

Bradford K. Berges, Ph.D.

Assistant Professor
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OBJECTIVE

A career in research of pathogenesis/immunology of human viruses in animal models

EDUCATION

University of Pennsylvania (1999-2005)

Ph.D. in Cell and Molecular Biology.

Dissertation: Gene Therapy of the Mucopolysaccharidosis VII Mouse Brain with a Herpes Simplex Virus Type 1 vector.

Brigham Young University (1993-94, 1996-99)

B.S. in Microbiology.

RESEARCH EXPERIENCE

Assistant Professor (July 2008-Aug 2016), *Associate Professor* (September 2016-present)
Brigham Young University, Department of Microbiology and Molecular Biology

We are using a humanized mouse model to study pathogenesis of human viruses, including HIV-1, Human herpesvirus 6A, and Kaposi's Sarcoma Herpesvirus. The long-term goals are to better understand the role of viral co-infections in AIDS-associated diseases. We have also isolated a number of novel bacteriophages with lytic activity against methicillin-resistant *Staphylococcus aureus* (MRSA). We are investigating of the utility of these phages to decontaminate MRSA from surfaces, including biofilms.

Postdoctoral Fellow (Jan. 2006-June 2008)

Colorado State University

Mentor: Dr. Ramesh Akkina. Development of new humanized mouse models for Human Immunodeficiency Virus (HIV) and Dengue virus infections and analysis of the subsequent human adaptive immune response. Development of a humanized mouse model to study antibody-dependent enhancement of dengue virus infection, dengue hemorrhagic fever, and dengue shock syndrome. Analysis of dengue virus cellular tropism in humanized mice. Establishment of a new model of HIV-1 mucosal transmission. Investigation of new anti-HIV gene therapies using lentiviral vectors.

Ph.D. Student

University of Pennsylvania (Sept. 1999-Dec. 2005)

Mentor: Dr. Nigel Fraser. Development of herpes simplex virus type 1 (HSV-1) as a vector for gene therapy of the brain using murine mucopolysaccharidosis type VII as a model disease. Made new recombinant viral vectors for investigation of the distribution of viral latency and transgene expression in the mouse brain as a function of various inoculation sites. Measured brain transduction at the levels of viral genome maintenance, transgene transcription, and enzyme expression. Published the first example of correction of an inherited disorder via HSV-mediated gene therapy.

PUBLICATIONS

- Benjamin H. Ogilvie**, Antonio Solis-Leal**, J. Brandon Lopez*, Brian D. Poole, Richard A. Robison, and **Bradford K. Berges**†. Alcohol-free hand sanitizer and other quaternary ammonium disinfectants quickly and effectively inactivate SARS-CoV-2. *Journal of Hospital Infection* 108 (2021): 142-145.
- Pogue, K. *, Jensen, J. , Stancil, C. *, Ferguson, D. *, Hughes, S.,* Mello, E. *, Burgess, R. *, **Berges, B.K.**, Quaye, A. **, and Poole, Brian D. † Influences on attitudes regarding potential COVID-19 vaccination in the United States. *Vaccines* 2020; 8(4): 582.
- Wienclaw, Trevor M.** and **Berges, Bradford K**†. The relationship between methicillin resistance and biofilm composition in *Staphylococcus aureus*. *American Journal of Biomedical Science & Research* 2020; 10(1): 11-15.
- Edwin J. Velazquez**, Taylor D. Brindley*, Gajendra Shrestha, Eliza E. Bitter**, Jordan D. Cress*, Michelle H. Townsend**, **Bradford K. Berges**, Richard A. Robison, K. Scott Weber and Kim L. O'Neill†. Novel Monoclonal Antibodies Against Thymidine Kinase 1 and Their Potential Use for The Immunotargeting of Lung, Breast and Colon Cancer Cells. *Cancer Cell International*. 2020 20:127.
- Israel Guerrero-Arguero**, Taalin Rasmussen Høj**, E. Shannon Tass, **Bradford K. Berges**, Richard Robison†. A Comparison of Chikungunya Virus Infection, Progression, and Cytokine Profiles in Human U937 and Murine RAW Monocyte Derived Macrophages. *PLoS One* 2020 15(3):e0230328.
- Hair, Bryan B., Conley, Matthew E., Wienclaw, Trevor M., Conley, Mark J., Heaton, Matthew J., and ***Berges, Bradford K.** Synergistic Activity of Silver Nanoparticles and Vancomycin Against a Spectrum of *Staphylococcus aureus* Biofilm Types. *J Bacteriol Mycol* 2018 5(9): 1089.
- Haskell, Kyler J., Schriever, Samuel R., Fonoimoana, Kenisi D., Haws, Benjamin, Hair, Bryan B., Wienclaw, Trevor M., Holmstead, Joseph G., Barboza, Andrew B., Berges, Erik T., Heaton, Matthew J., and ***Berges, Bradford K.** Antibiotic resistance is significantly lower in *Staphylococcus aureus* isolated from antibiotic-free raw meat as compared to conventional raw meat. *PLoS ONE* 2018 13(12):e0206712.
- Fullwood, R. Amy, Low, Gregory M., Chase, Emily P., Grasley, Meagan, Beal, Soren S., McCrary, Ian M., Daniels, Christian W., Ingersoll, Kayleigh, ***Berges, Bradford K.** The Kaposi's sarcoma-associated herpesvirus viral interleukin 6 gene affects metastasis and expression of B cell markers in a murine xenograft model. *PLoS ONE* 2018 13(9):e0204947.
- Solis-Leal, A., and **Berges, Bradford K.** Advances in nucleases used for genome editing. *JSM Biochemistry and Molecular Biology* 2016 3(2): 1017.
- Benjamin, R., Berges, Bradford K., Solis-Leal, A., Igbinedion, O., Strong, C.L., and Schiller, M. TALEN gene editing takes aim on HIV. *Human Genetics* 2016 135(9): 1059-70.
- Cornaby, C., Tanner, A., Stutz, E., Poole, B.D., and Berges, B.K. Piracy on the Molecular Level: Human Herpesvirus Manipulates Cellular Chemotaxis. *Journal of General Virology* 2016 97(3):543-60.
- Jensen, Kyle C., Hair, Bryan B., Wienclaw, Trevor M., Murdock, Mark H., Hatch, Jacob B., Trent, Aaron T., White, Tyler D., Haskell, Kyler J., and **Berges, Bradford K.** Isolation and Host Range of Bacteriophage with Lytic Activity against Methicillin-Resistant *Staphylococcus aureus* and Potential use as a Fomite Decontaminant. *PLoS ONE*, 2015 10(7): e0131714.
- Tanner, Anne, Hallam, Steven J., Nielsen, Stanton J., Cuadra, German I., and **Berges, Bradford K.** Development of Human B Cells and Antibodies Following Human

Hematopoietic Stem Cell Transplantation to Rag2^{-/-}γc^{-/-} mice. *Transpl Immunol*, 2015 32:144-150.

- Horvat, B., **Berges, B.K.**, and Lusso, P. Recent Developments in Animal Models for Human Herpesvirus 6A and 6B. *Curr Opin Virology*, 2014. 9:97-103.
- Berges, B.K.** and Tanner, A. Modeling of human herpesvirus infections in humanized mice. *J Gen Virol*, 2014. 95(Pt 10): 2106-17.
- Anne Tanner, Stephen E. Taylor, Wittnee Decottignies, and **Bradford K. Berges**. Humanized mice as a model to study hematopoietic stem cell transplantation. *Stem Cells Dev*, 2014. 23(1):76-82.
- Anne Tanner, Stephanie A. Carlson, Masatoshi Nukui, Eain A. Murphy, and **Bradford K. Berges**. Human herpesvirus 6A infection and immunopathogenesis in humanized Rag2^{-/-}γc^{-/-} Mice. *J Virol*, 2013. 87(22):12020-8. *Spotlighted article.
- Sanchez, F.M., Cuadra, G.I., Nielsen, S.J., Tanner, A., and **Berges, B.K.** Production and characterization of humanized Rag2^{-/-}γc^{-/-} mice. *Methods Mol Biol*, 2013. 1031:19-26.
- Sanchez, F.M., and **Berges, B.K.** Characterization of HIV-1 infection in the humanized Rag2^{-/-}γc^{-/-} mouse model. *Methods Mol Biol*, 2013. 1031:215-22.
- Berges, B.K.**, and Rowan, M.R. “The utility of the new generation of humanized mice to study HIV-1 infection: transmission, prevention, pathogenesis, and treatment”. *Retrovirology*, 2011; 8:65. *Designated as a Highly Accessed article by BioMed Central.
- Akkina R., **Berges, B.K.**, Palmer, Brent E., Remling L., Neff, Charles P., Kuruvilla, J., Connick, E., Folkvord, J., Gagliardi, K., Kassu, A., and Akkina, S.R. “Rag1^{-/-}γc^{-/-} mice support multilineage human hematopoiesis and are susceptible to HIV-1 infection via systemic and vaginal routes”. *PLoS One*, 2011. 6(6):e20169.
- Berges, B.K.**, Akkina, S.R., Remling, L., and Akkina, R. “Humanized Rag2^{-/-}γc^{-/-} (RAG-hu) mice can sustain long-term chronic HIV-1 infection lasting more than a year.” *Virol*, 2010. 397(1):100-3.
- Berges, B.K.**, Akkina, S.R., Folkvord, J.M., Connick, E., and Akkina, R. “Mucosal transmission of R5 and X4 tropic HIV-1 via vaginal and rectal routes in humanized Rag2^{-/-}γc^{-/-} (RAG-hu) mice.” *Virol* 2008 Apr;373(2):342-51.
- Berges, B.K.**, Wolfe, J.H. and Fraser, N.W. “Transduction of brain by herpes simplex virus vectors.” *Mol Ther* 2007 Jan;15(4):20-29.
- Berges, B.K.**, Wheat, W.H., Palmer, B.E., Connick, E. and Akkina, R. “HIV-1 infection and CD4 T cell depletion in the humanized Rag2^{-/-}γc^{-/-} mouse (RAG-hu) model.” *Retrovirology* 2006 Nov;3:76. *Designated as a Highly Accessed article by BioMed Central.
- Berges, B.K.**, Yellayi, S., Karolewski, B.A., Miselis, R.R., Wolfe, J.H., and Fraser, N.W. “Widespread correction of lysosomal storage in the mucopolysaccharidosis type VII mouse brain with a herpes simplex type 1 vector expressing beta-glucuronidase.” *Mol Ther* 2006 May;13(5):859-69.
- Berges, B.K.**, Wolfe, J.H. and Fraser, N.W. “Stable levels of long-term transgene expression driven by the latency-associated transcript promoter in a herpes simplex virus type 1 vector”. *Mol Ther* 2005 Dec;12(6):1111-9.

ABSTRACTS (since 2008)

- Antonio Solis-Leal, Dalton Karlinsey, Brandon Lopez, and Bradford K. Berges. HIV vpr mutants (R36W and R77Q) and its effect in progression to AIDS. American Society of Microbiology Tri-Branch Meeting, December 2020.
- Israel Guerrero, Crystal Villalva, Bradford K. Berges, and Richard A. Robison. A Rag2^{-/-}γc^{-/-} mouse model to study Chikungunya virus pathogenesis. American Society of Microbiology Tri-Branch Meeting, December 2020.

- Bradley Richmond, Courtney Freestone, Emilee Christensen, and Bradford K. Berges. The Influence of Staphylococcus Aureus Biofilm-associated Gene Mutations on Biofilm Composition. American Society of Microbiology Tri-Branch Meeting, 2020.
- Bradley Richmond, Courtney Freestone, Emilee Christensen, and Bradford K. Berges. The Influence of Staphylococcus Aureus Biofilm-associated Gene Mutations on Biofilm Composition. BYU College of Life Sciences poster competition, 2020.
- Antonio Solis-Leal, Dalton Karlinsey, Brandon Lopez, and Bradford K. Berges. The role of the HIV-1 R36W and R77Q vpr mutations in AIDS progression. American Society for Virology, 2020.
- Brad Pickett and Berges, Bradford K. Does Staph aureus use biofilms to promote antibiotic resistance? BYU CURA Research Conference, 2020.
- Mark Conley and Berges, Bradford K. Exploring the Ability of 4 Novel Phages in Reducing and Inhibiting MRSA Biofilms. BYU CURA Research Conference, 2020.
- Aileen MacLachlan and Berges, Bradford K. Phage and Vancomycin Biofilm Reduction. BYU CURA Research Conference, 2020.
- Jared Thompson and Bradford K. Berges. Antibiotic Resistance in Staphylococcus aureus: Effects of Biofilm Synthesis in Gene Transfer. Utah Conference on Undergraduate Research, 2020.
- Mark Conley and Bradford K. Berges. Exploring the Ability of 6 Novel Phages in Reducing and Inhibiting MRSA Biofilms. Utah Conference on Undergraduate Research, 2020.
- Elisa McRae and Bradford K. Berges. Using CRISPR and gRNA to Alter the HIV Genome. Utah Conference on Undergraduate Research, 2020.
- Bradley Richmond and Bradford K. Berges. The Influence of Staphylococcus Aureus Biofilm-associated Gene Mutations on Biofilm Composition. Utah Conference on Undergraduate Research, 2020.
- Brandon Lopez and Bradford K. Berges. Effects of specific mutations on HIV-1 vpr and subsequent AIDS pathogenesis. Utah Conference on Undergraduate Research, 2020.
- Blake Hirschi, Brad Pickett, Dr. Bradford Berges. Different compositions of *Staphylococcus Aureus* Biofilms Facilitate Antibiotic Resistance Gene Transfer at Different Rates. American Society of Microbiology Branch Meeting, 2019.
- Hirschi, B., Barboza, A., Holmstead, J., and Berges, B.K. Antibiotic resistance is lower in Staphylococcus aureus isolated from antibiotic-free raw meat as compared to conventional raw meat. Utah Conference on Undergraduate Research, 2019.
- Ball, A., and Berges, Bradford K. Genes Involved in the Formation of Staphylococcus aureus Biofilms. Utah Conference on Undergraduate Research, 2019.
- Holmstead, J. and Berges, Bradford K. Identifying mechanisms of icADBC operon regulation leading to altered biofilm formation in Methicillin-resistant S. aureus. Utah Conference on Undergraduate Research, 2019.
- McCrary, I. and Berges, Bradford K. Effect of Phage Treatment on the Biofilm of Staphylococcus epidermidis on Silastic Catheter Material. Utah Conference on Undergraduate Research, 2019.
- Dalton Karlinsey, and Berges, Bradford K. Testing the effect of Viral Protein R (Vpr) on the progression of the HIV-1 to AIDS. BYU College of Life Sciences poster competition, 2019.
- Dalton Karlinsey, and Berges, Bradford K. Testing the effect of Viral Protein R (Vpr) on the progression of the HIV-1 to AIDS. American Society of Microbiology Branch Meeting, 2019.
- Dalton Karlinsey, and Berges, Bradford K. Testing the effect of Viral Protein R (Vpr) on the progression of the HIV-1 to AIDS. BYU CURA Research Conference, 2019.

- Ian McCrary, and Berges, Bradford K. Effect of Phage Treatment on the Biofilm of *Staphylococcus aureus* on Silastic Catheter Material. BYU CURA Research Conference, 2019.
- Mark Conley, and Berges, Bradford K. Exploring the Ability of 12 Novel Phages in Breaking Down MRSA Biofilms. BYU CURA Research Conference, 2019.
- Grasley, M., and Berges, Bradford K. The Kaposi's sarcoma-associated herpesvirus viral interleukin 6 gene affects metastasis and expression of B cell markers in a murine xenograft model. Utah Conference on Undergraduate Research, 2019.
- Conley, M., and Berges, B.K. Exploring the ability of 12 Novel Phages in breaking down MRSA Biofilms. Utah Conference on Undergraduate Research, 2019.
- Solís-Leal, A., Karlinsey, D.C., Berges, B.K. Testing the effect of Viral Protein R (Vpr) on the progression of the HIV-1 to AIDS. American Society of Microbiology Tri-Branch Meeting, 2018.
- M. Grasley, A.E. Wallace, and B. K. Berges. Kaposi's Sarcoma Associated Herpesvirus and Its Dependency on Latency-Associated Nuclear Antigen to Maintain Episome Persistence. American Society of Microbiology Tri-Branch Meeting, 2018.
- Grasley, Meagan, Wallace, Addie, and Berges, Bradford K. Adult T-cell leukemia development in Rag2^{-/-}γc^{-/-} humanized mice. American Society of Microbiology Tri-Branch Meeting, 2018.
- Spencer Bagley, Bradford Berges. Sequencing and Annotation of 12 Bacteriophage Genomes To Aid In Discovering a Treatment For Methicillin-Resistant *Staphylococcus aureus*. Utah Conference on Undergraduate Research, 2017.
- Matthew Smith, Kayleigh Ingersoll, and Bradford K. Berges. Modeling a Leukemia-Causing Virus: Developing a Humanized Mouse Model for Human T-Lymphotropic Virus Type 1 (HTLV-1). American Society of Microbiology Intermountain Branch Meeting, 2017.
- Conley, M. and Berges, B.K. Eradication of *Staph aureus* biofilms with silver nanoparticles. American Society of Microbiology Intermountain Branch Meeting, 2017.
- Daniels, C.W., Fullwood A., and Berges, B.K. The Role of KSHV Viral Interleukin-6 in Cancer Development. American Society of Microbiology Intermountain Branch Meeting, 2017.
- Samuel Schriever, Kenisi Monomania, Kyler Haskell, Benjamin Haws, Erik Berges, Bradford Berges. Comparison of Antibiotic Resistance Profiles in *Staphylococcus aureus* in Organic and Traditionally Grown Poultry. American Society of Microbiology Intermountain Branch Meeting, 2017.
- I. Guerrero; T. Rasmussen Høj; B. Berges; R. Robison. Effects and Differences Between Human and Mouse Cell Lines During Chikungunya Infection. American Society of Microbiology Intermountain Branch Meeting, 2017.
- Christian Daniels, Amy Fullwood, Bradford Berges. Role of KSHV viral Interleukin-6 in Cancer Development. Utah Conference on Undergraduate Research, 2017.
- Haws, Benjamin, Schriever, Samuel R., Berges, Erik T., and Berges, Bradford K.. Assessment of the Impact of Antibiotic Use in Livestock on *Staphylococcus aureus* Prevalence and Antimicrobial Resistance. Utah Conference on Undergraduate Research, 2017.
- Smith, Matthew, Ingersoll, Kayleigh, and Berges, Bradford. Development of a humanized mouse model to study HTLV-1 infection and ATLL cancer. Utah Conference on Undergraduate Research, 2017.
- Conley, Matthew E., Hair, Bryan B., Bradford Berges. The Synergistic and Bactericidal Effects of Vancomycin, Bacteriophage, and Silver Nanoparticles against MRSA Biofilms. Utah Conference on Undergraduate Research, 2017.

- Frequency and Characterization of *Staphylococcus aureus* and MRSA in raw meat samples in the Utah County Area. Haskell, Kyler J., Schriever, Samuel R., Wienclaw, Trevor M., and Berges, Bradford K. Utah Conference on Undergraduate Research, 2016.
- Matthew Smith, Kayleigh Ingersoll, and Bradford K. Berges. Modeling a Leukemia-Causing Virus: Developing a Humanized Mouse Model for Human T-Lymphotropic Virus Type 1 (HTLV-1) American Society of Microbiology Intermountain Branch Meeting, 2017.
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- I. Guerrero; T. Rasmussen Høj; B. Berges; R. Robison. Effects and Differences Between Human and Mouse Cell Lines During Chikungunya Infection. American Society of Microbiology Intermountain Branch Meeting, 2017.
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- Conley, Matthew E., Hair, Bryan B., Bradford Berges. The Synergistic and Bactericidal Effects of Vancomycin, Bacteriophage, and Silver Nanoparticles against MRSA Biofilms. Utah Conference on Undergraduate Research, 2017.
- Christian Daniels, Bradford Berges. Hamsters Expected to Produce Better Immune System than Mice LDS Life Science Symposium, 2016.
- Daniels, Christian and Berges, Bradford K. . Hamsters Expected to Produce Better Immune System than Mice. American Society of Microbiology Intermountain Branch Meeting, 2016.
- Haskell, Kyler J., Schriever, Samuel R., Wienclaw, Trevor M., Hair, Bryan, Haws, Benjamin and Berges, Bradford K. Frequency and Characterization of *Staphylococcus aureus* and MRSA in raw meat samples in the Utah County Area. American Society of Microbiology Intermountain Branch Meeting, 2016.
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- Daniels, Christian and Berges, Bradford K. Hamsters Expected to Produce a Better Immune System than Mice. Utah Conference on Undergraduate Research, 2016.
- Hair, Bryan B., Rasmussen, Taalin S., Wienclaw, Trevor M., Deus, Lisa M., and Berges, Bradford K. The Synergistic and Bactericidal Effects of Vancomycin, Bacteriophage, and Silver Nanoparticles against MRSA Biofilms. Utah Conference on Undergraduate Research, 2016.

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- Haskell, Kyler J., Wienclaw, T.M., Jensen, K.C., Murdock, M.H., Hatch, J.B., White, T.D., Hair, B.B., Trent, A.T., Berges, B.K. Isolation and Characterization of Novel Lytic Phage to Treat Methicillin-Resistant *Staphylococcus Aureus*. American Society of Microbiology Intermountain Branch Meeting, 2015.
- White, T.D., Jensen, K.C., Wienclaw, T.M., Hatch, J.B., Hair, B.B., Trent, A.T., and Berges, B.K. Isolation and Characterization of Novel Lytic Phage to Treat Methicillin-Resistant *Staphylococcus Aureus*. Utah Conference on Undergraduate Research, 2015.
- Trevor M. Wienclaw, Kyle C. Jensen, Jacob B. Hatch, Tyler D. White, Bryan B. Hair, and Bradford K. Berges. Isolation and characterization of novel bacteriophage as a control of Methicillin Resistant *Staphylococcus Aureus*. Autumn Immunology Conference, 2014.
- Anne Tanner, Stephanie A. Carlson, Wittnee Decottignies, Steven J. Hallam, Hillary J. Willyerd, Masatoshi Nukui, Eain A. Murphy, and Bradford K. Berges. Human herpesvirus 6A infection of humanized mice and effects on human T cell populations. American Society for Virology, 2014.
- Kyle C. Jensen, Mark H. Murdock, Jacob B. Hatch, Tyler D. White, and Bradford K. Berges. Isolation and characterization of novel bacteriophage as a control of Methicillin Resistant *Staphylococcus Aureus*. American Society of Microbiology Intermountain Branch Meeting, 2014.
- Steven J. Hallam, German I. Cuadra, Stanton J. Nielsen, and Bradford K. Berges. Immune Development in Humanized Mice as characterized by B cell maturation and antibody production. American Society of Microbiology Intermountain Branch Meeting, 2014.
- Anne Tanner, Stephanie A. Carlson, Wittnee Decottignies, Stephen E. Taylor, and Bradford K. Berges. Humanized mice as a novel model to study human herpesvirus 6 tropism and infection. 8th International Conference on HHV-6 & 7, 2013.
- Stanton J. Nielsen, German I. Cuadra, and Bradford K. Berges. Human B Cell Development and Antibody Responses in Humanized Mice. Autumn Immunology Conference, 2012.
- German I. Cuadra, Stanton J. Nielsen, and Bradford K. Berges. Humanized mice as a model to study the development of human B cells and antibody responses. American Society of Microbiology Intermountain Branch Meeting, 2012.
- Bradford K. Berges, Anne Tanner, and Stephanie A. Carlson. Humanized mice as a novel model to study human herpesvirus 6 tropism and infection. American Society for Virology, 2012.
- Freddy S. Tumbaco, J. Nicholas Francis, Michael S. Kay, and Bradford K. Berges. Humanized mice as a preclinical model for testing a novel HIV-1 fusion inhibitor. International Conference and Exhibition on Virology, 2011.
- Freddy S. Tumbaco, Jamie D. Gardiner, Joel R. Gardner, German R. Cuadra, and Bradford K. Berges. Infection of humanized Rag2^{-/-}gc^{-/-} mice with Kaposi's Sarcoma-Associated Herpesvirus for studies of AIDS-associated lymphomas. American Society for Virology, 2011.
- Bradford K. Berges, Tyler S. Slater, Michael B. Hatch, Sterling G. Adams, Paulo M. Tello, and Christopher P. Koontz. Analysis of human antibody responses to Dengue virus type 2 following experimental infection of humanized Rag2^{-/-}gc^{-/-} mice. American Society for Virology, 2011.

- German I. Cuadra and Bradford K. Berges. “Humanized Mice as a Model to study Human Gammaherpesvirus Transmission”. American Society of Microbiology Intermountain Branch Meeting, 2011.
- Stephanie A. Carlson and Bradford K. Berges. “Humanized Mice as a Model of HHV-6 Infection”. American Society of Microbiology Intermountain Branch Meeting, 2011.
- Tyler Slater, Sterling G. Adams, and Bradford K. Berges. “A Novel ELISA Test to Detect Human Anti-Dengue Antibodies”. American Society of Microbiology Intermountain Branch Meeting, 2011.
- Berges, B.K., Sanchez, F., Rowan, M., and Carlson, S. ”Susceptibility of humanized mice to KSHV infection for studies of AIDS-associated lymphomagenesis.” 13th International Workshop on Kaposi’s Sarcoma Associated-Herpesvirus (KSHV) and Related Agents, 2010.
- Berges, B.K., Sanchez, F. ”Development of humanized mice to study AIDS-associated lymphomagenesis by gammaherpesviruses.” International Herpesvirus Workshop, 2010.
- Berges, B.K., Sanchez, F., Rowan, M. ”Human cytokine expression profile following Dengue virus infection of humanized Rag2^{-/-}gamma chain ^{-/-} mice.” American Society for Virology, 2009.
- Remling, L., Berges, B.K., and Akkina, R. ”Life-long chronic HIV-1 infection and persistent CD4 T cell depletion in a humanized Rag2^{-/-}γc^{-/-} (RAG-hu) mouse model.” Keystone Symposium on Molecular and Cellular Determinants of HIV Pathogenesis, 2009.
- Akkina, R., Berges, B. K., Akkina, S. R., Folkvord, J. M., and Connick, E. “Vaginal and rectal mucosal transmission of R5 and X4-tropic HIV-1 in humanized Rag2^{-/-}γc^{-/-} (RAG-hu) mice.” Keystone Symposium on Molecular and Cellular Determinants of HIV Pathogenesis, 2008.
- Berges, B. K., Akkina, S. R., Folkvord, J. M., Connick, E., and Akkina, R. “Vaginal and rectal mucosal transmission of R5 and X4-tropic HIV-1 in humanized Rag2^{-/-}γc^{-/-} (RAG-hu) mice.” Palm Springs Symposium on HIV/AIDS, 2008.
- Akkina, R., Berges, B., Akkina, S., Folkvord, J., and Connick, E. “A new humanized mouse model for testing HIV/AIDS therapies and microbicides.” International Conference on Drug Design and Discovery, 2008.

AWARDS

NIH Institutional Training Grant Fellow (University of Pennsylvania).

PROFESSIONAL AFFILIATIONS

The American Society of Gene Therapy.
The American Society for Virology.

FUNDING

BYU Widtsoe Grant award, 2019

Role: PI

Awarded (\$25,000)

BYU College of Life Sciences Technology Transfer Award 2017

Role: PI

Awarded (\$10,000)

BYU College of Life Sciences Turkey Vaccine Award 2016

Role: PI

Awarded (\$10,000)

Screening of *K. pinnata* extracts and synthetic derivatives for anti-herpesvirus compounds, June 2016. Funded by KP Biosciences
Role: PI
Awarded (\$7,500)

BYU Mentoring Environment Grant, October 2015: Frequency of Pathogenic *Staphylococcus Aureus* in Commercial Meat Samples and Examination of new ways to Eliminate *Staphylococcus Aureus* Biofilms
Role: PI
Awarded (\$20,000)

BYU Turkey Vaccine Study Award, October 2014: Development of phage therapy to protect poultry from *Staphylococcus aureus* infections
Role: PI
Awarded (\$15,000)

BYU Mentoring Environment Grant, October 2014: Discovery and characterization of novel bacteriophage as a way to control Methicillin-Resistant *Staphylococcus Aureus*
Role: PI
Awarded (\$20,000)

Developmental Center for AIDS Research Pilot Award, November 2013: Are humanized mice a viable model to study hiv-1 evolutionary dynamics? Role: co-PI
Awarded (\$50,000)

BYU Mentoring Environment Grant, October 2013: Analysis of the kinetics and recombinatorial mechanisms of HIV-1 evolution in vivo in humanized mice
Role: PI
Awarded (\$20,000)

Renewal of BYU Technology Transfer Grant, December 2012. Use of humanized mice to develop novel human monoclonal antibodies against Dengue virus
Role: PI
Awarded (\$26,673)

BYU Mentoring Environment Grant, October 2011. The role of the KSHV LANA protein in development of persistent infections in vivo
Role: PI
Awarded (\$20,000)

HHV6 Foundation Pilot Proposal Grant, September 2011. Development of Humanized Rag2^{-/-}γc^{-/-} Mice as a Model of HHV-6A Infection
PI: Bradford K. Berges
Awarded (\$27,500)

BYU Graduate Mentoring Award, April 2011.
Role: Mentor
Awarded (\$4,000)

USTAR sub-contract via Dr. Michael Kay (University of Utah) to study humanized mice as a model to analyze the efficacy of D-peptide inhibitors of HIV-1 entry (\$15,000)

BYU Technology Transfer Grant, September 2010. Use of humanized mice to develop novel human monoclonal antibodies against Dengue virus

Role: PI

Awarded (\$31,725)

BYU Mentoring Environment Grant, October 2009. Development of humanized mice to study Kaposi's Sarcoma Herpesvirus infections and pathogenesis

Role: PI

Awarded (\$20,000)

BYU Graduate Mentoring Award, January 2009.

Role: Mentor

Awarded (\$5,000)

RESIDENCY STATUS

U.S. Citizen

REFERENCES

Available upon request