

Curriculum Vitae

Name: Lisa Helene Butterfield, Ph.D.

Birth Place

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Education and Training

Undergraduate:

1982-1986 Rensselaer Polytechnic Institute, Troy, NY, 1986 B.S., Biology, Minor: German

Graduate:

1986-1993 University of California, Los Angeles, CA 1993, Ph.D., Biology, Molecular Biology, Winston A. Salser, Ph.D., advisor

Postgraduate:

1993-1995 Postdoctoral Fellow, Tumor Immunology, Hungyi Shau, Ph.D. and Sidney Golub, Ph.D., advisors

1994 AACR Histopathobiology of Neoplasia Workshop, Keystone, CO

1995-1997 Postdoctoral Fellow, Cancer Gene Therapy, James S. Economou, M.D., Ph.D. advisor

Appointments and Positions

1985-1986 Research Assistant, Rensselaer Polytechnic Institute, Laboratory of H. Roy, Ph.D.

1986-1993 Research Assistant, University of California, Los Angeles, Laboratory of W. Salser, Ph.D.

1986-1989 Teaching Assistant, University of California, Los Angeles, Biology Department.
Courses: Molecular Biology Lab (8L), Cell Biology Lab (158), Genetic Engineering (157) and graduate section (257).

1993-1997 Postdoctoral Fellow, University of California, Los Angeles, Department of Surgery, Division of Surgical Oncology

1997-1999 Assistant Research Oncologist, University of California, Los Angeles, Department of Surgery, Division of Surgical Oncology

1999-2003 Adjunct Assistant Professor, University of California, Los Angeles, Department of Surgery, Division of Surgical Oncology

2003-2004 Visiting Assistant Professor of Medicine and Surgery, University of Pittsburgh School of Medicine, UPCI

2004-2010 Assistant Professor of Medicine and Surgery, University of Pittsburgh School of Medicine, UPCI

2006-2010 Assistant Professor of Immunology, University of Pittsburgh

2004-2018 Member of the Immunology Graduate Program, University of Pittsburgh

2005-2006 Associate Director, UPCI Immunologic Monitoring Laboratory

2006-2008 Director, UPCI Immunologic Monitoring Laboratory

2008-2010 Director of Operations, UPCI Immunologic Monitoring and Cellular Products Laboratory

2010-2013	Associate Professor of Medicine, Surgery and Immunology (with tenure), University of Pittsburgh
2010-2018	Director, UPCI Immunologic Monitoring and Cellular Products Laboratory
2013-2018	Professor of Medicine, Surgery and Immunology, University of Pittsburgh, Pittsburgh, PA
2015-2018	Professor of Clinical and Translational Science, University of Pittsburgh, Pittsburgh, PA
2018-2022	Vice President, PICI Research Center/PICI Research & Development, Parker Institute for Cancer Immunotherapy, San Francisco, CA
2019-Present	Adjunct Professor, Microbiology and Immunology, Univ. California San Francisco, CA
2019-Present	Associate Member, ImmunoX, Univ. California San Francisco, CA
2019-Present	Core Faculty, Herbert Perkins Cellular Therapy and Transfusion Medicine Fellowship, UCSF
2019-present	Member, UCSF Helen Diller Family Comprehensive Cancer Center, Cancer Immunotherapy
2020-2021	Co-Chair, UCSF Cellular Therapy Product Development Task Force
2021-2024	AACR Cancer Immunology Working Group Steering Committee
2021-2023	Gladstone-UCSF Institute of Genomic Immunology: Affiliate Member

Certifications

UCSF: Human Subjects, Blood Borne Pathogens, Biosafety Training, Sexual Harassment; University of Pittsburgh: Research Integrity; Human Subject Research; HIPAA Researchers Privacy Requirements, Animal Use, Conflict of Interest, Blackboard/Course Web, Good Clinical Practice Course, Manager Training, Biomedical Responsible Conduct of Research, Advanced Leadership Training. UCLA: Flow Cytometry Course (1997); Human Subjects Protection; Gene-based Therapy Program/GMP (2000), Biosafety Cabinet Use, Hazmat Employee, Dangerous Goods Transport, HIPAA Training (annually, 2000-2003), Biomedical Human Subjects Research Curriculum.

Memberships in Professional and Scientific Societies and Groups

American Association for the Advancement of Science (AAAS)	1989-present
American Association of Immunologists (AAI)	1993-present
American Association for Cancer Research (AACR)	1994-present
Women in Cancer Research	1995-present
Society for Immunotherapy of Cancer (SITC)	
<i>[formerly: International Society for Biological Therapy of Cancer (iSBTc)]</i>	
Member, iSBTc Scientific Program Committee	2006-2008
Member, iSBTc Board of Directors	2007-2010
Steering Committee, Biomarker Taskforce	2008-2020
Strategic Plan "Goal C" Website Taskforce	2011
Society Officer: Secretary/Treasurer	2011-2014
Journal Committee	2012
Member, Council for Immunotherapy Education	2013-2021
Co-Chair, Basic/Translation Research Subcommittee	2013-2014
Society Officer: Vice-President	2014-2016

Chair, SITC Bylaws Committee	2016–2017
Society Officer: President	2016–2018
Women’s Initiatives (networking, leadership events), Chair	2017-present
Sparkathon II Judge	2018
Member, Finance Committee	2018-2020
Society Officer: Immediate Past President	2019-2020
Sparkathon 2.0 co-organizer	2020-present
Executive Council Member, and Nominating Subcommittee	2021-present
Eastern Cooperative Oncology Group – American College of Radiologic Imaging Network (ECOG-ACRIN)	2005-2018
Immunology Core Laboratory Director	2007-2018
Lab Science Liaison of the Melanoma Committee	2008-2018
Member: Biomarkers Committee	2013-2018
Member: Immune Strategies Biomarker Committee	2014-2018
Dendritic Cell & Vaccine Science	2010-2018
Cancer Immunotherapy Consortium (CIC)	2014-2018
Member, NCI Immune Response Modifier Subgroup (Pilot Prioritization Project)	2008-2009
Member, NCI Immune Response Modifier Pathway Prioritization Working Group	2009-2010
Member, AACR Cancer Immunology Working Group (CIMM)	2010-present
Chair, CIMM Nominating Committee	2014, 2016
Member, CIMM Steering Committee	2022-2025
Member, NIH Cancer Immunopathology and Immunotherapy (CII) Study Section	2010-2014
Member, NIH Cancer Immunotherapy Trials Network (CITN) Correlative Science Committee (CSC)	2011-2018
Co-chair, AAI Abstract Programming “Immunotherapy and Vaccines”	2012-2015
Member, NIAID/CIC Luminex Steering Committee	2012-2018
Member, International Society for Cellular Therapy (ISCT)	2013 –present
Member, ISCT Immunotherapy Committee	2013-2016
Member, ISCT Immuno-Gene Therapy Scientific Committee	2017- 2021
Member, NCI Cancer Steering Committee Immunotherapy Working Group	2015-2018
Member, IUIS Immunotherapy Committee	2015–2017
Member, EATI	2016-2018
Member, AACR-Cancer Research Institute Lloyd J. Old Award in Cancer Immunology Committee	2016-2017
Member, Food and Drug Administration Cellular, Tissues and Gene Therapies Advisory Committee	2016-2023
Chair, Food and Drug Administration Cellular, Tissues and Gene Therapies Advisory Committee	2018-3/2023
Member, FNIH Drug Selection Committee for the Lung-MAP Clinical Trial	2017-2019
Member, AACR Education Committee for the 2018 Annual Meeting	2017-2018

Member, PICI Senior Leadership Team	2018-2021
Chair, PICI Scholars and Fellows Scientific Committee	2019-2022
Member, PICI Invention Review and Tech Transfer Committees	2020-2022
Member, PICI Revenue Initiative Committee	2020
Advisor, PICI DEIB Committee	2020-2022
Member, University of Arizona Cancer Center External Scientific Advisory Board	2020-2022
Member, ESMO ImmunoOncology meeting Scientific Board	2021-2023

Honors

1983-1986	C. Sheldon Roberts Scholarship
1986-1987	California Graduate Fellowship
1995-1997	Jonsson Cancer Center Postdoctoral Fellowship
2003-2006	American Heart Association Scientist Development Award
2004-2006	Henry L. Hillman Foundation Award/Hillman Fellow
2006-2007	2006 Hillman Fellow for Innovative Cancer Research Award
2007-2008	2007 Hillman Fellow for Innovative Cancer Research Award
2008-2009	2008 Hillman Fellow for Innovative Cancer Research Award
2008	UPCI Junior Scholar Award in Basic Cancer Research
2010	iSBTc Team Science Recognition Award – <i>“For individual contribution of energy, activity and intellect to the team at University of Pittsburgh, whose leadership has fostered success in the field of immunotherapy/biological therapy of cancer.”</i>
2011	University of Pittsburgh – Faculty Honoree – <i>“For dedication and talent in the areas of teaching, research and public service.”</i>
2014-2015	2014 Hillman Fellow for Innovative Cancer Research Award
2016	AAI Travel Award to the International Congress on Immunology: Melbourne, Australia
2016-2017	2016 Hillman Fellow for Innovative Cancer Research Award
2020	SITC Visionary/Legacy Award

Publications

Refereed Articles:

1. Shau, H., **Butterfield, L.H.**, Chiu, R., and Kim, A. Cloning and sequence analysis of candidate human natural killer enhancing factor genes. *Immunogenetics*, 40:129-134, 1994. PMID: 8026862
2. Sauri, H., **Butterfield, L.H.**, Kim, A., and Shau, H. Antioxidant function of recombinant human natural killer enhancing factor. *Biochem. Biophys. Res. Commun.*, 208: 964-969, 1995. PMID: 7702627
3. Arthur, J.F., **Butterfield, L.H.**, Kiertscher, S.M., Roth, M.D., Bui, L.A., Lau, R., Dubinett, S.M., Glaspy, J., and Economou, J.S. A comparison of gene transfer methods in human dendritic cells. *Cancer Gene Ther.*, 4: 17-25, 1997. PMID: 9012447
4. **Butterfield, L.H.**, Stoll, T.C., Lau, R., and Economou, J.S. Cloning and analysis of MART-1/Melan-A human melanoma antigen promoter regions. *Gene*, 191:129-134, 1997. PMID: 9218710

5. Bui, L.A., **Butterfield, L.H.**, Seu, P., Kim, J., Ribas, A., Lau, R., Glaspy, J.A., McBride, W.H., and Economou, J.S. In vivo therapy of hepatocellular carcinoma with a tumor-specific adenoviral vector expressing interleukin-2. *Hum. Gene Ther.*, 8: 2173-2182, 1997. PMID: 9449371
6. Ribas, A., **Butterfield, L.H.**, McBride, W.H., Jilani, S., Bui, L.A., Vollmer, C.M., Lau, R., Dissette, V.B., Hu, W., Chen, A., Glaspy, J., and Economou, J.S. Genetic Immunization for the melanoma antigen MART-1/Melan-A using recombinant adenovirus-transduced murine dendritic cells. *Cancer Res.*, 57: 2865-2869, 1997. PMID: 9230191
7. Vollmer, C.M., **Butterfield, L.H.**, Ribas, A., Jilani, S., Glaspy, J., McBride, W.H., and Economou, J.S. An E1B attenuated adenovirus selectively inhibits growth of a p53 deficient hepatocellular carcinoma. *Surgical Forum*, 48: 838-841, 1997.
8. **Butterfield, L.H.**, Jilani, S., Chakraborty, N.G., Bui, L.A., Ribas, A., Dissette, V., Lau, R., Gamradt, S., Glaspy, J.A., McBride, W.H., Mukherji, B., and Economou, J.S. Generation of melanoma-specific cytotoxic T lymphocytes by dendritic cells transduced with a MART-1 adenovirus. *J. Immunol.*, 161: 5607-5613, 1998. PMID: 9820539
9. Perez-Diez, A., **Butterfield, L.H.**, Li, L., Chakraborty, N.G., Economou, J.S., and Mukherji, B. Generation of CD8⁺ and CD4⁺ T cell response to dendritic cells genetically engineered to express the MART-1/Melan-A gene. *Cancer Res.*, 58: 5305-5309, 1998. PMID: 9850054.
10. Ribas, A., **Butterfield, L.H.**, McBride, W.H., Dissette, V.B., Koh, A., Vollmer, C.M., Hu, B., Chen, A., Eilber, F.C., Andrews, K.J., Glaspy, J.A., and Economou, J.S. Characterization of antitumor immunization to a defined melanoma antigen using genetically engineered murine dendritic cells. *Cancer Gene Ther.*, 6: 523-536, 1999. PMID: 10608349
11. Ribas, A., Bui, L.A., **Butterfield, L.H.**, Vollmer, C.M., Jilani, S., Dissette, V.B., Glaspy, J.A., McBride, W.H., and Economou, J.S. Antitumor protection using murine dendritic cells pulsed with acid-eluted peptides from *in vivo* grown tumors of different immunogenicities. *Anticancer Res.*, 19: 1165-1170, 1999. PMID: 10368670
12. Vollmer, C.M., Eilber, F.C., **Butterfield, L.H.**, Ribas, A., Dissette, V.B., Koh, A., Montejo, L., Andrews, K.J., McBride, W.H., Glaspy, J.A., and Economou, J.S. Alpha- fetoprotein-specific genetic immunotherapy for hepatocellular carcinoma. *Cancer Res.*, 59: 3064-3067, 1999. PMID: 10397245
13. **Butterfield, L.H.**, Koh, A., Meng, W., Vollmer, C.M., Ribas, A., Dissette, V.B., Lee, E., Glaspy, J.A., McBride, W.H., and Economou, J.S. Generation of human T cell responses to an HLA-A2.1-restricted peptide epitope derived from alpha-fetoprotein. *Cancer Res.*, 59: 3134-3142, 1999. PMID: 10397256
14. Vollmer, C.M., Ribas, A., **Butterfield, L.H.**, Dissette, V.B., Andrews, K.J., Eilber, F.C., Montejo, L.D., Chen, A.Y., Hu, B., Glaspy, J., McBride, W.H., and Economou, J.S. p53 selective and non-selective replication of an E1B-deleted adenovirus in hepatocellular carcinoma. *Cancer Res.*, 59: 4369-4374, 1999. PMID: 10485485
15. Ribas, A., **Butterfield, L.H.**, Hu, B., Dissette, V.B., Chen, A.Y., Koh, A., Glaspy, J.G., McBride, W.H., and Economou, J.S. Generation of T cell immunity to a murine melanoma using MART-1 engineered dendritic cells. *J. Immunother.*, 23: 59-66, 2000. PMID: 10687138
16. Miller, P.W., Sharma, S. Stolina, M., **Butterfield, L.H.**, Luo, J., Lin Y., Dohadwala, M., Batra, R., Wu, L., Economou, J.S., and Dubinett, S.M. Intratumoral administration of adenoviral interleukin-7 gene-modified dendritic cells augments specific antitumor immunity and achieves tumor eradication. *Hum. Gene Ther.*, 11: 53-65, 2000. PMID: 10646639

17. Ribas, A., **Butterfield, L.H.**, Hu, B., Dissette, V.B., Koh, A., Lee, M.C., Andrews, K.J., Meng, W., Glaspy, J.G., McBride, W.H., and Economou, J.S. Immune deviation and Fas-mediated deletion limit antitumor activity after multiple dendritic cell vaccinations in mice. *Cancer Res.*, 60: 2218-2224, 2000. PMID: 10786687
18. Andrews, K.J., Ribas, A., **Butterfield, L.H.**, Vollmer, C.M., Eilber, F.C., Dissette, V.B., Nelson, S., Shintaku, P., Mekhoubad, S., Nakayama, T., Taniguchi, M., Glaspy, J.A., McBride, W.H., and Economou, J.S. Adenovirus-interleukin-12-mediated tumor regression in a murine hepatocellular carcinoma model is not dependent on CD1-restricted natural killer-T cells. *Cancer Res.*, 60: 6457-6464, 2000. PMID: 11103813
19. Meng, W.S., **Butterfield, L.H.**, Ribas, A., Dissette, V.B., Glaspy, J.A., McBride, W.H., and Economou, J.S. Fine specificity analysis of an HLA-A2.1-restricted immunodominant T cell epitope derived from human alpha-fetoprotein. *Mol. Immunol.*, 37: 943-950, 2000. PMID: 11395133
20. Frost, P., **Butterfield, L.H.**, Dissette, V.B., Economou, J.S., and Bonavida, B. Immunosensitization of melanoma tumor cells to non-MHC Fas-mediated killing by MART-1-specific CTL cultures. *J. Immunol.*, 166: 3564-3573, 2001. PMID: 11207317
21. **Butterfield, L.H.**, Meng, W., Koh, A., Vollmer, C.M., Ribas, A., Dissette, V.B., Faull, K., Glaspy, J.A., McBride, W.H., and Economou, J.S. T cell responses to HLA-A*0201-restricted peptides derived from human alpha fetoprotein. *J. Immunol.*, 166: 5300-5308, 2001. PMID: 11290817
22. Ribas, A. **Butterfield, L.H.**, Amarnani, S., Kim, D., Dissette, V.B., Meng, W.S., Miranda, G.A., Wang, H.-J., McBride, W.H., Glaspy, J.A., and Economou, J.S. CD40 cross-linking bypasses the absolute requirement for CD4 T-cells during immunization with melanoma antigen gene-modified dendritic cells. *Cancer Res.*, 61: 8787-8793, 2001. PMID: 11751400
23. Meng, W.S., **Butterfield, L.H.**, Ribas, A., Dissette, V.B., Heller, J.B., Miranda, G.A., Glaspy, J.A., McBride, W.H., and Economou, J.S. Alpha-fetoprotein-specific tumor immunity induced by plasmid prime-adenovirus boost genetic vaccination. *Cancer Res.*, 61: 8782-8786, 2001. PMID: 11751399
24. Ribas, A., Amarnani, S.N., Buga, G.M., **Butterfield, L.H.**, Dissette, V.B., McBride, W.H., Glaspy, J.A., Ignarro, L.J., and Economou, J.S. Immunosuppressive effects of interleukin-12 co-expression in melanoma antigen gene-modified dendritic cell vaccines. *Cancer Gene Ther.*, 9: 875-883, 2002. PMID: 12386826
25. **Butterfield, L.H.**, Ribas, A., Dissette, V.B., Amarnani, S., Vu, H., Oseguera, D., Wang, H.-J., Elashoff, R.M., McBride, W.H., Mukherji, B., Cochran, A., Glaspy, J.A., and Economou, J.S. Determinant spreading associated with clinical response in dendritic cell-based immunotherapy for malignant melanoma. *Clin. Cancer Res.*, 9: 998-1008, 2003. PMID: 12631598
26. **Butterfield, L.H.**, Ribas, A., Meng, W.S., Dissette, V.B., Amarnani, S., Vu, H., Seja, E., Todd, K., Glaspy, J.A., McBride, W.H., and Economou, J.S. T cell responses to HLA-A*0201 immunodominant peptides derived from alpha-fetoprotein in patients with hepatocellular cancer. *Clin. Cancer Res.*, 9: 5902-5908, 2003. PMID: 14676113
27. Mehrotra, S., Stevens, R., Zengou, R., Chakraborty, N.G., **Butterfield, L.H.**, Economou, J.S., Dorsky, D.I., and Mukherji, B. Regulation of melanoma epitope-specific cytolytic T lymphocyte response by immature and activated dendritic cells, *in vitro*. *Cancer Res.*, 63: 5607-5614, 2003. PMID: 14500402
28. Ribas, A., Wargo, J., Comin-Andruix, B., Sanetti, S., Schumacher, L.Y., McLean, C., Dissette, V.B., Glaspy, J.A., McBride, W.H., **Butterfield, L.H.**, and Economou, J.S. Enhanced tumor responses to dendritic cell vaccines in the absence of CD8-positive cells. *J. Immunol.*, 172: 4762-4769, 2004. PMID: 15067052

29. Schumacher, L.Y, Ribas, A., Dissette, V.B., McBride, W.H., Mukherji, B., Economou, J.S., and **Butterfield, L.H.** Human dendritic cell maturation by adenovirus transduction enhances tumor antigen-specific T cell responses. *J. Immunother.*, 27: 191-200, 2004. PMID: 15076136
30. Ribas, A., Glaspy, J.A., Lee, Y., Dissette, V.B., Seja, E., Vu, H., Tchekmedyian, N.S., Oseguera, D., Comin-Anduix, B., Wargo, J.A., Amarnani, S.N., McBride, W.H. Economou, J.S., and **Butterfield, L.H.** Role of dendritic cell phenotype, determinant spreading and negative costimulatory blockade in dendritic cell-based melanoma immunotherapy. *J. Immunother.*, 27: 354-367, 2004. PMID: 15314544
31. Gordon, L.K., Ribas, A, Nusinowitz, S., **Butterfield, L.H.**, Glaspy, J.A., Economou, J.S., and Straatsma, B.R. Surveillance of the eye and vision in a clinical trial of MART1-transformed dendritic cells for metastatic melanoma. *Control. Clin. Trials*, 25: 400-407, 2004. PMID: 15296814
32. Mehrotra, S., Chabra, A., Chakraborty, A., Chattopadhyay, S., Stevens, R., Zengou, R., **Butterfield, L.H.**, Dorsky, D.I., Economou, J.S., Mukherji, B., and Chakraborty, N.G. Antigen presentation by MART-1 adenovirus-transduced interleukin-10-polarized human monocyte derived dendritic cells. *Immunol.*, 113: 472-481, 2004. PMID: 15554925
33. Liao, Y-P., Wang, C-C., **Butterfield, L.H.**, Economou, J.S., Ribas, A., Meng, W.S., Iwamoto, K.S., and McBride, W.H. Ionizing radiation affects human MART-1 melanoma antigen processing and presentation by dendritic cells. *J. Immunol.*, 173: 2462-2469, 2004. PMID: 15294960
34. Wargo J.A., Schumacher, L.Y., Comin-Anduix, B., Dissette, V.B., Glaspy, J.A., McBride, W.H., **Butterfield, L.H.**, Economou, J.S., and Ribas, A. Natural killer cells play a critical role in the immune response following immunization with melanoma-antigen-engineered dendritic cells. *Cancer Gene Ther.*, 12(6): 516-527, 2005. PMID: 15775996
35. **Butterfield, L.H.**, Ribas, A., Dissette, V.B., Lee, Y., Yang, J., De la Rocha, P., Duran, S.D., Hernandez, J., Seja, E., Potter, D.M., McBride, W.H., Finn, R., Glaspy, J.A., and Economou, J.S. A Phase I/II trial testing immunization of hepatocellular carcinoma patients with dendritic cells pulsed with four alpha-fetoprotein peptides. *Clin. Cancer Res.*, 12: 2817-2825, 2006. PMID: 16675576
36. Liu, Y., Daley, S., Evdokimova, V.N., Zdobinski, D.D., Potter, D.M., and **Butterfield, L.H.** Hierarchy of alpha-fetoprotein (AFP)-specific T cell responses in subjects with AFP-positive hepatocellular cancer. *J. Immunol.*, 177: 712-721, 2006. PMID: 16785570; PMCID: 3607814
37. Evdokimova, V.N., Liu, Y., Potter, D.M., and **Butterfield, L.H.** AFP specific CD4⁺ helper T cell responses in healthy donors and HCC patients. *J. Immunother.*, 30: 425-437, 2007. PMID: 17457217; PMCID: 3612834
38. **Butterfield, L.H.**, Ribas, A., Potter, D.M., and Economou, J.S. Spontaneous and vaccine induced AFP-specific T cell phenotypes in subjects with AFP-positive hepatocellular cancer. *Cancer Immunol. Immunother.*, 56: 1931-1943, 2007. PMID: 17522860
39. Okada, H., Lieberman, F.S., Walter, K.A., Lunsford, L.D., Kondziolka, D.S., Bejjani, G.K., Hamilton, R.L., Torres-Trejo, A., Kalinski, P., Cai, Q., Mabold, J.L., Edington, H.D., **Butterfield, L.H.**, Whiteside, T.L., Potter, D.M., Schold, S.C., and Pollack, I.F. Autologous glioma cell vaccine admixed with interleukin-4 gene transfected fibroblasts in the treatment of patients with malignant gliomas. *J. Transl. Med.*, 5: 67, 2007. PMID: 18093335; PMCID: 2254376

40. Ueda, R., Low, K.L., Zhu, X., Fujita, M., Sasaki, K., Whiteside, T.L., **Butterfield, L.H.**, and Okada, H. Spontaneous immune responses against glioma-associated antigens in a long term survivor with malignant glioma. *J. Transl. Med.*, 5: 68, 2007. PMID: 18093336; PMCID: 2244605
41. **Butterfield, L.H.**, Gooding, W., and Whiteside, T.L. Development of a potency assay for human dendritic cells: IL-12p70 production. *J. Immunother.*, 31: 89-100, 2008. PMID: 18157016
42. **Butterfield, L.H.**, Comin-Anduix, B., Vujanovic, L., Lee, Y., Disette, V.B., Yang, J-Q., Vu, H.T., Seja, E., Oseguera, D.K., Potter, D.M., Glaspy, J.A., Economou, J.S., and Ribas, A. Adenovirus MART-1 engineered autologous dendritic cell vaccine for metastatic melanoma. *J. Immunother.*, 31: 294-309, 2008. PMID: 18317358; PMCID: 3651040
43. **Butterfield, L.H.**, Disis, M.L., Fox, B.A., Lee, P.P., Khleif, S.N., Thurin, M., Trinchieri, G., Wang, E., Wigginton, J., Chaussabel, D., Coukos, G., Dhodapkar, M., Hakansson, L., Janetzki, S., Kleen, T.O., Kirkwood, J.M., Maccalli, C., Maecker, H., Maio, M., Malyguine, A., Masucci, G., Palucka, A.K., Potter, D.M., Ribas, A., Rivoltini, L., Schendel, D., Seliger, B., Selvan, S., Slingluff, C.L., Stroncek, D.F., Streicher, H., Wu, X., Zeskind, B., Zhao, Y., Zocca, M-B., Zwierzina, H., and Marincola, F.M. A systematic approach to biomarker discovery; Preamble to "the iSBTc-FDA taskforce on immunotherapy biomarkers. *J. Transl. Med.*, 6: 81, 2008. PMID: 19105846; PMCID: 2630944
44. Vujanovic, L., Whiteside, T.L., Potter, D.P., Chu, J., Ferrone, S., and **Butterfield, L.H.** Regulation of antigen presentation machinery in human dendritic cells by recombinant adenovirus. *Cancer Immunol. Immunother.*, 58: 121-133, 2009. PMID: 18488218; PMCID: 2726804
45. Kirkwood, J.M., Lee, S., Moschos, S., Albertini, M., Michalak, J., Sander, C., Whiteside, T.L., **Butterfield, L.H.**, and Weiner, L. Immunogenicity and antitumor effects of vaccination with peptide vaccine +/- granulocyte-monocyte colony-stimulating factor and/or IFN-alpha2b in advanced metastatic melanoma: Eastern Cooperative Oncology Group Phase II Trial E1696. *Clin. Cancer Res.*, 15: 1443-1451, 2009. PMID: 19228745; PMCID: 2759898
46. Tahara, H., Sato, M., Thurin, M., Wang, E., **Butterfield, L.H.**, Disis, M.L., Fox, B.A., Lee, P.P., Khleif, S.N., Wigginton, J.M., Ambs, S., Akutsu, Y., Chaussabel, D., Doki, Y., Eremin, O., Fridman, W.H., Hirohashi, Y., Imai, K., Jacobson, J., Jinushi, M., Kanamoto, A., Kashani-Sabet, M., Kato, K., Kawakami, Y., Kirkwood, J.M., Kleen, T.O., Lehmann, P.V., Liotta, L., Lotze, M.T., Malyguine, A., Masucci, G., Matsubara, H., Nakamura, K., Nishikawa, H., Palucka, A.K., Petricoin, E.F., Pos, Z., Ribas, A., Rivoltini, L., Sato, N., Shiku, H., Slingluff, C.L., Streicher, H., Stroncek, D.F., Takeuchi, H., Toyota, M., Wada, H., Wu, X., Wulfkuehle, J., Yaguchi, T., Zeskind, B., Zhao, Y., Zocca, M-B., and Marincola, F.M. Emerging concepts in biomarker discovery: The US-Japan workshop on immunological molecular markers in oncology. *J. Transl. Med.*, 7: 45, 2009. PMID: 19534815; PMCID: 2724494
47. Lipscomb, M.W., Chen, L., Taylor, J.L., Goldbach, C., Watkins, S. C., Kalinski, P., **Butterfield, L.H.**, Wesa, A.K., and Storkus, W.J. Ectopic T-bet expression licenses dendritic cells for IL-12-independent priming of type-1 T cells *in vitro*. *J. Immunol.*, 183: 7250-7258, 2009. PMID: 19915058; PMCID: 2921905
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68. **Butterfield, L.H.**, Naveh, H.P., Geller, D., and Kirkwood, J.M. Tumor Antigen-encoding Adenovirus-based Vaccines for Melanoma and Hepatocellular Cancer. TVACT XIX, 2013. ***Selected for oral presentation.**
69. **Butterfield, L.H.**, Pardee, A., Shi, J. Tumor-derived alpha-fetoprotein impairs the differentiation and T cell stimulatory activity of human dendritic cells. Keystone Symposium on Immune Evolution in Cancer, 2014. ***Selected for oral presentation.**
70. Pollack, I.F., Jakacki, R.I., **Butterfield, L.H.**, Hamilton, R.L., Panigrahy, A., Potter, D.M., Krol, A.K., Dibridge, S., Whiteside, T.L., Okada, H. Immune responses and clinical outcome in a pilot study of vaccination with glioma-associated antigen peptides and PolyICLC in children with newly diagnosed malignant brainstem and non-brainstem gliomas. International Brain Tumor Research and Therapy, 2014.

71. Vujanovic L., Stahl, E., **Butterfield, L.H.** Alpha fetoprotein directly induces a unique pro-inflammatory, IL-2 hyperresponsive phenotype in human natural killer cells. SITC, 2014.
72. Pardee, A., Shi, J., **Butterfield, L.H.** Tumor-derived alpha-fetoprotein impairs the differentiation and T cell stimulatory activity of human dendritic cells. SITC, 2014.
73. Santos, P., Etheridge, A., Gambotto, A., and **Butterfield L.H.** Effect of transduction of human dendritic cells with adenovirus encoding anti-PD-1 co-cultured with autologous T cells. Abstract - poster presentation, SITC, 2014.
74. Retseck, J., Gillespie-Twardy, A., Nasr, A., Lin, H.M., Lin, Y., Kirkwood, J.M., **Butterfield, L.H.**, Zahoor, H., Sander, C., Tarhini, A.A. Long term monitoring of circulating regulatory T cells (Treg), myeloid derived suppressor cells (MDSC) and type I effector T cells in melanoma patients treated with neoadjuvant ipilimumab. Abstract – AACR Annual Meeting, 2015.
75. Vujanovic, L., Stahl, E., Pardee, A., Watkins, S., Gibson, G., **Butterfield, L.H.** Tumor-derived alpha fetoprotein directly impacts human natural killer cell activity and viability. SITC poster presentation 2015. J Immunother Cancer 2015, 3(Suppl 2):P289 (4 November 2015).
76. Santos, P.M., Pardee, A., Delgoffe, G.M., **Butterfield, L.H.** Tumor-derived alpha-fetoprotein (tAFP) causes immune and metabolic dysfunction in monocyte-derived dendritic cells. SITC poster presentation 2015. J Immunother Cancer 2015, 3(Suppl 2):P210 (4 November 2015).
77. Du, S., Santos, P.M., Tawbi, H., Tarhini, A., Kirkwood, J.M., **Butterfield, L.H.** CD8+ T cell responses in metastatic melanoma patients receiving an adenovirally antigen engineered dendritic cell vaccine +/- IFN- α . SITC poster presentation 2015. J Immunother Cancer 2015, 3(Suppl 2):P149 (4 November 2015)
78. Najjar, Y.G., Ding, F., Lin, Y., **Butterfield, L.H.**, Tarhini, A.A. Melanoma antigen-specific effector T cell cytokine secretion patterns in patients treated with ipilimumab. ASCO, 2016.
79. Kirkwood, J.M., Singh, S., Lin, Y., Hahm, E.R., Beumer, J.H., Christner, S.M., Rao, U.N.M., Sander, C., Tarhini, A.A., Tawbi, H.A., Ferris, L., Wilson, M., Petrany, M., Rose, A., Fahey, J.W., Leachman, S.A., Cassidy, P., **Butterfield, L.H.**, Zarour, H.M. Dose-Response Evaluation of Broccoli Sprout Extract Sulforaphane (BSE-SFN) in Melanoma Patients (Pts) with Atypical/Dysplastic Nevi (A/DN). ASCO, 2016.
80. Santos, P.M., Menk, A.V., Shi, J., Delgoffe, G.M., **Butterfield, L.H.** Tumor-derived alpha-fetoprotein (tAFP) inhibits dendritic cell metabolism. SITC 2016. Journal for ImmunoTherapy of Cancer 2016, 4(Suppl 1):P268.
81. Najjar, Y.G., **Butterfield, L.H.**, Zarour, H.M., Tarhini, A.A., Davar, D., Lin, Y., Kirkwood, J.M. Dose-seeking and efficacy study of pembrolizumab plus vemurafenib for therapy of advanced melanoma. ASCO Annual Meeting, 2017.
82. Burgess, M.A., Bolejack, V., Van Tine, B.A., Schuetze, S., Hu, J., D'Angelo, S.P., Attia, S., Priebat, D.A., Okuno, S.H., Riedel, R.F., Davis, L.E., Movva, S., Reed, D.R., **Butterfield, L.H.**, Roszik, J., Reinke, D.K., Baker, L.H., Maki, R.G., Patel, S., Tawbi, H.A. Multicenter Phase II Study of Pembrolizumab (P) in Advanced Soft Tissue (STS) and Bone Sarcomas (BS): Final Results of SARC028 and Biomarker Analyses. ASCO Annual Meeting, 2017.
83. Maurer, D.M., Santos, P.M., Kirkwood, J.M., Tarhini, A.A., Tawbi, H.A., Stroncek, D., Ping, J., **Butterfield, L.H.** Analysis of immune checkpoint and costimulation molecules in DC vaccines from melanoma

patients. 29th Annual UPMC Hillman Cancer Center Scientific Retreat, 2017. ***Best Clinical Science poster award**

84. Santos, P.M., **Butterfield, L.H.**, Du, S., Kirkwood, J.M. Tumor-specific CD8 T cell checkpoint expressions in melanoma patients that received adenovirally-engineered DC vaccine +/- IFN- α . SITC 2017. J Immunother Cancer 2017, 5(Suppl 2):86
85. Maurer, D.M., Santos, P.M., Kirkwood, J.M., Tarhini, A.A., Tawbi, H.A., Stroncek, D., Jin, P., and **Butterfield, L. H.** Immune Checkpoint and Costimulatory Molecules on DC Vaccines from Melanoma Patients., Hillman Cancer Center annual retreat, June 2018. *** 2nd place, Clinical Science poster award**
86. Maurer, D.M., Santos, P.M., Kirkwood, J.M., Tarhini, A.A., Tawbi, H.A., Stroncek, D.F., Ping, J., Butterfield, L.H. Identification and analysis of critical immune molecules and signaling pathways to improve the immunogenicity of dendritic cell vaccines. SITC 2018.
87. Maurer, D.M., Adamik, J, Santos, P.M., Shi, J., Taylor, J, Shurin, M.R., Kirkwood, J.M., Storkus, W.J., and **Butterfield, L.H.** ICOSL on human dendritic cells is critical for priming T cell responses. SITC 2019.
88. Adamik, J., Santos, PM, Du, S. Vujanovic, L., Howes, TR., Warren, S., Gambotto, A., Kirkwood, JM, and **Butterfield, L.H.** Molecular and Immunologic Profiling of CD8+ T Cell Responses in Patients Receiving a Multiple Antigen-Engineered Dendritic Cell Vaccine. SITC 2019.
89. Adamik, J., Maurer, D.M., Munson, P., Combes, A.J., Pierre, P., Krummel, M.F., Argüello, R.J., **Butterfield, L.H.** Immuno-Metabolic Signatures of DC Associate With T-cell Responses in Melanoma Patients. SITC 2020
90. Munson, P., Adamik, J., Combes, A.J., Pierre, P., Krummel, M.F., Argüello, R.J., **Butterfield, L.H.** Tumor derived alpha-fetoprotein inhibits cholesterol and steroid metabolism in monocyte-derived dendritic cells. SITC 2020
91. Ahmad Tarhini, Aik Choon Tan, Issam El Naqa, Sandra Lee, F Stephen Hodi, **Lisa H. Butterfield**, William LaFramboise, Walter Storkus, Jose Conejo-Garcia, Patrick Hwu, Howard Streicher, Vernon Sondak, John Kirkwood. Enhanced immunogenicity within the tumor microenvironment and the circulation of high-risk melanoma patients with unknown primary compared to those whose primary melanoma is known. Journal for ImmunoTherapy of Cancer Nov 2021, 9 (Suppl 2), SITC, 2021
92. Mariam Saad, Aik Choon Tan, Issam El Naqa, Sandra Lee, F Stephen Hodi, **Lisa H. Butterfield**, William LaFramboise, Walter Storkus, Jose Conejo-Garcia, Patrick Hwu, Howard Streicher, Vernon Sondak, John Kirkwood, Ahmad Tarhini. Evidence of enhanced immune activation within the tumor microenvironment and the circulation of female patients with high-risk melanoma compared to males. Journal for ImmunoTherapy of Cancer Nov 2021, 9 (Suppl 2), SITC, 2021
93. Sarah Church, Christina Bailey, Sarah Warren, **Lisa H. Butterfield**. Standardized transcriptional profiling for optimizing cellular therapies: a multi-center PICI-NanoString collaboration. Journal for ImmunoTherapy of Cancer Nov 2021, 9 (Suppl 2), SITC, 2021
94. Paul Munson, Juraj Adamik, **Lisa H. Butterfield**. Tumor-derived alpha-fetoprotein requires polyunsaturated fatty acids for immuno-metabolic dysregulation. Journal for ImmunoTherapy of Cancer Nov 2021, 9 (Suppl 2) A695; DOI: 10.1136/jitc-2021-SITC2021.667

Textbook Editor

1. **Butterfield, L.H.**, Kaufman, H.L., Marincola, F.M. (eds.). *Cancer Immunotherapy: Principles and Practice*. Section Editor, Section III: Immune Function in Cancer Patients. New York: Demos Medical Publishing, 2017.
2. **Butterfield, L.H.**, Kaufman, H.L., Marincola, F.M. (eds.). *Cancer Immunotherapy: Principles and Practice* (2nd edition). Section Editor, Section III: Immune Function in Cancer Patients. New York: Demos Medical Publishing, 2021.

Book Chapters

1. **Butterfield, L.H.**, Ribas, A., and Economou, J.S. DNA and Dendritic Cell-based Genetic Immunization against Cancer. In: Gene Therapy of Cancer, (eds) Lattime, E. and Gerson, S. Academic Press, pp. 285-299, 1998.
2. Second edition, pp 179-198, 2002.
3. **Butterfield, L.H.**, Schoenberger, S.P., and Lyczak, J.B. Cancer and the Immune System - Chapter 24, In: Immunology, Infection and Immunity, pp. 573-591, (eds) J. B. Lyczak, L. Wetzler and G. B. Pier, ASM Press, 2004.
4. Finn, O.J., Binder, R.J., Brickner, A.G., **Butterfield, L.H.**, Ferris, R.L., Kalinski, P., Okada, H., Storkus, W.J., Whiteside, T.L., and Zarour, H.M. Human Tumor Antigens as Targets of Immunosurveillance and Candidates for Cancer Vaccines. In: Tumor-Associated Antigens: Identification, Characterization and Clinical Applications, (eds) O. Gires and B. Seliger. Wiley-VCH Verlag, GmbH & Co., ISBN: 978-3-527-32084-4, pp 23-43, 2009.
5. Vujanovic, L. and **Butterfield, L.H.** Dendritic Cell Vaccines for Immunotherapy of Cancer: current status and challenges in clinical trials. In: Targeted Cancer Immune Therapies, (eds) Lustgarten, J., Cui, Y. and Li, S., Springer, 2009.
6. Magee, M., Vujanovic, L., **Butterfield, L.H.**, and Vujanovic, N.L. Guide to the Isolation, Culture and Propagation of NK Cells. In: Natural Killer Cells, (eds) Lotze, M.T. and Thomson, A. Elsevier, 2010.
7. **Butterfield, L.H.**, Vujanovic, L., and Pardee, A.D. Approaches to Immunologic Monitoring of Clinical Trials. In: Tumor Immunoenvironment, (eds) Shurin, M.R., Umansky, V. and Malyguine, A. Springer Publishing USA. ISBN:978-94-007-6216-9, pp 663-694, 2013.
8. **Butterfield, L.H.** and Buffo, M.J. Immunologic Monitoring of Cancer Vaccine Trials Using the ELISPOT Assay. In: Methods in Molecular Biology, (eds) Thurin, M. and Marincola, F. Humana Press for Springer Publishing USA. ISBN: 978-1-62703-726-6, pp 71-82, 2014.
9. Whiteside, T.L., **Butterfield, L.H.**, and Cohen, E.P. Insights into the process of translating emerging immunologic paradigms to clinical trial in patients with cancer. In: Lost in Translation, (eds) Srivastava, R., Maksymowicz W. and Lopaczynski, W. World Scientific, 2014.

10. **Butterfield, L.H.** and Whiteside, T.L. (January 2016). Cytokine Assays. In: eLS. John Wiley & Sons, Ltd: Chichester. DOI: 10.1002/9780470015902.a0001124.pub2
 11. **Butterfield, L.H.** Dendritic cell vaccines. In: Cellular Therapy: Principles, Methods, and Regulations, 2nd edition, (eds) Areman, E.M., Loper, K., eds. AABB, Bethesda, MD, 2016.
 12. Subrahmanyam, P.B., **Butterfield, L.H.**, Lee, P.P. and Maecker, H.T. Assessment of Anti-Tumor Immunity in Blood and Lymph Nodes. In: Cancer Immunotherapy: Principles and Practice, (eds.) **Butterfield, L.H.**, Kaufman, H.L., Marincola, F.M. New York: Demos Medical Publishing, 2017.
 13. **Butterfield, L.H.** and Budde, E. ASCO Self-Evaluation Program Cancer Immunotherapy Chapter Update 2021-2022 (*available online*).
 14. Munson, P.V., **Butterfield, L.H.** and Adamik, J. “Novel Dendritic Cell Vaccine Strategies” in Cancer Vaccines as Immunotherapy of Cancer. Drs. L. Buonaguro and S. van der Burg, Editors. Elsevier, 2021.
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Professional Activities

Teaching, University of Pittsburgh:

Facilitator, Department of Medicine, MED5116, “Immunology in Health and Disease,” Jan.20, 21 and 26, 2005, (MS-1, 1 PBL, 10 medical students, score: 4.29).

Facilitator, Department of Medicine, MED5116, “Immunology in Health and Disease,” Jan. – Feb., 2006, Jan.-Feb. 2007, (3 PBL sets, 10 MS-1 medical students, score 4.3 (2006) and 4.5 (2007)).

Facilitator, Department of Medicine, MED5116, “Immunology in Health and Disease,” February, 2015; February, 2016. (1PBL set, 10 MS-1 medical students, score 4.4). February 2017 (2 PBL sets, 10 MS-1 medical students, score 4.8).

Lectures (2), Department of Psychology, Psychoneuroimmunology (2520), Jan.10 and 24, 2005, 15 graduate students.

Lecture and Discussion, Department of Immunology, Introduction to ImmunoBioTherapeutics, “Gene Therapy in Malignancy,” (5-7 graduate students) Fall 2005, 2006, 2007.

Director, co-director and lecturer, Department of Immunology “Immunology and Human Disease,” MSIMM 3230: *Co-director and lecturer* - Fall 2005 (25)*; Spring 2007 (12)*; Fall 2010 (12)*

Director and lecturer - Fall 2008 (20)*; Fall 2009 (18)*

Lecturer, Fall 2011; 2012; 2013; 2014; 2015; 2016; 2017

*(number of graduate students/postdocs)

UPCI IMCPL Continuing Education seminar leader, 9/29/05; 12/8/05, 1/12/06, 5/5/06, 6/29/06, 9/29/06, 11/30/06, 12/14/06, 5/19/07, 6/14/07, 2/18/08, 4/18/08, 5/22/08, 6/16/08, 1/8/09, 2/13/09, 10/9/09, 11/20/09, 3/25/2010, 9/17/2010, 10/22/2010, 7/19/2012, 12/20/12, 11/26/13, 02/17/14, 11/24/15, 11/20/16, 12/15/17; ***Series organizer 6/2010-11/2018.***

Lecturer, “Cancer Vaccines,” Neoplasia elective, S. Moschos, M. T. Lotze, Directors. 3/9/09.

2010 Summer Institute for Biostatistical Sciences, sponsored by UPCI Biostatistics Facility - research presentation to undergraduates, July 21, 2010.

Lecturer, Cell Therapy Course (BioEng 3770, MSCMP 3770 Cell Therapy); “GMP Procedures for Cell Therapy” and “Dendritic Cell-based Vaccines for Cancer,” Course Directors, Alejandro Soto-Gutierrez and Diana Metes; June 27, 2013 and July 11, 2013; June 17 and June 24, 2014; June 16 and July 2, 2015.

Lecturer, MSTP Course, Professional Development I: Molecular Medicine Course, “Immunology,” June 27, 2013.

Lecturer, UPCI Summer Academy “Immune Monitoring”, July 2016, July 2017. “Immunological Monitoring and Cellular Products Lab and a Career as a Professor”, July 2018.

Lecturer, Hem. Onc. MD Fellows: Immunology/Tumor Immunology. July 2016; July 2017.

Lecturer, Dept. of Immunology: Comprehensive Immunology Course: “Tumor Immunity” – April 10, 2017; “Tumor Immunology – Immune Evasion & Vaccines” – March 30, 2018

Teaching, University of California San Francisco:

Program Faculty, UCSF Herbert Perkins Cellular Therapy & Transfusion Medicine Fellowship, 2019-present
Lectures (2021): GMP Manufacturing, Cancer Immunotherapy Biomarkers, Dendritic Cell and Cancer Vaccines

Guest Discussion Leader, Mini-course on Tumor immunogenomics, immunotherapy & the Microenvironment, “Dendritic Cell Vaccines”, Apr. 27, 2020.

Teaching, Parker Institute for Cancer Immunotherapy:

Science Club presentations 2019, 2020.

Medical Oncology and Clinical Research PICI Summer Education series for interns, 2021

Teaching, External:

Lecturer, Duquesne University, GPSC 617, Advanced Pharmaceutics on “Viral Gene Vectors and Cancer Vaccines,” 3/26/08.

AAI Advanced Course, “Tumor Immunology,” Boston, MA - August 7, 2015, August 5, 2016, July 28, 2017, July 27, 2018

Immuno-Oncology Young Investigator’s Forum, Faculty Mentor. Houston, TX. Feb. 21-22, 2017; April 20-21, 2018; April 25-27, 2019

FOCIS-SITC “Cancer Immunity and Immunotherapy” Course, “Vaccination Strategies” lecture, San Francisco, CA, June 20, 2018

SITC Winter School, Co-organizer and lecturer: “Cancer Vaccines: Can they Work?”, “How to get a Biomarker from Every Trial”, “It’s not Science, It’s Manufacturing: GMP” Mesa, AZ, Feb. 19-22, 2019

SITC Winter School, Co-organizer and lecturer: “Cancer Vaccines: Can they Work?”, “How to get a Biomarker from Every Trial”, “It’s not Science, It’s Manufacturing: GMP” Houston, TX, Feb. 13-17, 2020

Expert Panel, Genetic Engineering and Biotechnology News, “Leaps in Innovation in Cancer Immunology”, June 2020

Podcast “How Immunity Works” by Social Distance podcast from theatlantic.com,
<https://open.spotify.com/episode/7cIIG1EjZAh1ILVTzdIEAH> July 27, 2020.

Podcast Stroke of Genius Ep. 7 “Climbing Towards A Cure for Cancer”, Goat Rodeo,
<https://www.ipofef.org/podcasts/s3-e7/> Aug. 2020

SITC Winter School, lecturer: “Cancer Vaccines: Can they Work?”, “How to get a Biomarker from Every Trial”,
“It’s not Science, It’s Manufacturing: GMP” *virtual*, Feb. 22-25, 2021

SITC Winter School, lecturer: “Cancer Vaccines: Can they Work?”, “How to get a Biomarker from Every Trial”,
“It’s not Science, It’s Manufacturing: GMP” Jan. 24–28, 2022 • Austin, TX

Undergraduate and medical students supervised:

UPCI: Karen Schmitt (summer 2004)

SURP (Immunology): Michelle Heid (summer 2006, Gannon Univ., Erie, PA.), accepted to Univ. Pittsburgh Graduate Program, Fall 2007)

SURP (Immunology): Jason Tse (summer 2007, Beloit College., Beloit, WI., supported by Dean’s Scholarship)

SRP Sarah Bray Newton (MS-I) (supported by T35 DK065521 T. Kleyman), Univ. Pittsburgh Scholarly Project, 2007-2009

Duquesne University student Megan Mitchell, summer 2008, UPCI Volunteer Program

University of Pittsburgh Medical Resident Florencia McAllister, July-Dec. 2008

SURP (Immunology): Weners Ballard (summer 2009, Hampton College, Hampton, VA)

Doris Duke Summer Scholar: Aaron Ponce (summer 2012, Honolulu, Hawaii)

*project won “Best in Category” at the Hawaiian State Science Fair and was presented at the Intel International Science and Engineering Fair, Phoenix AZ, May 2013.

SURP (Immunology): Alexander Etheridge (summer 2014, Michigan State Univ., Lansing, MI)

SURP (Immunology): Samuel Du (summer 2015, Pomona College, Claremont, CA).

SURP (Immunology): Joel Lohr (summer, 2016, Edinboro University, PA)

BaoBao Annie Song, (summer 2017 – June 2018, Carnegie Mellon Univ., Pittsburgh, PA)

James Edgerton, Jesus College Summer Research Program (summer 2017, University of Cambridge, UK)

Grant Magnon (MS-1), Univ. Pittsburgh Scholarly Project, 2018-2019

Faith Curl, Cal State East Bay/PICI RISE Lab Intern at UCSF, Jan.- June 2022

Graduate students supervised:

Jessica Chu (rotation Spring 2005)

Brian Janelins (rotation Spring 2005)

Qi Yang (rotation Fall 2006)

Michelle Messmer (rotation Spring 2009)

Douglas Marvel (rotation Fall 2009)

Mahesh Raundhal (rotation Winter 2010)

Member, Immunology Comp Exam Committee, Sean Ryan, Summer 2005, Dept. Immunology (PI, O. Finn)

Member, Immunology Thesis Committee, Payal Watchmaker, 2006-2007, Dept. Surgery, (PI, P. Kalinski)

Member, Immunology Comp Exam Committee, Laura Vella, Winter 2005, Thesis committee, June 2006-2008, Dept. Immunology, (PI, O. Finn)

Member, Immunology Comp Exam Committee, Angela Pardee, Summer 2007, Thesis committee, Aug. 2007-Sept. 2010, Dept. Dermatology (PI, W. Storkus)

Member, Immunology Comp Exam Committee, Erik Berk, Summer 2008, (PI, P. Kalinski)

Member, Graduate School of Public Health Doctoral Comp Exam Committee, Thesis Committee, Catherine Mundia, July 2008-2009, Department of Infectious Diseases and Microbiology. (PI, C. Rinaldo)

Member, Immunology Comp Exam Committee, Kristine-Ann Buella, July 2009, (PI, R. Hendricks)

Member, Immunology Thesis Committee, Lu Chen, Fall 2009-2013, (PI, W. Storkus)

Member, Immunology Comp Exam Committee, Nina Chi, June 2010, (PI, W. Storkus)

Member, Immunology Dissertation Committee, Yu Zhou, August, 2010-2013, (PI, R. Binder)

Member, Immunology Dissertation Committee, Kellie Smith, August 2010-2014, (PI, C. Rinaldo)

Member, Immunology Dissertation Committee, Nina Chi, November 2010-2013, (PI, W. Storkus)

Member, Immunology Comp Exam Committee, Douglas M. Marvel, May 2011, (PI, R. Salter)

Chair, Immunology Comp Exam Committee, Jo Erika Narciso, Aug. 2012, (PI, L. Faló)

Member, Immunology Thesis Committee, Jo Erika T. Narciso, Jan. 2013-2018, (PI, L. Faló)

Chair, Immunology Comp Exam Committee, Kellsye Fabian, Jan. 2013, (PI, W. Storkus)

Member, Immunology Thesis Committee, Kellsye Fabian, Oct. 2013-2018 (PI, W. Storkus)

Mentor, Aliyah Weinstein (rotation Winter 2013)

Mentor, Elizabeth Stahl (rotation, Fall 2013)

Mentor, Liwen Wang (Tsinghua University rotation #2, Fall 2013)

Member, Immunology Comp Exam Committee, Lauren Kinner, July 2014, (PI, R. Binder)

Member, Immunology Thesis Committee, Abigail Overacre, September 2014–2018 (PI, D. Vignali)

External Dissertation Reader, Debarati Banik, Graduate student (PI: S. Abrams), Dept. of Immunology, Roswell Park Cancer Institute, Buffalo, NY, July 2014

Mentor, Hiroshi Yano (rotation Fall, 2014)

Member, Immunology Comp Exam Committee, Aliyah Weinstein, July, 2015, (PI, W. Storkus)

External Dissertation Committee Member, Erica Fleming-Trujillo, (PI: M. I. Nishimura), Loyola Univ. , Chicago, IL, 2015-2019

Mentor, Chunlei Li (Tsinghua University rotation #2, and dissertation project) Fall 2015-Summer 2017

Member, Immunology Thesis Committee, Aliyah Weinstein, September 2015–2018 (PI, W. J. Storkus)

External Dissertation Chair, Andressa Sodre de Castro Laino, Graduate Student (PI: E. Sotomayor), Cancer Biology Program, H. Lee Moffitt Cancer Center & Research Institute, University of South Florida, December, 2015.

External Dissertation Committee Member, Zipei Feng (PI: Bernard A. Fox), Oregon Health & Science University, Portland, OR, July 2016.

Dissertation Mentor, Deena Maurer (rotation, Fall 2016, PhD Dissertation Chair, 2017-2020). Univ. Pittsburgh Skin Biology T32 Training Grant pre-doctoral Scholar 2017-2018. CTSI TL1 Scholar pre-doctoral support 2018-2019, 2019-2020.

Mentor, Christopher Chuckran (rotation, Winter 2017)

Member, Immunology Comp Exam Committee, Manoj Chelvanambi, July, 2017, (PI, W. Storkus)

Member, Immunology Thesis Committee, Manoj Chelvanambi, Sept. 2017-2021, (PI, W. Storkus)

Mentor, Stephanie Grebinoski (rotation, Fall 2017)

Mentor, Ronal Peralta (rotation, Winter 2017)

Member, Immunology Comp Exam Committee, Sayali Onkar, Nov. 17, 2017, (PI, S. Oesterreich, D. Vignali)

External Dissertation Reader, Shaokang Ma, The University of Western Australia, June 2019

(PI Bruce Robinson)

Member, Qualifying Exam Committee, Elizabeth McCarthy, UCSF BMI Program (PIs Spitzer/Ye) June 2020

Member, Qualifying Exam Committee, Gabi Reeder, UCSF BMI Program (PI Eyquem) June 2022

Postdoctoral Fellows and Senior Scientists Supervised:

Viktoria Evdokimova, Ph.D. (Tomsk, Russia), Aug. 2004 - Dec. 2006

Yang Liu, M.D. (Shanghai, China), Nov. 2004 - Mar. 2006

Lazar Vujanovic, Ph.D. (Pittsburgh, PA), Oct. 2006 – 2018

Postdoctoral Fellow 2006-2008, Research Associate 2008-2011, Research Instructor 2011-2018

Jenny Landsberg, M.D. (Bonn, Germany), Feb. - June 2007

Jun Eun Park, M.D. (Seoul, South Korea), Mar. 2008 - Feb. 2009

Lee Ann Blalock, Ph.D. (Boston, MA), Aug. 2009 - March 2010

Angela Pardee, Ph.D. (Pittsburgh, PA), Oct. 2010 – Feb. 2015

Hadas Prag Naveh, M.D. (Jerusalem, Israel), Nov. 2010-Sept. 2012

Patricia Santos, Ph.D. (Pittsburgh, PA), Mar. 2014-2019

Juraj Adamik, Ph.D. (Research Scientist), (Pittsburgh, PA), Mar. 2019-Apr.2022

Paul V. Munson, Ph.D. (Research Scientist) (Seattle, WA), Aug. 2019-Jan. 2022

Seminars:

Nov. 14, 1994, Surgical Oncology Division Seminar Series, UCLA

March 7, 1996, Jonsson Cancer Center Seminar, UCLA
 March 11, 1996, Surgical Oncology Division Seminar Series, UCLA
 March 13, 1996, Radiation Oncology Graduate Student Research Seminar, UCLA
 August 23, 1996, Radiation Oncology Research Seminar, UCLA
 June 5, 1998, Gene Medicine Symposium, UCLA
 April 22, 1999, Surgery Branch, NCI, NIH, Bethesda, MD
 June 5, 2000, Gene Medicine Symposium, UCLA
 July 31, 2000, Gene Medicine/Human Genetics Seminar, UCLA
 Oct. 19, 2000, Jonsson Cancer Center Seminar, UCLA
 Nov. 6, 2000, Surgical Oncology Divisional Seminar, UCLA
 Nov. 11, 2000, Dental School Alumni Day Seminar, UCLA
 May 4, 2001, University of Connecticut Health Center, CT
 Oct. 25, 2001, Clinical Dendritic Cell Immunotherapy Conference, Pinehurst, NC, *invited speaker
 Feb. 28, 2002, University of Michigan Medical Center, Ann Arbor, MI
 June 5, 2002, University of Chicago, Surgery Dept., Chicago, IL
 June 13, 2002, Jonsson Cancer Center Seminar, UCLA
 Mar. 25, 2003, Baylor Institute for Immunology Research, Dallas, TX
 Apr. 16, 2003, Cleveland Clinic, Surgical Research, Cleveland, OH
 Apr. 18, 2003, University of Pittsburgh, Dept. Medicine, Pittsburgh, PA
 June 5, 2003, University of Nebraska, Omaha, Eppley Inst., NE
 June 10, 2003, Portland-Providence Medical Center, OR
 July 7, 2003, University of Chicago, Surgery Dept., Chicago, IL
 Nov. 13, 2003, Univ. Pittsburgh, Immunology Dept., Pittsburgh, PA
 Jan. 28, 2004, Univ. Pittsburgh, Clinical Onc. Grand Rounds, Pittsburgh, PA
 Apr. 2, 2004, "Hepatocellular Cancer" meeting, NIH, Bethesda, MD, *invited speaker
 June 9, 2004, Biological Therapeutics Group, UPCI, Pittsburgh, PA
 Jan. 18, 2005, Univ. Pittsburgh, UPCI Basic Science Seminar, Pittsburgh, PA
 June 24, 2005, Sabin Vaccine Colloquium on Cancer Vaccines, Cold Spring Harbor, NY, *invited speaker
 Oct. 18, 2005, Roswell Park Cancer Institute, Buffalo, NY
 Dec. 15, 2005, Univ. Pittsburgh, Immunology Dept., Pittsburgh, PA
 May 3, 2006, Univ. Pittsburgh, Surgical Oncology, Pittsburgh, PA
 Nov. 18, 2006, Immunotherapy 2006: Targeting Complexity, Havana, Cuba, *invited speaker and Cancer Immunotherapy session co-chair
 Jan. 5, 2007, Gastroenterology, Hepatology & Nutrition Research Seminar, Pittsburgh, PA
 Jan. 19, 2007, Surgical Oncology Retreat Faculty Session, Seven Springs, PA

Feb. 28, 2007, Univ. Pittsburgh, Clinical Onc. Grand Rounds, Pittsburgh, PA

June 22, 2007, Annual UPCI Retreat, Bench to Bedside, Greensburg, PA

June 29, 2007, Japanese Society for Gene Therapy, Nagoya, Japan *invited speaker

July 2, 2007, University of Nara, Nara, Japan

July 11, 2007, Univ. Pittsburgh, Surgical Oncology, Pittsburgh, PA

Aug. 29-30, 2007, Advances in Immunotherapy for Malignant Melanoma, Santa Monica, CA; Scottsdale, AZ

Oct. 5, 2007, Perspectives in Melanoma, Huntington Beach, CA *invited meeting talk

Nov. 7, 2007, University of Iowa, Immunology Program, Iowa City, IA

Mar. 6, 2008, Univ. Pittsburgh, Melanoma Program Seminar, Pittsburgh, PA

Mar. 18, 2008, Univ. Pittsburgh, UPCI Basic Science Seminar, Pittsburgh, PA

Mar. 20, 2008, Univ. Pittsburgh, Immunology Dept., Pittsburgh, PA

Apr. 11, 2008, Tumor Vaccine and Cell Therapy Working Group, San Diego, CA

May 19, 2008, International Society for Cellular Therapy, Miami, FL*invited speaker

May 27, 2008, Baylor Institute for Immunology Research, Dallas, TX

July 12, 2008, Skin SPORE Summer Workshop, New Haven, CT

Aug. 6, 2008, Univ. Pittsburgh, Surgical Oncology, Pittsburgh, PA

Sept. 23, 2008, Medical Univ. South Carolina, Dept. Surgery, Charleston, SC

Jan. 30, 2009, Univ. Pittsburgh, Surgical Oncology Retreat, Pittsburgh, PA

Mar. 24, 2009, US-Japanese Workshop on Immunological Molecular Markers in Oncology, Kona, Hawaii,*invited speaker

June 26, 2009, “Vector Development and Clinical Trials,” Yonsei Cancer Center, Seoul, South Korea, *invited speaker

June 29, 2009, Ajou University School of Medicine, Suwon, South Korea

June 30, 2009, Chonnam National University, Gwangju, South Korea

August 18, 2009, “Novel Vaccines,” ImVacs, Providence, RI, *invited speaker

Oct. 28, 2009, “iSBTc/FDA/NCI Workshop on Prognostic and Predictive Immunologic Biomarkers in Cancer,” Washington, DC, *invited speaker

Mar. 19, 2010, “MIATA Panel” panel discussant, Cancer Vaccine Consortium, Washington, DC, *invited panel member

Mar. 29, 2010 “Nordic Cancer Vaccine Consortium,” Stockholm, Sweden, *invited speaker

Mar. 30, 2010, Karolinska Institute, Stockholm, Sweden

April 9, 2010, 5th Meeting on Combined Biotherapy of Cancer of the *Alleanza Contro il Cancro*, San Raffaele Scientific Institute, Milan, Italy

June 26, 2010, Human ImmunoPhenotyping Consortium, FOCIS, Boston, MA, *invited panel member

Sept. 30, 2010, Immuno-Oncology Biomarkers 2010 and Beyond, NIH, Washington, DC

Oct. 1, 2010, iSBTc Primer on Tumor Immunology, “Immune Monitoring,” *invited speaker

Oct. 3, 2010, iSBTc Annual Meeting, “Update: 2009 iSBTc-FDA-NCI Workshop on Prognostic and Predictive Immunologic Biomarkers in Cancer,” Washington, DC

Oct. 20, 2010, University of Iowa, Immunology Seminar Series, Iowa City, IA

May 23, 2011, Herlev University Hospital, Center for Cancer ImmuneTherapy (CCIT), Copenhagen, Denmark, *invited speaker

May 27, 2011, 9th Annual Meeting of the Association for Cancer Immunotherapy (CIMT), Mainz, Germany, *invited speaker

May 30, 2011, Institute of Molecular Immunology, Helmholtz Center, Munich, Germany, *invited speaker

June 23, 2011, “MIATA Panel” discussant, FOCIS meeting, Washington, DC, *invited panelist and module 3 moderator

June 30, 2011, Skin SPORE Summer Workshop, *invited presentation: “Immune Biomarkers and Melanoma Patient Banks in Pittsburgh,” Weston, MA

Nov. 3, 2011, SITC Primer on Tumor Immunology & Cancer Immunotherapy, Bethesda, MD, *invited speaker: “Immunologic Monitoring”

Jan. 25, 2012, World Cancer Immunotherapy Conference, “Cancer Vaccine Immunity in Melanoma and Hepatocellular Cancer,” San Diego, CA, *invited speaker

Oct. 24, 2012, SITC Early Career Scientist Professional Development Session, “The Business of Research,” North Bethesda, MD, *invited speaker

Dec. 4, 2012, Georgia Health Sciences University Cancer Center, “Immunotherapy for Melanoma and Hepatocellular Cancer,” Augusta, GA

February 7, 2013, EMD Serono Lecturer, Oncology MSL Training, “Cancer Immunology 101,” Rockland, MD

Mar. 18, 2013, Dartmouth University, Tumor Immunology Seminar, Hanover, NH

April 4th, 2013, Society for Immunotherapy of Cancer (SITC), Cancer Immunotherapy Clinical Trials: Concepts and Challenges “What Relevant Immune Monitoring and Correlative Study Criteria Do We Use?” Bethesda, MD, *invited speaker

June 19, 2013, University of Pittsburgh School of Medicine, Clinical Oncology and Hematology Grand Rounds, “ASCO, AAI and BBBC Presentations,” AAI presenter, Pittsburgh, PA

Sept. 25-26, 2013, MD Anderson Cancer Center, Skin SPORE Workshop, Session IV – Immunotherapy, “State of the Art: DC Based Vaccines,” Houston, TX

Dec. 13, 2013, SITC Industry Primer: Dendreon, “The Need for Immune Monitoring and Development of Predictive & Prognostic Biomarkers,” Seattle, WA, *invited speaker

Jan. 22, 2014, Sidra Medical Research & Research Center Symposium, “Dendritic cell and adenovirus-based cancer vaccines” and “Highlights of Society for Immunotherapy of Cancer Annual Meeting,” Doha, Qatar, *invited speaker

Jan. 31, 2014, 6th Immunotherapeutics & Immunomonitoring Conference, “Immune Biomarkers in Cancer Immunotherapy,” San Diego, CA, *invited speaker

Jan. 31, 2014, Moores UCSD Cancer Center Immunotherapy Seminar, “Immunotherapy for Melanoma and Hepatocellular Cancer and Immunologic Biomarkers,” La Jolla, CA.

Apr. 1, 2014, Buffalo Conference on Immunology, Keynote Lecture: “Immunotherapy for Melanoma and Hepatocellular Cancer,” Chautauqua, NY

Apr. 16, 2014, Allegheny College “Women in Science” lecture: “Harnessing the Immune System to Fight Cancer,” Meadville, PA.

May 14, 2014, University of Pittsburgh, Clinical Oncology and Hematology Grand Rounds, “Immunotherapy Cancer Vaccination and a Dendritic Cell Combination Trial for Melanoma,” Pittsburgh, PA

July 11, 2014, Seminar: “Cancer Vaccination for Melanoma and Hepatocellular Cancer,” Roswell Park Cancer Institute, Buffalo, NY

October 10, 2014, Transplantation Biology Seminar Series: “Immunotherapy for Cancer,” University of Pittsburgh, Pittsburgh, PA *invited speaker

November 6, 2014, SITC Primer 2014: “Dendritic Cells.” SITC Annual Meeting, National Harbor, MD

November 7-9, 2014, SITC Annual Meeting Professional Development Session: “Implementing Your Academic Mission,” and Meet the Expert Breakfast Session: “Networking and Developing Successful Collaborations,” National Harbor, MD *invited speaker

November 18, 2014, Loyola University, “Immunotherapy for Melanoma and Hepatocellular Cancer,” Chicago, IL *invited speaker

January 13, 2015, University of Pittsburgh Cancer Institute, Basic and Translational Research Seminar, “Cancer vaccines and tumor antigens in melanoma and hepatocellular cancer,” Pittsburgh, PA

March 18, 2015, University of Pittsburgh, Pitt Signaling Club, “Cancer vaccine related gene regulation in DC,” Pittsburgh, PA

March 26, 2015, (ITOC-2) Immunotherapy of Cancer Conference, “Unexpected findings from Treg and MDSC monitoring,” Munich, Germany

April 29, 2015, (CITIM) Cancer Immunotherapy and Immunomonitoring, “Adenovirus and DC combination vaccines for melanoma and hepatocellular cancer,” Ljubljana, Slovenia

May 10, 2015, American Association of Immunology (AAI), “Immune biomarkers in clinical trials,” SITC Guest Symposium, New Orleans, LA

May 22, 2015, Tumor Immunology Meets Oncology XI (TIMO) “Immunologic monitoring of clinical trials,” Halle, Germany

June 18, 2015, UPCI Annual Retreat, “Antigen-Engineered Dendritic Cells and Immune Biomarkers in Melanoma,” Pittsburgh, PA

June 23, 2015, Topics in Pediatric Hem.Onc., “Immunologic Monitoring and Biological Effects of Tumor-Associated Antigens,” Children’s Hospital, Pittsburgh, PA

June 25, 2015, FOCIS 2015, “Immunologic biomarkers in cancer clinical trials” in “Best of Tumor Immunology” session, San Diego, CA.

July 31, 2015, “Advances in Cancer Immunology” SITC Program: “Tumor Immunology 101,” Pittsburgh, PA

September 3, 2015, “Challenges in immune target choice: Immune effects of tumor-associated antigens,” International Liver Cancer Assoc. (ILCA) Workshop, Paris, France

December 4, 2015, “Immunotherapy for Melanoma and Hepatocellular Cancer,” Moffitt Cancer Center, University of South Florida, Tampa, FL.

January 14-15, 2016, “Assay standardization and logistic challenges/SITC perspectives” NCI DCTD Workshop on Immunotherapy, presenter and panelist, Shady Grove, MD

January 21, 2016, “Immune biomarkers integration,” NRG Winter Symposium, Atlanta, GA

February 29, 2016, “Biomarker integration in clinical trials for immunotherapy,” Institute of Medicine, Washington, D.C.

March 11, 2016, “Cancer immunotherapy biomarkers: lessons from clinical trials,” Molecular Medicine TriCon, San Francisco, CA.

March 24, 2016, “Immune modulation by tumor antigens,” ITOC-3, Munich, Germany.

June 3, 2016, “Can we predict which patients will respond to cancer immunotherapy?” ASCO-SITC Symposium, Chicago, IL

June 12, 2016, “T cell responses to shared tumor antigens in cancer patients,” AgonOx T Cell Meeting, Maui, HI

June 15, 2016, “Targeting shared tumor antigens for immune activation,” UPCI Cancer Immunotherapy Symposium, Greensburg, PA

June 23, 2016, “Predictive and prognostic biomarkers in cancer immunotherapy,” FOCIS Meeting, Boston, MA

June 26, 2016, “Cancer immunotherapy biomarkers: progress and issues,” China FDA Cancer Immunotherapy Workshop, Beijing, China

July 26, 2016, “Tumor Antigens and Cancer Vaccines in Melanoma and Hepatocellular Cancer,” Earl A. Chiles Research Institute, Portland, OR

August 22, 2016, “Alpha Fetoprotein Immune Modulation of DC and NK cells,” International Congress on Immunology, Melbourne, Australia

September 9, 2016, “Immune Modulation by AFP,” and “SITC Immunotherapy Biomarkers Task Force,” National Institute of Oncology Immunotherapy Meeting, Budapest, Hungary.

September 21, 2016, “Cancer Immunotherapy for HCC and Immune Modulation by AFP,” Japan Society for Hepatology, Kanazawa, Japan.

September 24, 2016, “Immunologic Impact of Tumor Antigens in Vaccines for Melanoma and Hepatocellular Cancer,” SITC-CAHON-CSCO Workshop, CSCO Meeting, Xiamen, China

September 28, 2016, “Targeting Shared Tumor Antigens for Cancer Immunotherapy.” University of Pittsburgh Immunology Department Retreat, Wheeling, WV

November 11, 2016, “Vaccines, Tumor Antigens and Immune Responses.” SITC Annual Meeting, National Harbor, MD

November 12, 2016, “Immune Biomarkers Task Force Update.” SITC Annual Meeting, National Harbor, MD

December 3, 2016, “Promoting anti-tumor immunity with cancer vaccines.” Translational Cell Therapy for Cancer subgroup, ASCB Annual Meeting, San Francisco, CA

Feb. 24, 2017, “Biomarkers Wrap Up”, ASCO-SITC Clinical Immuno-Oncology Symposium, Orlando, FL

April 8, 2017, “Immunotherapy for Hepatocellular Cancer.” 2017 GI Oncology Symposium: Current Advances of Immune Therapy in Gastrointestinal Malignancies. UPMC Cancer Center, Pittsburgh, PA.

May 12, 2017, “Antigen-engineered DC Vaccine +/- IFN α for Melanoma”, The International Symposium on Immunotherapy, Institute for Cancer Vaccines and Immunotherapy, The Royal Society, London, UK.

June 15, 2017, “Cancer Immunotherapy Biomarkers,” ASTRO 2017 Immunotherapy Workshop, NIH, Bethesda, MD

June 28, 2017, “Immune Monitoring to determine efficacy of combination immunotherapy,” Rational Combinations 360, New York Academy of Medicine, New York, NY

August 31, 2017, “Genetically engineered DC vaccines for melanoma”, Keynote Presentation, Immuno-Oncology Summit, CHI. Boston, MA

September 12, 2017, “Tumor Immunology,” Arnold Palmer Cancer Center Journal Club, Greensburg, PA

September 14, 2017, “Basic Principles of Cancer Immunotherapy,” SITC Advances in Cancer Immunotherapy Course, Pittsburgh, PA

September 23, 2017, “Genetically engineered DC vaccines for melanoma,” Keynote Lecture, Great Lakes Imaging & International Flow Cytometry Association Conference, Middleton, WI

September 27, 2017, “How emerging biomarkers may affect patient selection for immunotherapy,” CSCO-CAHON-SITC Joint Symposium, Xiamen, China

October 3, 2017, “Immunotherapy for melanoma and hepatocellular cancer,” Center for Vaccine Research Seminar, Pittsburgh, PA

November 17, 2017, NanoString “Lunch and Learn,” “Immune profiling to discovery cancer vaccine markers in melanoma,” Pittsburgh, PA

November 30, 2017, “DC vaccine combinations for melanoma.” Melanoma Bridge Meeting, Naples, Italy

December 8, 2017, “Biomarker development to integrate immune effector and suppressor responses in cancer,” ESMO-IO Conference, Geneva, Switzerland

January 9, 2018 “Cancer Vaccines and Immunity”, Univ. Calif. San Diego Pharmacy Dept. seminar, La Jolla, CA

January 25, 2018 “Selection and Testing of Optimal Correlates to Immunotherapy Trials”, ASCO-SITC, San Francisco, CA

February 6, 2018 “Update on Cancer Vaccination and Biomarkers of Response”, IO360, New York, NY

March 19, 2018 “Cancer Vaccination and Immunotherapy Biomarkers,” ITOC-5, Berlin, Germany

March 25, 2018 “Cancer Immunotherapy,” Taiwan Society for Immunotherapy of Cancer, Taipei, Taiwan

March 26, 2018 “Cancer Vaccines and Biomarkers in Melanoma and Hepatocellular Cancer,” Taipei Medical University, Taipei, Taiwan

April 3, 2018 “Tumor antigens, vaccines and immunity,” Cancer Medicine Grand Rounds, MD Anderson, Houston TX

April 14, 2018 “Measuring Effector and Suppressor Cellular Responses and Circulating Proteins,” AACR Methods Workshop “Immunologic Landscape of Tumors,” Chicago, IL

May 8, 2018 “Oncology Diagnostics – Reading the Future,” panel discussion, Cancer Progress Conference, New York, NY

May 30, 2018 “Cancer Vaccines and Biomarkers in Melanoma and Hepatocellular Cancer,” Medical University of South Carolina, Seminar Speaker, Charleston, SC

June 6, 2018 “Cancer Vaccines and Immune Profiles in Melanoma and Hepatocellular Cancer”, Parker Institute for Cancer Immunotherapy, San Francisco, CA

June 7, 2018 “Cancer Vaccines and Immune Profiles in Melanoma and Hepatocellular Cancer”, Univ. Calif. San Francisco, San Francisco, CA

June 13, 2018 “Cancer Vaccines and Immune Profiles in Melanoma and Hepatocellular Cancer”, Massachusetts General Hospital, Boston, MA

June 20, 2018 “Vaccination Strategies and Identification of Neoantigens”, FOCIS-SITC Cancer Immunology session, FOCIS annual meeting, San Francisco, CA

July 16, 2018, “Strategies for Incorporating Biomarkers in Clinical Trials for PD-1/PD-L1 Combinations”, National Cancer Policy Forum workshop “Development of Combination Cancer Therapies with Immune Checkpoint Inhibitors”., Washington, DC

September 21, 2018, “Update on Cell Therapy,” CSCO-CAHON-SITC Joint Symposium, Xiamen, China

March 30, 2019 “The Role of Biomarkers in selecting Patients for Immunotherapy Trials” Methods workshop, AACR, Atlanta, GA

April 12, 2019 , “Cellular Therapies for Cancer”, ITOC-6, Vienna, Austria

May 14, 2019 “Tumor Antigens and the Immune System”, NY Academy of Sciences Frontiers meeting, NY, NY

May 17, 2019, panelist, “Processes to Enable Adaptive Manufacturing Processes during late stage development and post-approval”, at “Designing the Future of Cell Therapies”, Washington , DC

June 2, 2019, invited panelist “B-NOW Women in Oncology & Research” Luncheon, ASCO, Chicago, IL

June 24, 2019, AACR “Future of Cancer Research Innovation Summit: Combination Therapies” panelist, “Cancer vaccines, neoantigens, and human biomarkers of response”, Washington DC

July 9, 2019, “Cancer Vaccines and Tumor Antigens”, invited talk, PACT Pharma, South San Francisco, CA

August 16, 2019, “Cancer Vaccines: what does and does not matter”, 4th New Horizons in Immunotherapy for Head and Neck Cancer”, Portland, OR

August 20, 2019, panelist, SITC Women in Immunotherapy Network Leadership Institute Workshop, Seattle, WA

Sept. 13, 2019, Expert panelist, invited speaker: “Engineering Cell Therapies”, ISCT Regional Meeting, Madison, WI

Sept. 16, 2019 “Cancer Vaccines: what does and doesn’t matter” UCSF-PICI monthly work in progress, UCSF

Sept. 20, 2019 “Cancer Vaccines and Tumor Antigens” UCSF/UC Berkeley Immunology Retreat, Santa Cruz, CA

Sept. 30, 2019, “The Future of Immuno-Oncology”, Analytical, Life Science & Diagnostics Association CEO Conference, Half Moon Bay, CA

Oct. 17, 2019, “Immunologic Correlates of Outcome”, Cancer Immunotherapy- The basis and practices (IUIS Satellite meeting), Hefei, China

Nov. 17, 2019, “Immunologic Correlates of Outcome”, Roche-Genentech Biomarkers Symposium, Basel, Switzerland

Nov. 26, 2019, “Dendritic Cell Vaccines: what does and doesn’t matter”, OSU PIIO Symposium, Columbus, OH

Dec. 4, 2019, “Successes and Failures in Cancer Vaccination”, Immunotherapy Bridge, Naples, Italy

Jan. 7, 2020 “Cancer Vaccines and Alpha Fetoprotein”, Eureka Biotherapeutics, Emeryville, CA

Jan. 14, 2020 “Cancer Vaccines: successes and failures” Solebury Trout, JP Morgan week, San Francisco, CA

Jan. 22, 2020 “Cancer Vaccines: What does and does not matter”, Immunology Seminar, Univ. Iowa, Iowa.

Feb. 13, 2020 “Cancer Vaccines: What does and does not matter”, Great Science Seminar, Jounce, Boston, MA.

Mar. 6, 2020 “Tissue biobanking and collection”, SITC-AACR Workshop Immuno-oncology Autoimmunity, Houston, TX

Mar. 20, 2020 “AFP: Tumor Antigen and Cancer Vaccines:, PICI Science Club, SF, CA

Apr. 17, 2020 “Cancer Vaccines in Melanoma and Hepatocellular Cancer”, UCSF Division of Hematology/Oncology Research in Progress. SF, CA(virtual).

May 29, 2020 McKinsey & Co. “Cell Therapies: Moving beyond the CAR race” invited panelist (pre-ASCO, virtual)

July 23, 2020 “Cancer Vaccination and Immunotherapy”, Carolina BioOncology Institute, 2020 Internship Guest Speaker Series, NC (virtual)

Sept. 24, 2020 “Great Debate: Cancer Vaccination: Yes or No?”, Immunotherapy Bridge, Naples, Italy (*virtual*)

Oct. 4, 2020 “Cancer Vaccination in Immunotherapy”, ITOC-7, Munich, Germany (*virtual*)

Dec. 1, 2020 “Panel: 30 years of cancer vaccines – should we still be optimistic?” panelist, World Vaccine and Immunotherapy conference (*virtual*).

Jan. 5, 2021 “Lessons learned from vaccination of cancer patients” Yale Center for Immuno-Oncology Seminar, (*virtual*).

Feb. 9, 2021, Centre for Translational Cancer Research - 2nd Annual Immuno-Oncology Symposium, “Cancer Vaccination & Immune Profiling in Cancer Patients” (*virtual*).

Feb. 23-25, 2021. IO360 Keynote: “Cancer Vaccination: Lessons Learned”; panelist: “Cell Therapy Regulatory Considerations” (*virtual*).

Mar. 30, 2021 Precision Oncology, panel discussion: “The Future of Cell Therapy” Alessandra Cesano (moderator), panelists: Adrian Bot, **Lisa Butterfield**, Franco Marincola (*virtual*).

May 6, 2021 Cellicon Valley '21 - The Future of Cell and Gene Therapies a virtual symposium, “Immune Responsiveness” (*virtual*).

May 10, 2021, ASCGT Annual Meeting Cell Therapy Symposium: Expanding the Success of Immune Effector Cell Therapies for Cancer, “Challenges for Solid Tumors” (*virtual*).

May 21, 2021, First Thought Focus: Cancer Vaccines. Live online webinar/discussion with host Neil Canavan.

Aug. 5-7, 2021, V Foundation “Dinner with the Docs” and “Cure Symposium” presenter/panelist. Napa, CA

Oct. 23, 2021, Keynote lecture, University of Kansas School of Medicine “Tumor Immunology Symposium”, Kansas University Cancer Center, Kansas City, KS

Dec. 2, 2021, “Can Vaccine Transform Cold into Hot Tumors? Yes or No”, Immunotherapy Bridge, Naples, Italy (*virtual*)

Jan. 6, 2022, “Lessons Learned from Cancer Vaccination Clinical Trials”, Cancer Immunotherapy Program seminar, NIH (*virtual*).

Jan. 25, 2022, Parnassus Research in Progress Seminar: “Cellular Metabolism in Dendritic Cells”, UCSF, (*virtual*).

April 12, 2022 “Biomarkers to Identify Rational Combinations” Forum/panel, AACR 2022, New Orleans, LA

May 10, 2022, Keynote Address: "Cancer Vaccination: where it fits and what is holding us back?", Cancer Progress, (*virtual*).

May 12, 2022, “Cancer Vaccines: What does and does not matter”, Cell & Gene Therapy seminar, St. Jude, Memphis, TN.

May 20, 2022, “Cancer Vaccines: What does and does not matter”, Winship Elkin Lecture Series, Emory Univ., Atlanta, GA

May 28, 2022, Keynote “Cancer Immunotherapy”, Precision Medicine meeting; panel on women’s careers in science, Doha, Qatar

June 21, 2022, FOCIS Cancer Immunity and Immunotherapy Course, “Vaccination Strategies, Identification of Neoantigens” San Francisco, CA

July 6, 2022, SU2C Innovation Summit: Using NK Cells and Vaccines in Cancer. Presentation: “Vaccines”. Houston, TX

September 22, 2022, FDA CBER Science Symposium, “Biomarker Discovery”, keynote talk, *virtual*.

Session Co-chair:

1. American Assoc. Immunology (AAI) Annual Meeting, “Immunotherapy of Cancer,” Block Symposium Co-Chair, April 2005.

2. American Assoc. for Cancer Research (AACR) Annual Meeting, Mini-Symposium Co-Chair, “Novel Vaccine and Antibody Approaches,” April 2005; Session 2 Co-Chair, Tumor Vaccine and Cell Therapy Working Group meeting, March 2006.
3. American Assoc. Immunology (AAI) Annual Meeting, “Tumor-associated Immunoregulation and Immunosuppression” Block Symposium Co-Chair, May 2006.
4. American Assoc. Immunology (AAI) Annual Meeting, April 2008 Block Symposium Co-Chair, “Tumor-Associated Antigens and Pathobiology of the Immune System,” and Discussion Leader, Committee on the Status of Women “Careers Roundtable.”
5. US-Japanese Workshop on Immunological Molecular Markers in Oncology, Session Co-Chair, 2009.
6. NCI Translational Science, Poster Discussion Session Co-Chair, "Adoptive Cellular Therapies," 2009
7. NIH Center for Scientific Review, Oncology 2 CII Study Section Co-Chair, Feb. 2011.
8. American Assoc. for Cancer Research (AACR) Annual Meeting, Mini-Symposium Co-Chair, “Posed for the Clinic: Next Generation of Cancer Immunotherapy.” Orlando, FL, April 2011.
9. Society for Immunotherapy of Cancer (SITC), “Meet the Expert” breakfast discussion leader, “Grant Writing.” N. Bethesda, MD. Nov. 2011.
10. American Assoc. Immunology (AAI) Annual Meeting, “DC Vaccines” and “Innate Immunity and Viral Vaccines” Block Symposia Co-Chair, Honolulu, HI, May 2013.
11. Society for Immunotherapy of Cancer (SITC), “Meet the Expert” breakfast discussion leader, “Work-Life Balance,” National Harbor, MD, Nov. 8, 2013.
12. “Immune Evolution in Cancer” Keystone Meeting, Whistler, B.C., Canada. Workshop co-chair, Mar. 12, 2014.
13. American Assoc. Immunology (AAI) Annual Meeting, “Tumor Immunoregulation” Block Symposium Co-Chair; SITC Guest Society Symposium co-chair, Pittsburgh, PA, May 2014.
14. American Assoc. Immunology (AAI), SITC Guest Society Symposium: Block symposium “Checkpoints and Combinations in Cancer Therapy,” Co-Chair, New Orleans, LA, May 2015.
15. CSCO-CAHON- SITC, Cancer Immunotherapy Session, CSCO, Xiamen, China, September, 2016
16. ASCB Annual Meeting, Subgroup (SITC) Session on “Translational Cell Therapy of Cancer,” Co-Chair, San Francisco, CA, December, 2016
17. ASCO-SITC Clinical Immuno-Oncology Symposium, “Immune Biomarkers in the Blood”, Co-Chair, Orlando, FL, Feb. 24, 2017.
19. American Assoc. Immunology (AAI) Annual Meeting, Career’s Round Table. “Preparing for Promotion” Table mentor. Washington DC, May 14, 2017.
20. CSCO-CAHON- SITC, Cancer Immunotherapy Session, CSCO, Xiamen, China, September, 2017.
21. ITOC-5, Conference Co-President and “Immune Evasion” session co-chair, Berlin, Mar. 2018.
22. CSCO-CAHON-SITC, Cancer Immunotherapy Session, CSCO, Xiamen, China, September 2018.

23. Immunotherapy Bridge/Melanoma Bridge, conference co-President, session chair, Naples, Italy, Nov. 2018
24. ITOC-6, “Cellular Therapy” session co-chair, Vienna, Austria, Apr. 2019.
25. Immunotherapy Bridge/Melanoma Bridge, conference co-President, session chair, Naples, Italy, Dec. 2019
26. ITOC-7: Precision Medicine Meets Immunotherapy (Immuno-Monitoring), session co-chair, Munich, Germany, April 3, 2020 [virtual on Oct. 4, 2020 due to COVID-19]
27. AAI 2020: Major Symposium E: Molecular Mechanisms of Tumor Immunity, co-chair and speaker, Honolulu, HI, May 11, 2020 [moved to the 2021 virtual meeting due to COVID-19]
28. SITC 2021: “NK Cells” Nov. 12, 2021 (on site moderator). Washington DC
29. FOCIS 2022: “Immunology of Cancer”, session chair. San Francisco, CA, June 23, 2022

Meeting Co-organizer:

1. “iSBTc-FDA-NCI Workshop on Prognostic and Predictive Immunologic Biomarkers in Cancer” Co-organizers: **Lisa Butterfield, PhD** – *University of Pittsburgh*; Mary (Nora) Disis, MD – *University of Washington*; Samir Khleif, MD – *National Cancer Institute*; Francesco Marincola, MD – *National Institutes of Health*; Magda Thurin, MD – *National Institutes of Health*. October 28, 2009, Gaylord National Hotel and Convention Center, Washington, DC.
2. “Immuno-Oncology Biomarkers 2010 and Beyond: Perspectives from the iSBTc Biomarker Task Force” Co-organizers: **Lisa Butterfield, PhD** – *University of Pittsburgh*; Mary (Nora) Disis, MD – *University of Washington*; Samir Khleif, MD – *National Cancer Institute*; Francesco Marincola, MD – *National Institutes of Health*, Sept. 30, 2010, NIH Masur Auditorium, Washington, DC.
3. Society for Immunotherapy of Cancer (SITC): Advances in Cancer Immunotherapy. Co-organizers: **Lisa Butterfield, PhD** – *University of Pittsburgh*; Roberts Ferris, MD, PhD, FACS – *University of Pittsburgh*; Hassane Zarour, MD – *University of Pittsburgh*. December 7, 2013.
4. Immunotherapy Biomarkers 2016: Overcoming the Barriers. Co-organizers: **L.H. Butterfield**, M.L. Disis, B.A. Fox, S. Gnjjatic, J.L. Gulley, S.N. Khleif, F.M. Marincola, G.V. Massucci, D.F. Stroncek, M. Thurin, J. Yuan. National Cancer Institute, April 1, 2016.
5. SITC Cancer Immunotherapy Biomarkers Workshop. Co-organizers: **Lisa H. Butterfield, PhD** – *University of Pittsburgh*; Mary (Nora) Disis, MD – *University of Washington*; Samir Khleif, MD – *Georgia Regents Cancer Center*; Francesco Marincola, MD – *Abbvie*; Magda Thurin, MD – *National Institutes of Health*. San Francisco, CA May 16-17, 2018
6. SITC Cancer Immunotherapy Winter School, Co-organizers: **Lisa H. Butterfield, PhD** *University of Pittsburgh*, Leisha Emens *University of Pittsburgh*, Michael Morse *Duke University*. Mesa, Ariz., Feb. 18–22, 2019
7. 2019 Women in Immunotherapy Network Leadership Institute Workshop (SITC). Co-organizers: **Lisa H. Butterfield, PhD** – *Parker Institute for Cancer Immunotherapy/UCSF*, Nora Disis, MD FACP – *University of Washington*, Olivera Finn, PhD – *University of Pittsburgh*, Kristen Hege, MD – *Celgene*, *University of California San Francisco*, Elizabeth Jaffee, MD – *Johns Hopkins University*, Solange Peters, MD, PhD – *Centre Hospitalier Universitaire Vaudois*, Padmanee Sharma, MD, PhD – *MD Anderson Cancer Center*...Seattle, WA Aug. 19-20, 2019.

8. SITC Cancer Immunotherapy Winter School, Co-organizers: **Lisa H. Butterfield, PhD** *Parker Institute, UCSF*, Leisha Emens *University of Pittsburgh*. Houston, TX, Feb. 13-17, 2020

9. SITC/AACR Workshop on “The Cancer Biology Underlying Immunotherapy-induced Autoimmunity” Co-organizers: **Lisa H. Butterfield, PhD** *Parker Institute for Cancer Immunotherapy/UCSF*, Elizabeth Jaffee, MD – *Johns Hopkins University*. **Arlene Sharpe, Ph.D.**, *Dana Farber Cancer Institute*. Houston, TX March 4 – 6, 2020.

10. 2020/2021 Women in Immunotherapy Network Leadership Institute Workshop (SITC). Co-organizers: **Lisa H. Butterfield, PhD** – *Parker Institute for Cancer Immunotherapy/UCSF*, Nora Disis, MD FACP – *University Washington*, Olivera Finn, PhD – *University of Pittsburgh*, Kristen Hege, MD – *Celgene, University of California San Francisco*, Cornelia Trimble, MD – *Johns Hopkins University*, Solange Peters, MD, PhD – *Centre Hospitalier Universitaire Vaudois*, Padmanee Sharma, MD, PhD – *MD Anderson Cancer Center*... Seattle, WA Jul. 12-13, and Chicago, IL Aug. 2-3, 2021. (*Rescheduled to 2021 due to COVID-19*).

11. PICI-NBTS “Barriers and Opportunities in IO Translational Science for Brain Tumors”. Co-organizers: **Lisa H. Butterfield, PhD** – *Parker Institute for Cancer Immunotherapy/UCSF*, **Kirk Tanner, PhD** – *CEO, National Brain Tumor Society*. April 8, 2021 (virtual).

12. SITC “Sparkathon 2.0”. Program Co-Organizers: Co-Chair: Jennifer Guerriero, PhD – *Brigham and Women’s Hospital*; Co-Chair: Marco Ruella, MD – *University of Pennsylvania*; **Lisa H. Butterfield, PhD** – *Parker Institute for Cancer Immunotherapy/UCSF*; Kristen Hege, MD – *BMS/UCSF*; Howard L. Kaufman, MD, FACS – *Ankyra Therapeutics/Massachusetts General Hospital*. Nov. 9-10, 2021, Washington DC; June 13-15, 2022 New York City. Presentation: “Vaccine Combinations” June 15, 2022.

13. 2022 Women in Immunotherapy Network Leadership Institute Workshop (SITC). Co-organizers: **Lisa H. Butterfield, PhD** – *Parker Institute for Cancer Immunotherapy/UCSF*, Nora Disis, MD FACP – *University Washington*, Olivera Finn, PhD – *University of Pittsburgh*, Kristen Hege, MD – *Celgene, University of California San Francisco*, Cornelia Trimble, MD – *Johns Hopkins University*, Padmanee Sharma, MD, PhD – *MD Anderson Cancer Center*. Seattle, WA Jul. 11-12, 2022.

14. Keystone Symposium “Emerging Cellular Therapies at the Forefront of Cancer Immunotherapy (L4-2023) Organizers: Francesco M. Marincola, **Lisa H. Butterfield**, David F. Stronck and Marcela V. Maus Fairmont Banff Springs, Banff, AB, Canada • January 29 - February 2, 2023

Research

Current Research Support:

Parker Institute for Cancer Immunotherapy	01/01/2019-12/31/2024	\$1,600,000
Role: PI		

CIRM TRAN1-12245 (Okada, UCSF)	07/01/2021-6/30/2023	0.6 calendar
“Development of novel synNotch CART cell therapy in patients with recurrent EGFRvIII+ glioblastoma”		
Role: subcontract to support IND preparation and process development		

Recent Research Support:

CCSG Supplement - P30CA047904 (Ferris)	09/01/16 – 11/30/18	0.36 calendar
NIH	\$616,141	
“Tumor Microenvironment Biomarkers”		
Role: Project Director		

P50 CA121973-03 Skin SPORE (Kirkwood) NIH Skin SPORE: Project 2 (Butterfield , PI), "Multiple Antigen-Engineered DC Immunization and IFN α Boost for Metastatic Melanoma" Role: Co-Investigator	08/01/08 – 07/31/18 \$105,483	2.40 calendar
P50 CA121973-05 (Kirkwood) NIH Skin SPORE: Core B Role: Core Leader	08/01/08 – 07/31/18 \$372,420	0.60 calendar
P30 CA047904-24 (Ferris) NIH "Cancer Center Support Grant" IMCPL – Cellular Products Laboratory (CPL) Role: Co-Investigator, IMCPL Director	08/01/15 – 11/30/18 \$325,025	0.60 calendar
P30 CA047904-24 (Ferris) NIH "Cancer Center Support Grant" IMCPL – Immunologic Monitoring Laboratory (IML) Role: Co-Investigator, IMCPL Director	08/01/15 – 11/30/18 \$146,951	0.60 calendar
PITE2408 (Butterfield) Frontier Science and Technology Research Foundation "Immunologic Monitoring and Cellular Products Laboratory (IMCPL): E2408 Laboratory Studies: Processing, TNF- α ELISA, Proteasome ELISA" This grant supports the coordination, receipt, and analysis of samples as outlined in the E2408 protocol. Role: Co-Investigator	12/13/10 – 11/30/18 \$135,105	0.22 calendar
PITE1609 (Butterfield) Frontier Science and Technology Research Foundation "Immunologic Monitoring and Cellular Products Laboratory (IMCPL): E1609 Collection Kits, Processing, Shipping, and Storage" This grant supports the coordination, receipt, and processing of kits and specimens as outlined in the E1609 protocol. Role: Co-Investigator	05/25/11 – 11/30/18 \$1,345,603	0.30 calendar
U24 CA196172-01-PITT1 Sub- EAMRF (Butterfield) NIH "ECOG-ACRIN biospecimen bank to support the NCI- Clinical Trials Network (NCTN)" Role: PI	04/29/15 – 11/30/18 \$59,791	0.40 calendar
U01 CA099168-11 (Chu) NIH "NCI ET-CTN with Phase 1 emphasis at PCI" Role: Co-Investigator	03/01/14 – 11/30/18 \$23,653	0.22 calendar
Roswell Park Cancer Institute (Edwards) RPCI/UPCI Ovarian Cancer SPORE Role: Co-Investigator	07/01/14 – 06/30/18 \$48,145	0.30 calendar
R01 CA187219-01A1 (Pollack) NIH	01/08/16 - 11/30/18	0.48 calendar

“Peptide vaccine immunotherapy for children with recurrent low-grade astrocytomas”

Role: Co-Investigator

U01 AI131285 (Riddler)	07/14/2017 – 11/30/18	0.60 calendar
NIH	\$45,408	

“Comparison of Dendritic Cell-Based Therapeutic Vaccine Strategies for HIV Functional Cure”

Role: Co-Investigator

Prior Grant Support:

UCLA Gene Medicine Seed Grant (Butterfield)	07/01/02-06/30/03	0.6 calendar
“Melanoma Tumor Antigen Immunological Monitoring”	\$25,000 total	

Role: PI

Henry L. Hillman Foundation	07/01/04-06/30/07	1.2 calendar
“Determinant Spreading in Melanoma”	\$100,000/year, \$200,000 total	

Role: PI

#0330102N American Heart Association Scientist Development Grant	01/01/03-12/31/06	2.4 calendar
“AFP Based Immunotherapy for Hepatocellular Cancer”	\$65,000 per year, \$260,000 total	

Role: PI

The Pittsburgh Foundation	08/01/05-07/31/07	1.44 calendar
“AFP-Based Adoptive Immunotherapy for Hepatocellular Cancer”	\$60,000/year, \$120,000 total	

Role: PI

Intrexon Corporation (research contract)	03/01/08-06/01/08	
“Assay development and AdVRTSIL-12 vector preclinical studies”	\$21,300 total	

Henry L. Hillman Foundation	01/01/08-12/31/08	1.2 calendar
“Determinant Spreading in Melanoma”	\$100,000 total	

Role: PI

Basic to Clinical Collaborative Research Program Clinical and Translational Science Inst. (CTSI)	10/01/08-09/30/09	1.2 calendar
University of Pittsburgh	\$25,000	

“Serum Biomarkers for Hepatocellular Cancer” (**Butterfield** and Gamblin)

Role: Co-PI

RO1 CA 104524 (Butterfield)	07/01/04-06/30/10	3.6 calendar
NIH/NCI	\$205,000 annual direct costs	

“AFP-Based Prime-Boost Immunotherapy of Hepatocellular Cancer”

This grant supports a Phase I clinical trial in which Alpha Fetoprotein-positive Hepatocellular cancer patients are immunized with AFP DNA and AdVhAFP with detailed immunological monitoring.

Role: PI

Frontier Science and Technology Research Foundation	05/01/05-04/30/10	
ECOG Central Laboratory Support		
This grant supports efforts by the UCPI Immunological Monitoring Lab work for multiple ECOG supported clinical trials.		
Role: Co-Investigator		
R21 CA133859-02 (Okada)	07/01/10-06/30/11	0.58 calendar
NIH	\$7,088	
“A Bi-Institutional Pilot Study of Vaccinations for Patients with Low-Grade Glioma”		
Role: Co-Investigator		
R21 CA127046-01A1 (Steel)	07/01/08-6/30/11	0.36 calendar
NIH		
“Analysis of the cytokine-immunological model of a cancer-related symptom cluster”		
Role: Co-Investigator		
P01 CA101944 (Lotze)	07/06/05-06/30/11	0.78 calendar
NIH/NCI	\$89,999	
“Integrating NK and DC into Cancer Therapy”		
This program studies interactions between tumor, NK cells and DC. Dr. Butterfield is responsible for generating therapeutic cultures of NK cells and DC for patient therapy.		
Role: Co-Investigator		
PO1 CA109688 (Whiteside)	07/01/06-06/30/12	0.6 calendar
NIH	\$1,071,960/yr	
“Immune Escape in Human Cancer: Mechanisms and Therapeutic Implications”		
In this multidisciplinary program, the investigators will evaluate various mechanisms of tumor escape in humans, focusing on T-cell and DC apoptosis down-regulation of the APM machinery and protection mechanisms.		
Role: Co-Investigator, Core C		
PO1 NS40923-09 (Pollack)	03/01/10-02/28/13	0.6 calendar
NIH	\$122,312	
“Novel Strategies for Brain Tumor Therapies”		
Core C (IMCPL) is responsible for immune monitoring, DC generation and preparation of gene-modified products.		
Role: Co-Investigator		
R21 CA149872-02 (Pollack)	03/01/10-02/28/13	0.528 calendar
NIH	\$7,241	
“Peptide Based Vaccine Therapy for Childhood Malignant Gliomas”		
Role: Co-Investigator, Core C		
W81XWH-11-2-0013 (Davidson)	11/01/10-04/30/12	0.56 calendar
US Army/DOD	\$5,988	
GYN COE Project 4		
Role: Co-Investigator		
UCPI CCSG Development Funds	10/01/13 – 07/31/14	
UCPI CCSG	\$5,000	
“Whole Transcriptome Analysis of Tumor and Normal Forms of AFP on Dendritic Cells”		
Role: Co-PI		
PITE6508 (Butterfield)	09/21/10 – 09/20/15	0.30 calendar

Frontier Science and Technology Research Foundation	\$77,411	
“Immunologic Monitoring and Cellular Products Laboratory (IMCPL): E6508 Laboratory Studies: VEGF, ICAM-1 and other Analyte Levels; Treg Assessments; Anti-Muc-1 Antibody Titer, Cellular Immune Response against Muc-1”		
This grant supports the coordination, receipt, processing of samples, and distribution of shipping/collections kits.		
Role: Co-Investigator		
 PITAIMSS-00 (Butterfield)	 10/1/12 – 09/30/15	 0.24 calendar
Frontier Science and Technology Research Foundation	\$33,333	
A Cohort Study to Evaluate Genetic Predictors for Aromatase Inhibitor Musculoskeletal Symptoms.		
Role: Co-Investigator		
 PIT1Z11B-00 (Butterfield)	 10/1/14 – 09/30/15	 0.40 calendar
Frontier Science - BCRF	\$24,000	
“BCRF Project 4: A Cohort Study to Evaluate Genetic Predictors for Aromatase Inhibitor Musculoskeletal Symptoms”		
Role: PI		
 5UL1 TR00000-09 (Thomson)	 02/01/15 – 01/31/16	
CTSI	\$20,000	
“Safety and efficacy of donor-derived regulatory dendritic cell (DCreg) infusion in living donor renal transplant recipients”		
Role: Co-Investigator		
 R01 CA174858-02 (Pollack)	 08/01/13 – 04/30/16	 0.46 calendar
NIH/NCI	\$37,499	
“Peptide-vaccine-based immunotherapy for children with recurrent ependymomas.”		
Role: Co-PI		
 R01 CA138635 (Butterfield)	 07/01/10 – 05/31/16	 3.52 calendar
NIH/NCI	\$310,114	
“Multiple Tumor Antigen-loaded DC Vaccine for Hepatocellular Cancer”		
This grant supports a Phase I clinical trial in which Alpha Fetoprotein-positive Hepatocellular cancer patients are immunized with AFP, Glypican-3 and MAGE antigen-loaded DC with detailed immune monitoring.		
Role: PI		
 R56 AI117726 (Gambotto)	 07/01/15 – 06/30/16	 0.60 calendar
NIH	\$15,462	
“Clinical manufacturing and toxicology testing of an adenoviral-based RSV vaccine”		
Role: Co-Investigator		
 Lustgarten Foundation (Thorne)	 01/01/13 – 12/31/16	 0.28 calendar
Lustgarten Foundation Award	\$3,454	
“Novel oncolytic vaccinia strains for targeted pancreatic cancer therapy”		
This proposal will test a novel oncolytic vaccinia virus for pancreatic cancer.		
Role: Co-Investigator		
 SAP#410006224 (Levine)	 01/07/14 – 12/31/16	 0.6 calendar
Commonwealth of Pennsylvania	\$505,814	
“Tobacco Yr. 12 – Project 10”		
Role: Co-Investigator		

2013 MRA Team Science Award (Tawbi)	05/01/13 – 04/30/17	0.36 calendar
Melanoma Research Alliance/MD Anderson Center	\$62,231	
“Targeting BRAF-mutant Melanoma Brain Metastases”		
Role: Co-Investigator		

Recent Pending Grants:

R21 CA230491-01	07/01/18 – 06/30/20	1.2 calendar
NIH	\$250,000	
“Metabolic Inhibitory AFP-binding Molecules”		
Role: PI (score = 26, percentile = 10%, not funded)		

Patents and INDs Granted:

Co-inventor for “Method and Compositions for Treating Hepatocellular Cancer” in various formulations, patent protection granted in 2005-2009 in: South Korea, China, Japan, Europe/ United Kingdom/Hong Kong

U. S. Patent # 7,098,306, “Method and Compositions for Treating Hepatocellular Cancer”
August 2006, co-inventor with Drs. J.S. Economou and A. Ribas.

Disclosure filed: co-inventor for UPCI provisional patent submitted for “An Adenoviral Vector Expressing Melanoma Tumor Antigens Tyrosinase, MART-1 and MAGE-A6.” Feb. 2006 (not pursued by Univ. Pittsburgh).

IND 13653, “A Phase I/II Trial Testing Immunization with AFP + GM-CSF Plasmid Prime and AFP Adenoviral Vector Boost in Patients with Hepatocellular Carcinoma.” Sponsor: L. H. Butterfield, April 2008.

IND 15044, “A Phase I trial testing Multiple Antigen-Engineered DC followed by IFN α 2b Boost for Immunization of HLA-unrestricted Melanoma Patients”. Sponsor: L. H. Butterfield, April 2012.

Current Research Interests:

Immunotherapy, Cancer Vaccines, Tumor Antigens, Dendritic Cells, Melanoma, Hepatocellular Carcinoma, NK cells, Antigen Processing and Presentation, immune metabolism.

Service

Editorial Service:

Journal of Immunology; Journal of Experimental Medicine; Cancer Research; Journal of Immunotherapy; Journal of Clinical Oncology; Clinical Cancer Research; Nature Nanotechnology; Science Translational Medicine; Science Immunology; Journal of the National Cancer Institute; Scientific Reports, Vaccine; Cancer Immunology Immunotherapy; Journal of Leukocyte Biology; Gene Therapy; Trends in Immunology; Molecular Cancer Therapeutics; Journal of Immunological Methods; International Journal of Cancer; British Journal of Cancer; Gene Therapy; Current Gene Therapy; Cancer Letters; Cancer Investigation; Journal of Hepatology; Expert Opinion on Biological Therapy; Expert Review of Gastroenterology and Hepatology; BioMed Central Cancer; BMC Immunology; Cellular and Molecular Life Sciences; Cancer Chemotherapy and Pharmacology;

Biologics: Targets and Therapy; Journal of Cancer Research and Clinical Oncology; Experimental Biology and Medicine; Clinical and Developmental Immunology; Journal of Biomedicine and Biotechnology; Tumor Biology; OMICS: A Journal of Integrative Biology; Current Molecular Medicine; Neoplasia; Yonsei Medical Journal; Clinical and Experimental Medicine; Cancers; BioScience Reports; Melanoma Research; PLoS ONE; Clinical Immunology; Gastroenterology, Gut, The Lancet Oncology; European Journal of Immunology; Cancer Immunology Research; Cytometry: Part B: Clinical Cytometry; Nature Communications; JAMA Oncology; Cancer Discovery, Nature Biotechnology, Nature Cancer (all *ad hoc* reviewer).

Special Journal Issue: Frontiers in Immunology: Molecular Innate Immunity “Dendritic cell control of immune response,” 2014, L. H. Butterfield and P. A. Morel, Co-Editors

Associate Editor, *Cancer Research*, Jan. 2005-2009

Associate Editor, *The Journal of Immunology*, July 2007-2009 and 2009-2011

Editorial Board, *Cancer Research*, 2010-2019

Editorial Board, *OncoImmunology*, 2011-present

Founding Section Editor, *Journal for ImmunoTherapy of Cancer (JITC)*, Immunotherapy Biomarkers, 2012-2019

Associate Editor, *Journal for ImmunoTherapy of Cancer (JITC)*, Immunotherapy Biomarkers, 2019-2021

Grant and Program/Institution Reviewer:

Department of Veterans Affairs, Office of External Reviews, Feb. 2002

Avon/NCI Progress for Patients Program, Dec. 2002, May 2004, May 2005

Northwest Health Foundation Grant Programs, Sept. 2003

NCI “Rapid Access to Interventional Development (RAID)” Program, Oct. 2003

NIH Clinical Oncology (CONC) Study Section, *ad hoc* member, Feb. 2004, June 2005

Special Emphasis Panel member Mar. 2004

Prostate Ca. Res. Program (DOD) Immunol. Sciences, Scientist Reviewer Apr. 2004, 2005,

June 2006, July 2007 (co-chair for June 2006 and July 2007); Chair, Sept. 2008

Breast Ca. Res. Program (DOD) Immunol. Sciences, Scientific Reviewer Mar. 2005, Aug.

2005; Concept Award Reviewer 2005, 2006, 2007

NIH/NCI Immunotherapy Cluster Panel, *ad hoc* member, Oct. 2005

NIH SBIR/STTR Cancer Diagnostic and Treatment Study Section, *ad hoc* member, Oct. 2005

NIH SBIR/STTR Experimental Cancer Therapeutics, Study Section, *ad hoc* member, Feb. '09.

July '09, Oct. '09

American Heart Association, Microbiology/Immunology, grant reviewer, April 2006

Alliance for Cancer Gene Therapy, grant reviewer, April 2006, October 2006
 Medical University of South Carolina, Center for Gene, Cell and Vaccine Therapy, Sept. 2006,
 Feb. 2009
 NIH NCI/Cancer Immunopathology and Immunotherapy (CII) Study Section, *ad hoc* member:
 Nov. '06, Feb., Sep. '07, Jan. '10, mail review May '10, Jul '10; Standing member: 2010-2014.
 Cancer Research UK, Jan. '08, Feb. '09, July '09
 NIH/NCI Cancer Health Disparities PAR Panel, ZRG1-OBT-Z, *ad hoc* member, Mar. '10
 NIH/NCI Intramural Research Program Reviewer, Surgery Branch, Sept. 15-16, 2010
 NIH – Division of Translational and Clinical Sciences CII Study Section, June 2011
 NIH – Special Emphasis Panels: March 2012; Dec. 2012 (co-chair), July 2014
 NIH/NCI “Provocative Questions” RO1 and R21 reviewer, Mar. 26-29, 2012
 NIH/NCI Intramural Research Program Reviewer, Surgery Branch, June 12-14, 2012
 NCI Program Project Meeting ZCA1 RPRB-C, Bethesda, MD, Oct. 15-16, 2012
 MRC, RCUK Shared Services, Developmental Clinical Studies grant, Nov. 2012
 NCI Program Project Meeting III, ZCA1 RPRB-2 (M1), Rockville, MD, February 19-20, 2013
 NCI Program Project Meeting I, ZCA1 RPRB-C (J1), Rockville, MD, October 9-10, 2013
 NIH Immunology Fellowship and R15 AREA reviewer, Rockville, MD, October 21-22, 2014
 FDA Site Visit Review, Tumor Vaccines and Biotechnology Branch (TVBB), Office of
 Cellular, Tissue and Gene Therapies (OCTGT), CBER, FDA, June 8-9, 2015
 JDRF External Advisory Board, Diabetes Biomarker Working Group, San Diego, CA June 26, 2015
 NCI ZCA1 SRB-D Omnibus R03 & R21 SEP-7 Review, Panel Chair, Bethesda, MD July 9-10, 2015
 NCI ZRG1 F09B-B Fellowships: Oncological Sciences Review, July 13-14, 2015
 NCI Omnibus SEP-7 ZCA1 Review Panel, Bethesda, MD, Oct. 20-21, 2015
 UCLA Human Gene and Cell Therapy Program and GMP Lab, External Consultant, January 11, 2016
 NCI ZRG1 OTC-Y(50)R & ZRG1 OTC-Y(51)R US-China Program for Collaborative Biomedical Research
 Review Teleconference, August 1, 2016
 University of Maryland Greenebaum Cancer Center External Advisory Committee, *ad hoc* member, November
 21-22, 2016
 NCI ZCA1 SRB-C (M1): NCI R03/R21 SEP-2 Review Committee, Tyson's Corner, VA Feb. 16-17, 2017
 NCI OTC K03 CII member conflict SEP Review Committee, Chair, Mar. 8, 2017.
 NCI Program Project I (P01) SEP Review Committee, June 8-9, 2017
 NCI Clinical and Translational Exploratory/Developmental Studies SEP ZCA1 SRB-P (M2), Co-Chair, Feb. 16,
 2018
 NCI PI-DDN (U54), April 5, 2018

Rutgers Cancer Institute Immune Monitoring Shared Resource Advisory Committee, 2018
 NCI ZRG1 OTC-B, (CII member conflict), panel Chair, July 3, 2018
 NCI Mechanisms of Cancer Therapeutics-1 [MCT1], San Diego, October 11-12, 2018
 NCI PI-DDN (U54) Review, April 19, 2019
 NCI 2019/08 ZCA1 SRB-C (A1) Immuno-Oncology Translation Network, June 13-14, 2019
 Chair, Site Visit of Research Programs in the Tumor Vaccines and Biotechnology Branch, Division of Cellular and Gene Therapies, CBER, FDA, White Oak, VA, Sept. 6, 2019-2020
 External Scientific Advisory Board member of The OSUCCC Institute for Immuno-Oncology, 2019-present
 NCI SPORE II Review Panel, member. Rockville, MD Jan. 28-29, 2020
 Chair, NCI SPORE (P50) I Review Panel (*teleconference due to COVID-19*), May 18-19, 2020
 Co-Chair, NCI PO1 Review Panel, (*teleconference due to COVID-19*), Feb 16-17, 2021
 SME/Reviewer: TO18 Clinical Site Source Evaluation Group Meeting, Neoantigen Vaccine clinical trials, Leidos/NCI Fredrick, (*teleconference due to COVID-19*), April 6, 2021
 NCI ZCA1 RPRB-6 (O1), NCI SPORE II (P50) review panel, May 26-27, 2021 (*virtual*)
 NCI ZRG1-OTC-M 08, Immuno-Oncology Research study section, June 10-11, 2021 (*virtual*)
 FDA, CBER, OTAT, DCGT, Gene Transfer and Immunogenicity Branch Site Visit Chair, Dec. 9-10, 2021 (*virtual*)

Consultant:

Bristol-Myers Squibb, Tumor Immunology, Advisory Board Meeting Oct. 2-3, 2009
 Prometheus Laboratories, Advisory Board Meeting Oct. 29-30, 2010
 Kite Pharma, Consultant/Special Advisor 2010-2014
 Amplimmune, Consultant, Feb.-May 2011
 Boehringer-Ingelheim meeting Participant/Presenter Oct. 5-7, 2011
 EMD Serono, Advisory Board Meetings: Dec. 10, 2011; Sept. 5, 2012; Educational lecture Feb. 7, 2013
 Novartis, Immunotherapy in Cancer, Advisory Board Meeting, April 5, 2012
 Bionest Partners, Consultant, Dec. 18, 2012, August 2017
 Ziopharm Oncology, Advisory Board Meeting, Feb. 8, 2013
 Nodality, Advisory Board Meeting, Nov. 10, 2013
 Dendreon, SITC Industry Primer, Dec. 13, 2013
 Dianippon Sumitomo Pharma meeting, June 5, 2014
 Caladrius (formerly NeoStem), Scientific Advisory Board member, 2014 – 2016
 Astellas, Cancer Immunotherapy Advisory Board Meeting, Santa Monica, CA, September 12-13, 2014;
 “Overview of Cancer Immunotherapy Approaches” educational lecture.
 Oxford Immunotec, consulting meeting, Pittsburgh, PA. June 22-23, 2015.
 Affymetrix/eBioscience, consulting meeting, San Diego, CA, Aug. 5, 2015

Merck, Advisory Board Meeting, New Jersey, Oct. 1-2, 2015
 Biodesix Advisory Board Meeting, National Harbor, DC, Nov. 4, 2015
 Verastem Consulting call, Nov. 30, 2015
 AstraZeneca, Grand Rounds, Gaithersburg, MD, March 16, 2016
 Verastem meeting, August 28, 2016
 Immune Design consulting call, October, 2016
 Kite Pharma Advisory Board Meeting, National Harbor, MD, November 9, 2016
 Simpatica, Scientific Advisory Board Member, Jan. 2017-2018
 Shire Advisory Board Meeting, Orlando, FL Feb. 25, 2017
 StemImmune/Calidi Scientific and Medical Advisory Board, April 6, 2017-present
 SapVax Advisory Board meeting, Philadelphia, PA, Nov. 15, 2017; Dec. 6, 2018; May 2020;
 NextCure, Scientific Advisory Board, 2018-2020
 Replimmune, Scientific Advisory Board, 2018-2019
 Western Oncolytics/KaliVir, Scientific Advisory Board, 2018-present
 Torque Therapeutics/Repertoire, Scientific Advisory Board, 2018-2020
 Pyxis, Scientific Advisory Board member, 2019-present
 Cytomx, Scientific Advisory Board member, 2019-present
 Roche-Genentech Biomarkers Roundtable Nov. 19, 2019
 Khloris, Scientific Advisory Board member, 2020-present
 Takeda Oncology, Strategic Scientific Advisor, May 2020-present
 Adaptimmune, Scientific Advisor, meeting July 6, 2020
 RAPT, Scientific Advisory Board member, 2020-present
 DCPrime/Immunicum, Scientific Advisory meeting, Nov. 2020, July 2021
 Parker Institute for Cancer Immunotherapy, Research consultant, Aug. 2022 – present

University of Pittsburgh Service:

Member, Liver Tissue Utilization Committee, Surgery Dept., 2004-2016
 Member, UPCI Basic Research Task Force, 2004-2006
 Judges Panel for the UPCI Scientific Retreat, June 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017
 Director, UPCI Immunologic Monitoring Laboratory, 2005-2008
 Director of Operations, UPCI Immunologic Monitoring and Cellular Products Laboratory, 2008-2010
 Director, UPCI Immunologic Monitoring and Cellular Products Laboratory, 2010-2018
 Member, UPCI Luminex Core Facility Advisory Committee, 2007-2010, 2015, 2017
 Participant: UPCI Melanoma DSMC, 2008-2018
 Participant: UPCI GI DSMC, 2009-2014
 Member, Cytometry Facility Steering Committee, 2011-2018
 Member, UPCI Poster Review Committee, UPCI Summer Academy, 2011, 2013

Member, Clinical Pharmacology Analytical Facility and Translational Research Facility Advisory Committee, 2013-2017
 Member, Univ. Pittsburgh Non-Tenured Faculty Promotions and Appointments Committee, 2014-2017
 Poster Judge: Department of Immunology Annual Retreat, 2014, 2015, 2016
 Co-organizer, UPCI Annual Scientific Retreat, June 2015
 Co-organizer, UPCI 30th Anniversary Immunotherapy Symposium, June 2016
 Member, Department of Immunology Junior Faculty Mentoring Committee, 2017-2018
 Member, UPMC Hillman Cancer Center Research Executive Advisory Committee, 2017-2018
 Member and Founding Chair, UPMC Hillman Cancer Center Women's Task Force, 2018

University of California San Francisco Service:

Participant, UCSF ImmunoXX Symposium lunch mentor 2019
 Panelist, UCSF ImmunoXX strategy meeting Dec. 2019
 Member, UCSF IgEquity Faculty Leadership Board Oct. 2020 - 2021

Community Service:

1998	Boy Scout Troup Atomic Energy Merit Badge, Counselor
1998	John Muir School, Glendale, Career Day classroom presentations
2000	American Association of University Women, Glendale Branch, lecture
2003	Boy Scout Troup Atomic Energy Merit Badge, Counselor
2005	The Ellis School Health Sciences Day, Hillman Cancer Center
2011	Pittsburgh Philoptochos Society Daffodil Luncheon Event, Honored Guest Speaker – presenting UPCI Melanoma Program
2015-2018	Pittsburgh Symphony Orchestra, New Leadership Board/Council
2016	STEM/AP Biology High School Student visit, co-host, Hillman Cancer Center
2016	Bipartisan Energy and Commerce Committee congressional staffer briefing on immune-oncology (as SITC President), Washington DC
2017	AACR-SITC Congressional briefing: Progress in Immuno-Oncology. Speaker. Washington DC
2020	National Postdoc Appreciation Week (Gladstone Institute and UCSF): “Perseverance and Creative Thinking from the Life of Dr. Jim Allison” invited panelist.
2021-present	Member, Chief Women's Executive Leadership group