc.
Title of Project: Development of peptide-based inhibitors of paramyxoviruses
Dates of Approved/Proposed Funding: 09/01/08 -4/31/10
Annual Direct Costs/Percent Effort: $15,500.00/5%

Using small peptides aimed at measles and respiratory syncytial virus fusion inhibition, we performed in vitro and animal studies to examine safety and efficacy of a panel of peptides.

Active/Pending: Completed
Name of Individual: Thomas G. Voss
Project # (Principle Investigator): Tulane Project# 546631 (Robert F. Garry/Autoimmune Technologies, LLC)
Source: NIH/NAID
Title of Project: Development of Peptide Based Inhibitors of Influenza Virus
Dates of Approved/Proposed Funding: 10/01/06 – 05/30/08
Total Direct Costs/Percent Effort: $980,000.00/20%

This project was aimed at the development of fusion peptide based inhibitors of viral entry and egress as therapeutics for influenza virus infection using cell culture and ferret models of infection. The program, in collaboration with the laboratory or Dr. Robert Garry in the SOM, is focused on characterization of the peptide virus interactions in vitro and in vivo and the ability of this 18-mer to prevent infection, reduce disease severity, and prevent transmission in the ferret model. These studies have led to the submission of an Investigational New Drug (IND) application to the US FDA and the performance of a Phase I Clinical Trial in Humans for this candidate compound.

Active/Pending: Completed
Name of Individual: Thomas G. Voss, Subcontract PI
Project # (Principle Investigator): N01-AI-40095- Part D Task Order Solicitation – Task D09 (Chuck Hobbs, Lovelace Respiratory Research Institute, PI)
Source: NIH/NAID.
Title of Project: Development of NHP Models for SARS
Dates of Approved/Proposed Funding: 10/01/05 – 05/30/07
Total Direct Costs/Percent Effort: $268,000.00/20%

This project was a subcontract from NIH and Lovelace Respiratory Research Institute to characterize the infection of non-human primates with the SARS coronavirus, a recently emerging virus responsible for human infection and disease with high mortality. My laboratory prepared challenge viruses and the analyzed viral burden and pathology in selected tissues from Rhesus macaques, cynomolgus macaques, and African green monkeys (AGM) infected with SARS-CoV. These studies led to the conclusion that AGM infected with SARS-CoV by inhalation developed acute lung damage that models SARS-CoV in humans. These studies, however, did not lead to highly fatal infection supporting further development of the model to refine and more closely model human disease.

Active/Pending: Completed
Name of Individual: Thomas G. Voss
Project # (Principle Investigator): N01-AI-40095- Part C Task Order Solicitation Task C11 (Thomas G. Voss, PI, Southern Research Institute)
Source: NIH/NAID.
Title of Project: Development of Small Animal Models for SARS
Dates of Approved/Proposed Funding: 10/01/02 – 05/30/07
Total Direct Costs/Percent Effort: $5,450,000.00/10%

Active/Pending: Completed
Name of Individual: Thomas G. Voss,
Project # (Principle Investigator): NIH-NIAID-DMID -03-06 (Thomas G. Voss, PI, Southern Research Institute)
Source: NIH/NAID
Title of Project: High Throughput Antiviral Screening for SARS
Dates of Approved/Proposed Funding: 10/01/03 – 05/30/08
Total Direct Costs/Percent Effort: $7,300,000.00/10%

Active/Pending: Completed
Name of Individual: Thomas G. Voss,
Project # (Principle Investigator): DARPA (Thomas G. Voss, PI, Southern Research Institute)
Source: DoD/DARPA
Title of Project: Innate Immune Modulators for Biodefense
Dates of Approved/Proposed Funding: 10/01/00 – 05/30/02
Total Direct Costs/Percent Effort: $1,250,000.00/10%

Active/Pending: Completed
Name of Individual: Thomas G. Voss,
Project # (Principle Investigator): DoD-USMRMC (Thomas G. Voss, PI, Southern Research Institute)
Source: DoD/USMRMC
Title of Project: Medical Countermeasures for Anthrax
Dates of Approved/Proposed Funding: 10/01/02 – 05/30/03
Total Direct Costs/Percent Effort: $1,250,000.00/10%

MENTORING AND TEACHING ACTIVITIES:

Postdoctoral Fellows:

Southern Research Institute

2001-2004 Aysegul Nalca, MD/Ph.D. – Currently Director of Aerobiology, USAMRIID, Ft. Detrick MD

2002-2004 Robert J. Hogan, Ph.D. – Currently on the faculty at Univ. of Georgia, School of Veterinary Medicine

Tulane University School of Medicine

2005-2006 Christopher LeBlanc, Ph.D. – Currently a member of the faculty at Delgado Community College, New Orleans, LA

2006-2007 Harris McFerrin, Ph.D. – Currently a member of the faculty at Xavier University, New Orleans, LA

2009-2010 Rebecca Brocato, Ph.D. – Currently NRC Fellow at USAMRIID, Ft. Detrick MD
2009- Present  Somanna K. Naveen, Ph.D.

2009- 2011  Gena J. Nichols, Ph.D. – Currently residing in Chapel Hill, NC.

2011- Present  Vibha Yadav, Currently a fellow at Tulane National Primate Research Center

2011 – 2012  Bryan S. Kaplan, Ph.D. – Currently a fellow at St. Jude’s Children’s Research Hospital

Graduate Students:

2009 (PhD)  Rebecca Brocato, Molecular and Cellular Biology Program, Tulane School of Medicine, New Orleans, LA

2009 (MS)  Joseph Barbercheck, Molecular and Cellular Biology Program, Tulane School of Medicine, New Orleans, LA – currently manager, BSL-3 facility, Oregon National Primate Research Center

2011 (PhD)  Bryan Kaplan, Graduate Biomedical Sciences Program, Tulane School of Medicine, New Orleans, LA

2009 – 2012  Robert Cross, Graduate Biomedical Sciences Program, Tulane School of Medicine, New Orleans, LA

2010 – 2012  Gregor Manukian, Tulane Physician Scientist Program, Tulane School of Medicine, New Orleans, LA

Participation on Graduate Student Committees:

Ratish Gambhira, DVM (TNPRC)
Hussain Badani (Department of Biochemistry)
Kevin Zwezdaryk (Department of Microbiology and Immunology)
Magdalena Angelova (Department of Microbiology and Immunology)
Lilia Mclnik (Department of Microbiology and Immunology)
Zaid Mahdi (PhD awarded, 2011)
Bryan S. Kaplan, MS (PhD awarded, 2011)
Robert Cross, MPH (Department of Microbiology and Immunology)
Rachel Yenni (Department of Microbiology and Immunology)
Gregor Manukian ((Department of Microbiology and Immunology)
Suzanne Tomchuck (PhD Awarded 2010)
David Nielson (MS Awarded, 2009)
Jessica Warner (PhD Awarded 2010)
Ali Sabahi (PhD awarded, 2008)
Elizabedi Norton (PhD Awarded, 2009)
Ramesh Rathnakumar (Department of Biochemistry, PhD Awarded 2009)
Phillip Ferro (PhD awarded, 2007)

EDUCATIONAL LECTURES:

2005 – 2013: **Lecturer**, Medical Microbiology

Lectures presented:
*Introduction to Virology*
Taxonomy (1hr)
Structure and replication (1hr)
*Respiratory viruses*
Coronaviruses (1hr)
Orthomyxoviruses (2hr) (TBL in 2010)
Paramyxoviruses (1hr)
*Gastrointestinal Virus infections*
Reovirus and norovirus (1hr)
*Viral hemorrhagic fevers*
Arenaviruses, bunyaviruses, filoviruses (2hr)
*Bioterrorism viruses*
Pox, VHF, Arboviruses (1hr)

2006 – 2013: **Course Director and lecturer**, Advanced Virology, Tulane School of Medicine Graduate Program in Biomedical Sciences

Lectures presented:
*Introduction to Virology (4 hrs)*
*Respiratory viruses (4 hrs)*
*Viral hemorrhagic fevers (4hrs)*
*Antiviral Drugs (2 hrs)*
*Vaccines for viral diseases (2 hrs)*

2009- 2013

Lecturer, Tropical Virology, Tulane School of Public Health and Tropical Medicine

Lecture Presented
*Adenoviruses: Structure, replication, pathogenesis, and public health impact (2hrs)*

2010-2013

Lecturer, Graduate Medical Virology

Lectures Presented:
*Introduction to Virology (2hr)*
*Arenaviruses/bunyaviruses (2hr)*
*Paramyx/o/Rhabdo/Filoviruses (2hr)*
*Orthomyxoviruses (2hr)*
*Poxviruses (2hr)*
SERVICE ACTIVITIES:

2008-present Judge, Fountainbleau Junior High School Science Fair, Mandeville LA

PUBLICATIONS:

Published Papers:

Old world hantaviruses in rodents in New Orleans, LA


Use of the Aerosol Rabbitpox Virus Model for Evaluation of Anti-poxvirus agents Roy CJ, Voss TG. Viruses. 2010 Sep 27;2(9):2096-2107

Prophylactic Administration of Bacterially-Derived Immunomodulators Improves the Outcome of Influenza Infection in a Murine Model Norton EB, Clements, JD, Voss TG, Cardenas-Freytag L. Journal of Virology, 84 (6) 2010, Jan 6, 2983-95


Antiviral activity of hop constituents against a series of DNA and RNA viruses


Glycoprotein B of Human Herpes Virus 8 is a component of the cleaved form composed of amino- and carboxyl-terminal fragments. A. Baghian, M. Luftig, J.B. Black,


**Abstracts:**

2007 *Phosphorodiamidate morpholino oligomer-Mediated Inhibition of Influenza A Virus In Mice* T.G. Voss, KL. Warfield, R. Brocato, J Barbercheck, B. Kaplin, DA Stein, S Bavari, PL. Iversen Abstracts of the 20th International Conference on Antiviral Research, Palm Springs CA USA

2008 *Peptide-based Entry Inhibitors for Influenza* Thomas Voss, Christopher LeBlanc, Joseph Barbercheck, Bryan Kaplan, Russell Wilson, Garry Robert Abstracts of the 20th International Conference on Antiviral Research, Montreal, Quebec Canada, 7

2008 *Peptide-based Entry Inhibitors for Paramyxoviruses* Christopher LeBlanc, Russell Wilson, Peter Kukosky, Robert Garry, Thomas Voss Abstracts of the 20th International Conference on Antiviral Research, Montreal, Quebec Canada, 70

2008 *In Vitro Vascular Leak as a Model of Viral Hemorrhagic Fever*
Rebecca Brocato and **Thomas Voss**
Abstracts of the 20th International Conference on Antiviral Research, Montreal, Quebec Canada, **49**

2008 *Peptide-based Entry Inhibitors for Influenza*
**Thomas Voss**, Christopher LeBlanc, Peter Kulkosky, Russell Wilson, Garry Robert
Abstracts of the Third European Influenza Conference, Vilamoura, Portugal **P6-008**


2010 *In vitro Infection of Human Trophoblasts with Pandemic Influenza*
BS Kaplan, JA Warner, CA Morris, and **TG Voss**
Swine Origin H1N1 Virus: The First Pandemic of the 21st Century
Atlanta, GA USA **P40**

2010 *Peptide-based Inhibitors of Pandemic Influenza Virus In Ferrets*
S. Naveen, GJ Nichols, CE Garry, TA Hartley, DM Minor, MC Chun, RF Garry, TK Mandel, WC Wimley, RB Wilson, **TG Voss**
Swine Origin H1N1 Virus: The First Pandemic of the 21st Century
Atlanta, GA USA **P23**

2010 *A Novel Therapeutic Effective in a Ferret Model for Pandemic Influenza (H1N1-SOIV)*
P. L. IVERSEN PHD, S. CRUMLEY, D. V. MOURICH, F. J. SCHNELL, and **T. VOSS**
Abstracts of the 50th ICAAC Boston MA USA September 2010, **V-448e**

2010 *PEPTIDE-BASED INHIBITORS OF INFLUENZA VIRUS*

2010 *PMOplusTM Chemistry for Rapid Response to Novel Therapeutic for Pandemic Influenza (H1NI-SOIV)* P. L. IVERSEN PHD, D. V. MOURICH, F. J. SCHNELL, and **T. VOSS**
Abstracts of the 50th ICAAC Boston MA USA September 2010, **766**.

2010 *An Emerging Therapeutic for the Treatment of Dengue Viral Infections*
P. L. IVERSEN PHD and **T. VOSS** Abstracts of the Infectious Disease Society of America, Vancouver BC Canada, **LB-1**


2011 R. Cross*, T. Voss *The role of monocye derived VEGF in hantavirus induced vascular leak* Abstracts of the 21st European Congress of Clinical Microbiology and Infectious Diseases, P1761


*Dengue fever, Dengue hemorrhagic fever, Dengue shock syndrome modeled in the ferret, *Mustela putorius furo* Abstracts of the 21st European Congress of Clinical Microbiology and Infectious Diseases, O469


* Pituitary Adenylate Cyclase-Activating Polypeptide Ameliorates Cisplatin-Induced Renal Injury In vitro and In vivo* Min Li, Saravanan Balamuthusamy, Jerome L. Maderdrut, Thomas G. Voss, Eric E. Simon, and Vecihi Batuman, ASN Renal Week 2008, Abstract 555413

*Peptide-based Entry Inhibitors for Influenza* Thomas G. Voss, P Kulakosky, R Wilson, R. Garry Third European Conference on Influenza, Vilamora Portugal, Abstract 1327369

*In vitro Vascular Leak as a Model of Viral Hemorrhagic Fever* Rebecca Brocato and Thomas G. Voss 21st International Conference on Antiviral Research, Montreal, Quebec Canada.
Peptide-based Entry Inhibitors for Influenza Thomas G. Voss, CS LeBlanc, J Barbercheck, B Kaplan, P Kulakosky, R Wilson, R. Garry 21st International Conference on Antiviral Research, Montreal, Quebec Canada.

Peptide-based Entry Inhibitors for Paramyxoviruses Thomas G. Voss, CS LeBlanc, J Barbercheck, B Kaplan, P Kulakosky, R Wilson, R. Garry 21st International Conference on Antiviral Research, Montreal, Quebec Canada.

Phosphorodiamidate morpholino oligomer-Mediated Inhibition of Influenza A Virus In Mice Thomas Voss, Kelly Warfield, Rebecca Brocato, Joseph Barbercheck, Bryan Kaplin, David Stein, Sina Bavari, Patrick Iversen, 20th International Conference on Antiviral Research, Rancho Mirage, CA USA

Delay in ciprofloxacin treatment dramatically reduces mice survival in anthrax infection Nalca, A., Maland, M., Wells, J., Voss, T., Popov, S., Alibek, K. 2003. 5th International Conference on Anthrax, Nice, France.

Inhibitor of apoptosis improves survival of mice infected with Bacillus anthracis. 5th, Nalca, A., Pfarr, J., Chuvala, L., Sloane, S., Popov, S., Alibek, K., Voss, T. 2003. International Conference on Anthrax, Nice, France


Glycoprotein B of Human Herpes Virus 8 is a Major Component of the Virion Particle and is Expressed on the surfaces of Infected Cells, A Baghian, M Luftig, J.B.


Meeting of The South Central Branch of The American Society For Microbiology and the Mid-South Biochemists, Baton Rouge, LA, 12 November 1993, P1.


Additional Professional Activities:

Over the past 6 years, I have performed translational research that has led to the application for Investigational New Drug (IND) status for two (2) novel compounds for the treatment of influenza infection. These two compounds are currently in Phase I or Phase II clinical trial in humans as a result of my laboratory’s efforts in non-clinical development. To support these applications the following Study Reports were submitted to the US Food and Drug Administration (FDA).

Autoimmune Technologies, LLC Program (NIAID, SBIR funded)

1. Inhibitory Activity of Flufirvitide-3 Against Influenza Viruses In Cell Culture

2. Activity of Flufirvitide-3 Against Seasonal Influenza Virus In Ferrets

3. Transmission Inhibition Efficacy of Flufirvitide-3 Against Seasonal Influenza A and B Viruses In Ferrets

AVI BioPharma, Inc. Program (DTRA Funded)

1. Influenza Ferret Model: H1N1 (SOIV) Infectivity Study: Study No. 7100-eff-010

2. Influenza Ferret Model: Evaluation in a Non-Adapted Pandemic Flu (H1N1 SOIV) Infection: Study No. 7100-eff-011

3. Influenza Ferret Model: Evaluation in a Non-Adapted Pandemic Flu (H1N1 SOIV) Infection Repeat: Study No. 7100-eff-012

4. Influenza Ferret Model: Evaluation of AVI-7100 against an Oseltamivir Resistant Pandemic Flu (H1N1 SOIV) Infection: Study No. 7100-eff-14

5. Influenza Ferret Model: Evaluation of AVI-7100 against an Oseltamivir Resistant Pandemic Flu (H1N1 SOIV) Infection Repeat: Study No. 7100-eff-15
6. H1N1 Influenza Ferret Model: AVI-7100 Intranasal Efficacy, Prophylaxis, and Post Exposure Efficacy: Study No. 7100-eff-023

*Professional References – Available upon request*