

Brian D. Poole, PhD

Professor, Dept. of Microbiology and Molecular Biology

Brigham Young University

EDUCATION AND TRAINING

		DEGREE YEAR(s)	FIELD OF STUDY
Brigham Young University	B.S.	1993-1999	Microbiology
Pennsylvania State University	PhD	1999-2004	Immunology/virology
Oklahoma Medical Research Foundation	(Postdoc)	2004-2008	Immunology/virology

POSITIONS

Professor, Brigham Young University, 2022-present

Associate Chair, Department of Microbiology and Molecular Biology. 2025-Present

Associate Professor, Brigham Young University, 2014-2022

Assistant Professor, Brigham Young University. 2008-2014

Chair, Scientific Advisory committee, Lupus Foundation of America, Utah Chapter. 2016-2019

Lead Guest Editor, Journal of Biomedicine and Biotechnology, 2009-2012

Associate Research Scientist, Oklahoma Medical Research Foundation, 2004-2008

Research Assistant, Pennsylvania State University, 2002-2003

Life Science Consortium Fellow, Pennsylvania State University, 1999-2001

HONORS

Distinguished HPV Cancer Prevention Researcher. Intermountain West HPV Vaccination Coalition 2023

College of Life Sciences Outstanding Research Award 2023

Best Paper Award 2022. "Vaccines" MDPI 2022

College of Life Sciences Outstanding Teaching Award 2018

Phi Kappa Phi National Honor Society 2018

Research Appreciation Award, Lupus Foundation of America, Utah Chapter 2017

Alcuin Fellow (University Honors teaching award) 2017-2019

Fulbright Research Award 2016

Microbiology and Molecular Biology Departmental Research Award 2013

Microbiology and Molecular Biology Departmental Teaching Award 2013

Recognition for Research. Lupus Foundation of America, Utah Chapter 2010

Faculty Affiliate, Women's Research Institute, Brigham Young University 2009

Intercollege Graduate Student Outreach Award, Pennsylvania State University 2004

Arthritis Foundation trainee award 2002, 2003

Trustees Scholar, Brigham Young University 1993-1999

PROFESSIONAL MEMBERSHIPS

American Association of Immunologists 2008-Present

REFEREED PUBLICATIONS

1. Aduse-Poku, I.; Ardon, D.A.; Call, A.B.; Davis, S.C.; Evans, P.; Johanson, S.; Larson, R.J.; Rencher, J.; Woolley, I.A.; **Poole, B.D.**; et al. Intervention Strategies to Overcome HPV Vaccine Hesitancy Among Hispanic Immigrants in the USA: A Video-Based Approach. *Vaccines* 2025, *13*, 574. <https://doi.org/10.3390/vaccines13060574>
2. Quaye, A.; Pickett, B.E.; Griffiths, J.S.; Berges, B.K.; **Poole, B.D.** Turkey B Cell Transcriptome Profile During Turkey Hemorrhagic Enteritis Virus (THEV) Infection Highlights Upregulated Apoptosis and Breakdown Pathways That May Mediate Immunosuppression. *Viruses* 2025, *17*, 299. <https://doi.org/10.3390/v17030299>
3. Larson RJ, Jensen JL, Alvord SM, Sloan-Aagard C, Skyles T, Davis SC, Obray AM, Pogue K, **Poole BD**. Effects of religious and cultural beliefs on vaccine attitudes in a Hispanic immigrant population in the United States. *PLOS Glob Public Health*. 2024 Aug 6;4(8):e0003519. doi: 10.1371/journal.pgph.0003519.
4. Redd DS, Altman JD, Jensen JL, Sloan-Aagard CD, Crook TB, Asay AE, Nielson BU, Larson RJ, Miner DS, **Poole BD**. A Randomized Study to Determine the Effect of a Culturally Focused Video Intervention on Improving HPV Vaccine Intentions in a Christian Population in the United States. *J Community Health*. 2024 Aug;49(4):661-673. doi: 10.1007/s10900-024-01327-8. Epub 2024 Feb 23.
5. Quaye A, Pickett BE, Griffiths JS, Berges BK, **Poole BD**. Characterizing the splice map of Turkey Hemorrhagic Enteritis Virus. *Virol J*. 2024 Aug 6;21(1):175. doi: 10.1186/s12985-024-02449-0.
6. Rapier-Sharman N, Hutchinson ML, Moreno CM, Quaye A, **Poole BD**, Weber KS, Pitt WG, Pickett BE. A Novel Application of Spinning Disk Technology to Collect Plasma from Whole Blood Prior to Quantifying Plasma RNA. *MicroPubl Biol*. 2023 Nov 3;2023:10.17912/micropub.biology.001007. doi: 10.17912/micropub.biology.001007.
7. Hittson, H.; McAleer, L.; Saucedo, L.; Mahler, L.; Andino, G.; Zorba, A.; Walden, S.; Pickett, B.E.; **Poole, B.D.**; Abel, E.L. Association between Religious Beliefs and HPV Vaccination Attitudes among College Students. *Vaccines* **2023**, *11*, 1623. <https://doi.org/10.3390/vaccines11101623>
8. Skyles, Ty J.; Stevens, Harlan P.; Obray, Acelan M.; Jensen, Jamie L.; Miner, Dashiell S.; Bodily, Ruth J.; Nielson, Bryce U.; **Poole, Brian D.** Changes in Attitudes and Barriers to Seasonal Influenza Vaccination from 2007 to 2023. *Journal of Community Health*, 2023 1-11. <https://doi.org/10.1007/s10900-023-01277-7>
9. Pogue, K.; Altman, J.D.; Lee, A.A.; Miner, D.S.; Skyles, T.J.; Bodily, R.J.; Crook, T.B.; Nielson, B.U.; Hinton, K.; Busacker, L.; Mecham, Z.E.; Rose, A.M.; Black, S.; **Poole, B.D.** Decrease in Overall Vaccine Hesitancy in College Students during the COVID-19 Pandemic. *Vaccines* **2023**, *11*, 1132. <https://doi.org/10.3390/vaccines11071132>
10. Altman, J.D.; Miner, D.S.; Lee, A.A.; Asay, A.E.; Nielson, B.U.; Rose, A.M.; Hinton, K.; **Poole, B.D.** Factors Affecting Vaccine Attitudes Influenced by the COVID-19 Pandemic. *Vaccines* **2023**, *11*, 516. <https://doi.org/10.3390/vaccines11030516>
11. Téllez Arévalo AM, Quaye A, Rojas-Rodríguez LC, **Poole BD**, Baracaldo-Santamaría D, Tellez Freitas CM. Synthetic Pharmacotherapy for Systemic Lupus Erythematosus: Potential Mechanisms of Action, Efficacy, and Safety. *Medicina*. 2023; 59(1):56.

<https://doi.org/10.3390/medicina59010056>

12. Redd, D. S.; Jensen, J.L.; Bodily, R.J.; Lee, A.A.; Skyles, T.J.; **Poole B.D.** Cautious Sexual Attitudes Diminish Intent to Vaccinate Children Against HPV in Utah. *Vaccines* 2022 10(9) 1382 DOI: <https://doi.org/10.3390/vaccines10091382>
13. Redd, D.S.; Jensen, J.L.; Hughes, S.J.; Pogue, K.; Sloan-Aagard, C.D.; Miner, D.S.; Altman, J.D.; Crook, T.B.; Zentz, L.; Bodily, R.J.; **Poole, B.D.** Effects of Religious Practice and Teachings about Sexual Behavior on Intent to Vaccinate against Human Papillomavirus. *Vaccines* 2022, 10, 397. <https://doi.org/10.3390/vaccines10030397>
14. Fobiwe, J.P.; Martus, P.; **Poole, B.D.**; Jensen, J.L.; Joos, S. Influences on Attitudes Regarding COVID-19 Vaccination in Germany. *Vaccines* 2022, 10, 658. <https://doi.org/10.3390/vaccines10050658>
15. Afzal A, Shariff MA, Perez-Gutierrez V, Khalid A, Pili C, Pillai A, Venugopal U, Kasubhai M, Kanna B, **Poole BD**, Pickett BE, Redd DS, Menon V. Impact of Local and Demographic Factors on Early COVID-19 Vaccine Hesitancy among Health Care Workers in New York City Public Hospitals. *Vaccines (Basel)*. 2022 Feb 10;10(2):273. doi: 10.3390/vaccines10020273.
16. Figueiredo-Braga, Margarida; Silva, Beatriz; Beatriz; Aguiar, Francisca; Cornaby, Caleb; Brito, Iva; **Poole, Brian D.** Kidney function, age, and education as contributors to depression and anxiety in juvenile systemic lupus erythematosus. *Eur J Investig Health Psychol Educ*. 2021 Nov 25;11(4):1503-1515. doi: 10.3390/ejihpe11040107.
17. Laura J. Westhoff, Savannah J. Hughes, Erin Gill, Trent Walker, Abraham Quaye, Bradford Berges, **Brian D. Poole**. IL-18 Overproduction Associated with NLRP1 Single Nucleotide Polymorphisms Linked to Risk for Vitiligo. *International Journal of Clinical & Experimental Dermatology* Sept 2021 6(2). Doi: <https://doi.org/10.33140/IJCED.06.02.05>
18. Ciardi, Federico.; Menon, Vidya.; Jensen, Jamie L.; Shariff, Masood A.; Pillai, Anjana; Venugopal, Usha; Kasubhai, Moiz; Dimitrov, Vihren; Kanna, Balavenkatesh, **Poole, Brian D.** Knowledge, Attitudes and Perceptions of COVID-19 Vaccination among Healthcare Workers of an Inner-City Hospital in New York. *Vaccines*. May 17, 2021 9(5). <https://www.mdpi.com/2076-393X/9/5/516/htm#>
19. Johnson, Deborah K.; Reynolds, Kaylia M.; **Poole, Brian D.**; Monteirh, Matthew D.; Todd, Vera M.; Barnado, April; Davis, Mary F. Contribution of viral infection to risk for cancer in systemic lupus erythematosus and multiple sclerosis. *PLOS One*. 2021. Jan 22 16(1): e0243150. <https://doi.org/10.1371/journal.pone.0243150>
20. Ogilvie BH, Solis-Leal A, Lopez JB, **Poole BD**, Robison RA, Berges BK. Alcohol-free hand sanitizer and other quaternary ammonium disinfectants quickly and effectively inactivate SARS-CoV-2. *J Hosp Infect*. 2020 Nov 28;108:142–5. doi: 10.1016/j.jhin.2020.11.023
21. Pogue, Kendall; Jensen, Jamie L.; Stancil, Carter K.; Ferguson, Daniel G.; Hughes, Savannah J.; Mello, Emily J.; Burgess, Ryan; Berges, Bradford K.; Quaye, Abraham; **Poole, Brian D.** Influences on Attitudes Regarding Potential COVID-19 Vaccination in the United States. *Vaccines*, 2020. 8: 582. <https://doi.org/10.3390/vaccines8040582>

22. Johnson, Deborah K.; Mello, Emily J; Walker, Trent D.; Hood, Spencer J.; Jensen, Jamie L.; **Poole, Brian D.** Combating Vaccine Hesitancy with Vaccine-Preventable Disease Familiarization: An Interview and Curriculum Intervention for College Students. *Vaccines*. 2019 May 12;7(2). pii: E39. doi: 10.3390/vaccines7020039
23. Figueiredo-Braga M, Cornaby C, Cortez A, Bernardes M, Terroso G, Figueiredo M, Mesquita CDS, Costa L, **Poole Brian D.** Influence of Biological Therapeutics, Cytokines, and Disease Activity on Depression in Rheumatoid Arthritis. *Journal of Immunology Research*. 2018, Article ID 5954897, 9 pages. doi: 10.1155/2018/5954897
24. Figueiredo-Braga M, Cornaby C, Cortez A, Bernardes M, Terroso G, Figueiredo M, Mesquita CDS, Costa L, **Poole Brian D.** Depression and anxiety in systemic lupus erythematosus: The crosstalk between immunological, clinical, and psychosocial factors. *Medicine (Baltimore)*. 2018 Jul;97(28):e11376. doi: 10.1097/MD.00000000000011376.
25. Figueiredo-Braga M, Cornaby C, Bernardes M, Figueiredo M, Mesquita CDS, Costa L, **Poole, Brian D.** Correlation between physical markers and psychiatric health in a Portuguese systemic lupus erythematosus cohort: The role of suffering in chronic autoimmune disease. *PLoS ONE*. April 2018. 13(4): e0195579.
26. Cornaby, Caleb; Jafek, Jillian L.; Birrell, Cameron; Mayhew, Vera; Syndergaard, Lauren; Mella, Jeff; Cheney, Wesley; **Poole, Brian D.** EB12 expression in B lymphocytes is controlled by the Epstein-Barr virus transcription factor, BRRF1 (Na), during viral infection. *Journal of General Virology*, 2016 Nov 16. doi: 10.1099/jgv.0.000660
27. Cornaby, Caleb; Tanner, Anne; Stutz, Eric; **Poole, Brian D.**; Berges, Bradford K. Piracy on the molecular level: human herpesviruses that manipulate cellular chemotaxis. *Journal of General Virology*, December, 2015. Doi 10.1099/jgv.0.000370
28. Cornaby, Caleb; Gibbons, Lauren; Mayhew, Vera; Sloan, Chad S.; Welling, Andrew; **Poole, Brian D.** B cell epitope spreading: Mechanisms and contribution to autoimmune diseases. *Immunology Letters*. January 2015: 163(1) 56-68. doi:10.1016/j.imlet.2014.11.001
29. Clark, Daniel N.; Read, R. Daniel; Mayhew, Vera; Petersen, Stephen C; Argueta, Lissanya B.; Stutz, Lance A; Till, Rodney E; Bergsten, Sean M.; Robinson, Brandon S.; Baumann, Douglas G.; Heap, J. Casey; **Poole, Brian D.** Four promoters of IRF5 respond distinctly to stimuli and are affected by autoimmune-risk polymorphisms. *Front. Immunol.* 2013. doi: 10.3389/fimmu.2013.00360
30. Clark, Daniel N.; Lambert, Jared P.; Till, Rodney E.; Argueta, Lissanya B; Roznik Marinya G; Greenhalgh, Kathryn E.; Henrie, Brandon; Hawkley, Tyson F.; Sloan, Jason M.; Bills, Trieste; Woodland, ; Nelson, Eric P; Tsai, Meng-Hsuan; **Poole, Brian D.** Molecular effects of the rs2004640 autoimmune risk allele on mRNA translational efficiency and exon choice in interferon regulatory factor 5. *Journal of Interferon and Cytokine Research*. Dec 2013.

31. Clark, Daniel N.; Markham, Jillian L.; Sloan, Chad S.; **Poole, Brian D.** Cytokine Inhibition as a Strategy for Treating Systemic Lupus Erythematosus. *Clin Immunol.* 2012 Nov 12. doi:pii: S1521-6616(12)00276-8.
32. Guthridge, Joel M.; Clark, Daniel N.; Templeton, Amanda; Dominguez, Nicolas; Lu, Rufe; Vidal, Gabriel; Kelly, Jennifer A; Kauffman, Kenneth; Harley, John B.; Gaffney, Patrick; James, Judith A.; **Poole, Brian D.** Effects of IRF5 lupus risk haplotype on pathways predicted to influence B cell functions. *Journal of Biomedicine and Biotechnology. J Biomed Biotechnol.* 2012; 2012: 594056
33. Clark, Daniel N.; **Poole, Brian D.**; Hedman, Tyler J.; Hammond, Daniel V.; Catts, Daniel S.; Stewart, Amanda; Johnson, F. Brent. Characterization of herpes simplex virus clinical isolate Y3369 and its bearing on HSV typing. *Virology Journal* 2011. **8**:290
34. **Poole, Brian D.**; Kivovich, Violetta; Gilbert, Leona; Naides, Stanley J. Parvovirus B19 nonstructural protein-induced damage of cellular DNA and resultant apoptosis. *Int J Med Sci.* 2011 Jan 15;8(2):88-96
35. Neiwold, Timothy; Clark, Daniel; Salloum, Rafeh; **Poole Brian D.** Interferon alpha in systemic lupus erythematosus. *J Biomed Biotechnology.* 2010;2010:948364.
36. **Poole, Brian D.**; Templeton, Amanda K.; Guthridge, Joel M.; Brown, Eric J.; Harley, John B.; James, Judith A. Aberrant Epstein-Barr viral infection in systemic lupus erythematosus. *Autoimmun Rev.* 2009 8(4):337-42.
37. **Poole, Brian D.**, Schneider, Rebecca I.; Guthridge, Joel M.; Velte, Cathy; Reichlin, Morris; Harley, John B.; James, Judith A. Early Targets of nRNP Humoral Autoimmunity in Human Systemic Lupus Erythematosus. *Arthritis and Rheumatism* 2009 60(3):848-59.
38. **Poole, Brian D.**, Gross, Timothy, Maier, Shannon, Harley, John B., James, Judith A. Lupus-like Autoantibody development in rabbits and mice after immunization with EBNA-1 fragments. *Journal of Autoimmunity* 2009 (4):362-71.
39. **Poole, Brian D.**; Zhou, Jing, Grote, Amy; Schiffenbauer, Adam; and Naides, Stanley. Apoptosis of Liver-Derived Cells Induced by Parvovirus B19 Nonstructural Protein. *Journal of Virology*, 2006 April; 80(8):4114-4121.
40. **Poole, Brian D.**; Scofield, R. Hal; Harley, John B.; and James, Judith A. Epstein-Barr Virus and Molecular Mimicry in Systemic Lupus Erythematosus. *Autoimmunity* 2006 Feb;39(1):63-70.
41. McClain, Micah; **Poole, Brian D.**; Bruner, Benjamin; Kaufman, Kenneth; Harley, John, and James, Judith A. An altered immune response to Epstein-Barr virus nuclear antigen-1 (EBNA-1) in pediatric systemic lupus erythematosus. *Arthritis & Rheumatism*, 2005 Dec 29;54(1):360-368
42. **Poole, Brian D.**; Karetnyi, Yuory; and Naides, Stanley J. Parvovirus B19-Induced Apoptosis of Hepatocytes. *Journal of Virology* 2004 78(14):7775-7783.

NON-REFEREED PUBLICATIONS

1. Abbot, Benjamin; Chaston, John M; Bush, Jonas; Sloan, Chantel D; **Poole, Brian D**; Greenhalgh, Mitchell; St. Claire, Isaac; Moon, Haley; Gudmundson, Jacob; Gottfredson, Sarah; Errigo, Isabella; Lemmon, Skyler. Making sense of the research on COVID-19 and school reopenings. <http://rgdoi.net/10.13140/RG.2.2.24052.17285> 2020.
2. Hope, Sandra; **Poole, Brian D.** *Our Immune System and the Pathogens that Challenge Us: Foundations in Immunology, Virology, and Bacteriology*. Great River Learning, 2019.
3. Clark Daniel N.; **Poole, Brian D.** Interferon and apoptosis in Systemic Lupus Erythematosus. In *Systemic Lupus Erythematosus*, Hani Almoallim, editor. Intech Publishing. 2012 pp 77-96.
4. **Poole, Brian D.**; Niewold, Timothy B.; Tsokos, George C. Cytokines in Systemic Lupus Erythematosus 2011. *J. Biomed Biotechnol.* 2011. 2012:427824.
5. **Poole, Brian D.**; Niewold, Timothy B.; Tsokos, George C.; Via, Charles S. Cytokines in Systemic Lupus Erythematosus. *J. Biomed Biotechnology.* 2010:2010 735169.
6. **Poole, Brian D.** and James, Judith A. Infection and Autoimmunity. In *Systemic Lupus Erythematosus, a Companion to Rheumatology*. George C. Tsokos, Caroline Gordon, and Josef S. Smolen, Editors. Elsevier Press, Philadelphia, PA. Jan 2007 pp143-155.

RESEARCH SUPPORT

Current

1. **Brian D. Poole (PI), Jamie L. Jensen (Co-PI), Len Novilla (Co-PI).** Merck Investigator studies program (\$188,743) "Overcoming barriers to HPV vaccination among Pacific Islanders in the United States" 2025-2027

Completed

1. **Brian D. Poole (PI) Jamie L. Jensen (Co-PI), Chantel Sloan (Co-PI) Scott Alvord (Co-PI).** Merck Investigator Studies Program (\$177,577). "Overcoming barriers to HPV vaccine acceptance among Hispanic Immigrants in the US" 2022-2024
2. **Brian D. Poole (PI).** American Cancer Society: HPV-Free Utah (\$39,000). "Understanding HPV vaccine attitudes in rural Utah" 2022-2023
3. **Brian D. Poole (PI) Jamie L. Jensen (Co-PI), Chantel Sloan (Co-PI).** Merck Investigator Studies Program (\$92,231.28) "Overcoming barriers to HPV vaccine acceptance in religious populations" 2020-2022
4. **Brian D. Poole (PI) Utah Department of Health (\$29,164).** "HPV Vaccination Belief Assessment and Intervention Plan" 2022
5. **Brian D. Poole (PI) Mentoring Environment Grant (\$20,000) 2017-2018** "IRF5 in B cells in systemic lupus erythematosus"
6. **Brian D. Poole (PI) Fulbright Scholar award (\$20,000) 2016.** "Fatigue and Depression in Lupus"
7. **Brian D. Poole (PI) Women's research initiative grant (\$5,000). 2015.** Epitope spreading in Systemic lupus erythematosus.
8. **Brian D. Poole (PI).** American Association of Immunologists Undergraduate Faculty Travel Grant (\$2,250). 2015
9. Bradford K. Berges, **Brian D. Poole (Co-PI).** "Use of humanized mice to develop novel human monoclonal antibodies against Dengue." 11/2012-12/2013 (\$24,254). Funded by Harmony Health.
10. **Brian D. Poole (PI) Mentoring Environment Grant.** "Role of Epstein-Barr Virus Induced Gene II (EBI2) in Epstein-Barr Virus Infection and B-cell Chemotaxis" 01/01/2012-

- 01/31/2014. (\$20,000). This award is to provide an environment for undergraduate research at Brigham Young University. Funded by Brigham Young University
11. **Brian D. Poole** (PI) Mentoring Environment Grant. "Molecular Mechanisms of Lupus Risk Conferred by an Allele in the Gene for Interferon Response Factor 5" 01/01/2011-01/31/2013. (\$20,000). This award is to provide an environment for undergraduate research at Brigham Young University.
 12. **Brian D. Poole** (PI) Women's Research Initiative Grant 2011. "Interferon Regulatory Factor 5 in Systemic Lupus Erythematosus" 01/10/2011-12/31/2011. (\$5,000) This award to carry out research on lupus, a disease which primarily affects women. Funded by Brigham Young University.
 13. **Brian D. Poole** (PI) Mentoring Environment Grant. 02/01/2009-/01/31/2011 This award is to provide an environment for undergraduate research at Brigham Young University. (\$20,000)
 14. **Brian D. Poole (PI)**. Functional manifestations of SLE Risk Haplotypes on EBV infection and Related Stimuli NIH 5 P20 RR020143-05.07/2008-08/2008. (\$50,000). This award is to study the role of the IRF 5 risk haplotype on Epstein-Barr virus infection and gene expression in the development of systemic lupus erythematosus. The grant was only utilized for one month because of a change in institution and position.
 15. **Brian D. Poole (PI)**. Molecular Basis of Immunity NIH T32 AI007633-07. 09/2006-08/2008. (Post-doctoral stipend plus \$3,000/year over 2 years). Post-doctoral fellowship.

Presentations 2008-present

1. Affecting HPV Vaccination Barriers Through Culturally-Specific Communication. Utah HPV Stakeholders Meeting. Salt Lake City, UT. 2023 (Oral Presentation).
2. Assessing HPV Vaccination attitudes and Barriers in Rural Utah. Brian D. Poole Utah Cancer Action Network. Salt Lake City, UT 2023 (Keynote Address)
3. New insights into the Turkey Hemorrhagic Enteritis Virus Transcriptome. Abraham Quaye, Brent Pickett, Bradford Berges, **Brian D. Poole**. American Society for Virology annual meeting. Athens, GA, 2023 (Oral Presentation)
4. Culturally-specific education can change perception of risk of HPV infection. **Brian D. Poole**, David S. Redd, Jessica D. Altman, Jamie L. Jensen, Chantel D. Sloan-Aagard, Triston B. Crook, Aaron E. Asay, Bryce U. Nielson, Ruth J. Bodily, Dashiell S. Miner. American Association of Immunologists Annual Scientific Meeting 2023. Washington, D.C.
5. Community-specific personal stories improve HPV vaccine attitudes in a Christian population in the United States. David Redd, Jamie Jensen, Chantel Sloan-Aagard, **Brian Poole**. 16th Vaccine Congress (Elsevier) 2022 (Oral Presentation)
6. Contribution of viral infection to risk for cancer in systemic lupus erythematosus and multiple sclerosis. Johnson, D.K.; Reynolds K.M; **Poole, B.D.**; Montierth M.D.; Todd V.M.; I Barnado A.; Davis M.F. Autoimmunity 2021 (Oral Presentation)
7. Kidney function, age and education contribute to depression and anxiety in juvenile systemic lupus erythematosus. **Poole, BD.**; Silva, B.; Ganhão S.; Rodrigues M.;

Aguiar F.; Brito, I.; Cornaby C.; Figueiredo-Braga M. Autoimmunity 2021 (Oral Presentation)

8. Specific coping strategies in JSLE depression and anxiety. **Poole, BD.**; Silva, B.; Ganhão S.; Rodrigues M.; Aguiar F.; Brito, I.; Cornaby C.; Figueiredo-Braga M. American Association of Immunologists. 2021.
9. Kidney function, age and education as contributors to depression and anxiety in juvenile systemic lupus erythematosus. **Poole, BD.**; Silva, B.; Ganhão S.; Rodrigues M.; Aguiar F.; Brito, I.; Cornaby C.; Figueiredo-Braga M. American Association of Immunologists. 2021.
10. Short variant of Turkey Hemorrhagic Enteritis Virus Vaccine Strain. Quaye, Abraham; Ord, Brandon; VanDerWerff, KJ; **Poole, Brian D.** American Society for Microbiology Branch Meeting, Weber, UT 2020.
11. Effects of NLRP-1 polymorphisms on IL-18 levels and gene expression. **Poole, Brian D.**, Westhoff, Laura J., Gill, Erin., Hughes, Savannah., Walker, Trent. American Association of Immunologists. Honolulu, Hawaii 2020.
12. Links Between Cytokines, Disease Activity, and Psychiatric Symptoms in Systemic Lupus Erythematosus. **Brian Poole**, Margarida Figueiredo-Braga. World Congress of Psychiatry. Lisbon, Portugal, 2019 (Oral Presentation)
13. Improving Attitudes Towards Vaccination By Emphasizing Vaccine-Preventable Diseases. Deborah K. Johnson, Emily J. Mello, Trent D. Walker, Spencer J. Hood, Jamie L. Jensen and **Brian D. Poole**. International Precision Vaccines Conference, Harvard University, Boston, MA. 2019
14. Depression and chronic immune system dysfunction – a longitudinal study in patients with Lupus. European Psychiatry Association Congress 2017. Florence, Italy. Figueiredo-Braga, Margarida, **Poole, Brian D.**
15. Decreased B Cell Activation-Induced Apoptosis in Cells Overexpressing Interferon Regulatory Factor 5 (IRF5), a Gene Associated with Risk for Systemic Lupus Erythematosus and Other Autoimmune Diseases. **Brian Poole**, Caleb Cornaby, Kalare Eberting, Wesley Cheney, Grant Walker, Craig Smith, Tosh Dowling and Emily Mello. American College of Rheumatology Annual Scientific Meeting. November, 2016. Washington, D.C
16. EB12 expression of B lymphocytes is controlled by Epstein-Barr virus transcription factor, BRRF1, during viral infection. Cheney, Wesley; Cornaby, Caleb; **Poole, Brian D.** Utah Conference on Undergraduate Research. Feb 2016. Salt Lake City, UT.
17. EB12 expression pattern is controlled in response to EBV infection, putatively controlling immune-evasive migration of B cells in lymph nodes. Cornaby, Caleb; Mayhew, Vera; Cheney, Wesley; **Poole, Brian D.** Utah Conference on Undergraduate Research. Feb 2016. Salt Lake City, UT
18. Lytic Genes Influence the Production of Infectious Epstein-Barr Virus. Morin, Allison, Cornaby, Caleb, **Poole, Brian D.** Utah Conference on Undergraduate Research. Feb 2016. Salt Lake City, UT.
19. Regulation of EB12 expression by the EBV BRRF1 gene in B lymphocytes. Cornaby, Caleb; Birrell, Cameron; **Poole, Brian D.** American Association of Immunologists Annual Meeting May 2015. New Orleans, LA.

20. Effects of an IRF 5 lupus risk allele on apoptosis, splicing, and promoter usage. Mella, Jeff; Sloan, Chad; Clark, Daniel; **Poole, Brian D.** 2nd International conference on Clinical and Cellular Immunology October 2013, Los Vegas, NV. Oral Presentation.
21. IRF5 promoter usage and response to toll-like receptor stimulation. Till, Rodney; Clark, Daniel; **Poole, Brian D.** 2nd International conference on Clinical and Cellular Immunology October 2013, Los Vegas, NV. Oral Presentation.
22. Characterization of a herpes simplex virus variant as a common glycoprotein G mutant and its implications on HSV detection methods. Catts, Daniel; Lambert, Jared; Argueta, Lissenyi; Pham, May; Bills, Trieste; **Poole, Brian D.** Conference of Undergraduate Research. 2012. Ogden, UT.
23. Lupus Risk Factor Decreases IL-10 Levels. Argueta, Lissenyi; Lambert, Jared; **Poole, Brian D.** Conference of Undergraduate Research. 2012. Ogden, UT.
24. Rates of Cellular Apoptosis Due to a Lupus-Risk Factor in IRF5. Reed, Richard D.; **Poole, Brian D.** Conference of Undergraduate Research. 2012. Ogden, UT.
25. SLE risk gene IRF5: a translational analysis. Till, Rodney; **Poole, Brian D.** National Conference of Undergraduate Research. 2012. Ogden, UT.
26. Effects on IRF5 First Exon Usage of an Allele Associated with Risk for Lupus. Clark, Daniel N.; **Poole, Brian D.** Kirkland Scholars Conference, 2011. Hospital for Special Surgery, New York, New York.
27. Altered IRF5 exon usage and increased expression of IRF7 targets in cells with an allele associated with risk for lupus. **Poole, Brian D.**; Clark, Daniel N.; Henrie, Brandon; Sloan, Jason; Baumann, Douglas; Heap, Casey; Bills, Trieste, Greenhalgh, Kathryn E.; Reed, Daniel; Bergsten, Sean; Roznick, Marinya; American Association of Immunologists, 2011, San Francisco, CA
28. IRF5 in Systemic Lupus Erythematosus. Greenhalgh, Kathryn; Clark, Daniel; Bills, Trieste; Read, Richard; Burns, Devin; **Poole, Brian.** Utah Conference of Undergraduate Research February 2011, Ogden, Utah.
29. The Effect of EB12 on B cell Homing in EBV Infected Cells. Sloan, Jason; Robinson, Brandon, **Poole, Brian.** Utah Conference of Undergraduate Research February 2011, Ogden, Utah.
30. Effects of an IRF5 polymorphism on IRF5/IRF7 interactions. Reed, Richard; Lambert, Jared; Henrie, Brandon; Bills, Trieste; Sloan, Jason; Baumann, Doug; Heap, Casey; Bergsten, Sean; Naylor, Brian; Clark, Daniel; **Poole, Brian D.** Utah Conference of Undergraduate Research February 2011, Ogden, Utah.
31. Characterization of a nontypable strain of Herpes simplex virus. Catts, Daniel; Hedman, Tyler; Clark, Daniel; **Poole, Brian;** Utah Conference of Undergraduate Research February 2011, Ogden, Utah.
32. Genes and the environment in lupus. **Brian D. Poole.** Invited seminar speaker, Southern Utah University. October 14, 2010
33. Loss of regulation in the Epstein Barr virus gene LMP1 by an IRF5 allele associated with risk for lupus. Daniel Clark, Brandon Henrie, and **Brian D. Poole.** American Society for Microbiology Intermountain Branch Meeting 2010
34. Characterization of a Herpes Simplex Virus Clinical Isolate (Oral Presentation). Hammond, Daniel, Clark, Daniel, Johnson F. Brent, **Poole Brian D.** American Society for Microbiology Intermountain Branch Meeting, Provo, UT 2010

35. Host B cell gene expression responses following Epstein-Barr Virus exposure differ based on IRF5 haplotype. Amanda Templeton, **B. Poole**, N Dominguez, R. Lu, G.S. Vidal, J. Levin, A.S. Sestak, J.A. Kelly, K.M. Kaufman, G.R. Bruner, P.M. Gaffney, J.B. Harley, J.A. James, J.M. Guthridge. American College of Rheumatology Annual Scientific Meeting, Philadelphia, PA 2009
36. Genes and the Environment in Lupus: Potential Pathways for Therapeutic Targets. **Brian D. Poole**. Lupus Foundation of America Utah Chapter, Annual Symposium. Salt Lake City, UT 2009.
37. RF5 Genetic Risk Haplotype Influences Host B Cell Gene Responses to Epstein-Barr Virus. Amanda Templeton, **Poole B**, Lu R Vidal G, Levin J, Sestak A, Kelly J, Kauffman K, Bruner G, Gaffney P, Harley J, James J, Guthridge J. American Association of Immunologists, Seattle, WA 2009.

COURSES TAUGHT

1. Advanced Cell Biology-MMBIO 430
2. Advanced Molecular Biology-MMBIO 441
3. Advanced Molecular Biology Lab-MMBIO 442
4. Molecular Biology-MMBIO 240
5. Infection and Immunity-MMBIO 261
6. Graduate Molecular Virology-MMBIO 560
7. Graduate Seminar Series-MMBIO 691
8. Graduate Topics in Microbiology and Molecular Biology-MMBIO 651R
9. The Germ of an Idea: Disease and Literature-UNIV 291 (Honors)
10. Molecular Genetics in Practice-MMBIO 661
11. Pre-Genetic Counseling-MMBIO 350
12. UNIV 216R-Topics in Biological Sciences

TEACHING GRANTS

Brian D. Poole (PI), Jamie Jensen. Teaching Enhancement Grant 2018. (\$1,500) Effect of personal narratives on attitudes towards vaccination.

Scott Weber, **Brian D. Poole (Co-PI)**. Teaching Enhancement Grant (\$2,000) 2015. The use of molecular models as teaching aids in lecture courses.