

Publications for David Bowen

2018

Paul-Heng, M., Leong, M., Cunningham, E., Bunker, D., Bremner, K., Wang, Z., Wang, C., Tay, S., McGuffog, C., Logan, G., Alexander, I., Hu, M., Alexander, S., Bertolino, P., Bowen, D., Bishop, A., Sharland, A., et al (2018). Direct recognition of hepatocyte-expressed MHC class I alloantigens is required for tolerance induction. *JCI Insight*, 3(15), 1-19. [More Information]

Pulitano, C., Ho, P., Verran, D., Sandroussi, C., Joseph, D., Bowen, D., McCaughan, G., Crawford, M., Shackel, N. (2018). Molecular Profiling of Post-Reperfusion Milieu Determines Acute Kidney Injury after Liver Transplantation: a Prospective Study. *Liver Transplantation*, 24(7), 922-931. [More Information]

Reid, S., Day, C., Bowen, D., Minnis, J., Ludlow, J., Jacobs, S., Gordon, A., Haber, P. (2018). Vertical transmission of hepatitis C: Testing and health-care engagement. *Journal of Paediatrics and Child Health*, 54(6), 647-652. [More Information]

2017

Sierro, F., Evrard, M., Rizzetto, S., Melino, M., Mitchell, A., Florido, M., Beattie, L., Walters, S., Tay, S., Lu, B., Roediger, B., Wong, Y., Warren, A., Ritchie, W., McGuffog, C., Weninger, W., Le Couteur, D., Britton, W., Saunders, B., McCaughan, G., Bowen, D., Bertolino, P., et al (2017). A Liver Capsular Network of Monocyte-Derived Macrophages Restricts Hepatic Dissemination of Intra-peritoneal Bacteria by Neutrophil Recruitment. *Immunity*, 47(2), 374-388. [More Information]

Vidot, H., Bowen, D., Carey, S., McCaughan, G., Allman-Farinelli, M., Shackel, N. (2017). Aggressive nutrition intervention reduces ascites and frequency of paracentesis in malnourished patients with cirrhosis and ascites. *JGH Open*, 1(3), 92-97. [More Information]

De Willige, S., Keane, F., Bowen, D., Malfliet, J., Zhang, H., Maneck, B., McCaughan, G., Leebeek, F., Rijken, D., Gorrell, M. (2017). Circulating fibroblast activation protein activity and antigen levels correlate strongly when measured in liver disease and coronary heart disease. *PLoS One*, 12(6), 1-8. [More Information]

Mohsen, W., Rodov, M., Prakoso, E., Charlton, B., Bowen, D., Koorey, D., Shackel, N., McCaughan, G., Strasser, S. (2017). Patients with non-viral liver disease have a greater tumor burden and less curative treatment options when diagnosed with hepatocellular carcinoma. *World Journal of Gastroenterology*, 23(15), 2763-2770. [More Information]

Grzelak, C., Sigglekow, N., Tirnitz-Parker, J., Hamson, E., Warren, A., Maneck, B., Chen, J., Patkunanathan, B., Boland, J., Cheng, R., Shackel, N., Seth, D., Bowen, D., McCaughan, G., et al (2017). Widespread GLI expression but limited

canonical hedgehog signaling restricted to the ductular reaction in human chronic liver disease. *PLoS One*, 12(2), 1-23. [More Information]

2016

McCaughan, G., Crawford, M., Sandroussi, C., Koorey, D., Bowen, D., Shackel, N., Strasser, S. (2016). Assessment of adult patients with chronic liver failure for liver transplantation in 2015: who and when? *Internal Medicine Journal*, 46(4), 404-412. [More Information]

Vo, M., Holz, L., Wong, Y., English, K., Benseler, V., McGuffog, C., Azuma, M., McCaughan, G., Bowen, D., Bertolino, P. (2016). Effector T cell function rather than survival determines extent and duration of hepatitis in mice. *Journal of Hepatology*, 64(6), 1327-1338. [More Information]

Sivam, S., Al-Hindawi, Y., Di Michiel, J., Moriarty, C., Spratt, P., Jansz, P., Malouf, M., Plit, M., Pleass, H., Havryk, A., Bowen, D., Haber, P., Bye, P., et al (2016). Liver and lung transplantation in cystic fibrosis: an adult cystic fibrosis centre's experience. *Internal Medicine Journal*, 46(7), 852-854. [More Information]

Fernandez-Ruiz, D., Ng, W., Holz, L., Ma, J., Zaid, A., Wong, Y., Lau, L., Mollard, V., Cozijnsen, A., Collins, N., Tay, S., Bowen, D., Bertolino, P., et al (2016). Liver-Resident Memory CD8+ T Cells Form a Front-Line Defense against Malaria Liver-Stage Infection. *Immunity*, 45(4), 889-902. [More Information]

Wong, Y., McCaughan, G., Bowen, D., Bertolino, P. (2016). The CD8 T-cell response during tolerance induction in liver transplantation. *Clinical & Translational Immunology*, 5(10), 1-12. [More Information]

2015

Rahman, W., Tu, T., Budzinska, M., Huang, P., Belov, L., Chrisp, J., Christopherson, R., Warner, F., Bowden, D., Thomsson, A., Bowen, D., Strasser, S., Sharland, A., Yang, J., McCaughan, G., Shackel, N., et al (2015). Analysis of Post-Liver Transplant Hepatitis C Virus Recurrence Using Serial Cluster of differentiation Antibody Microarrays. *Transplantation*, 99(9), e120-e126. [More Information]

McCaughan, G., Bertolino, P., Bowen, D. (2015). Could the morning after liver transplant be immunologically interesting? *Liver Transplantation*, 21(9), 1120-1122. [More Information]

Wong, Y., Tay, S., McCaughan, G., Bowen, D., Bertolino, P. (2015). Immune outcomes in the liver: Is CD8 T cell fate determined by the environment? *Journal of Hepatology*, 63(4), 1005-1014. [More Information]

Information]

Bertolino, P., Bowen, D. (2015). Malaria and the liver: immunological hide-and-seek or subversion of immunity from within? *Frontiers in Microbiology*, 6(FEB), 1-15. [More Information]

Brockhausen, J., Tay, S., Grzelak, C., Bertolino, P., Bowen, D., d'Avigdor, W., Teoh, N., Pok, S., Shackel, N., Gamble, J., Vadas, M., et al (2015). miR-181a mediates TGF- β -induced hepatocyte EMT and is dysregulated in cirrhosis and hepatocellular cancer. *Liver International*, 35(1), 240-253. [More Information]

Sierro, F., Tay, S., Warren, A., Le Couteur, D., McCaughan, G., Bowen, D., Bertolino, P. (2015). Suicidal Emperipolesis: A process leading to cell-in-cell structures, T cell clearance and immune homeostasis. *Current Molecular Medicine*, 15(9), 819-827. [More Information]

2014

Prakoso, E., Tirnitz-Parker, J., Clouston, A., Kayali, Z., Lee, A., Gan, E., Ramm, G., Kench, J., Bowen, D., Olynyk, J., McCaughan, G., Shackel, N. (2014). Analysis of the intrahepatic ductular reaction and progenitor cell responses in hepatitis C virus recurrence after liver transplantation. *Liver Transplantation*, 20(12), 1508-1519. [More Information]

Tay, S., Wong, Y., McDonald, D., Wood, N., Roediger, B., Sierro, F., McGuffog, C., Alexander, I., Bishop, A., Gamble, J., Weninger, W., McCaughan, G., Bertolino, P., Bowen, D. (2014). Antigen expression level threshold tunes the fate of CD8 T cells during primary hepatic immune responses. *Proceedings of the National Academy of Sciences of the United States of America*, 111(25), E2540-E2549. [More Information]

Bowen, D., Bertolino, P. (2014). Immune Responses to the Hepatitis C Virus. In I. R. Mackay, N. R. Rose, B. Diamond, A. Davidson (Eds.), *Encyclopedia of Medical Immunology: Autoimmune Diseases*, (pp. 476-486). New York: Springer Science+Business Media. [More Information]

Tay, S., Wong, Y., Roediger, B., Sierro, F., Lu, B., McDonald, D., McGuffog, C., Meyer, N., Alexander, I., Parish, I., Weninger, W., Bishop, A., Gamble, J., McCaughan, G., Bertolino, P., Bowen, D., et al (2014). Intrahepatic activation of naive CD4+T cells by liver-resident phagocytic cells. *Journal of Immunology*, 193(5), 2087-2095. [More Information]

Bertolino, P., Bowen, D. (2014). Primary T-Cell Activation in Liver. In I. R. Mackay, N. R. Rose, B. Diamond, A. Davidson (Eds.), *Encyclopedia of Medical Immunology: Autoimmune Diseases*, (pp. 899-905). New York: Springer Science+Business Media. [More Information]

2013

Prakoso, E., Jones, C., Koorey, D., Strasser, S., Bowen, D., McCaughan, G., Shackel, N. (2013). Author reply: RE Terlipressin therapy for moderate to severe hyponatraemia in patients with liver failure. *Internal Medicine Journal*, 43(5),

607-607. [More Information]

Tay, S., Lu, B., Sierro, F., Benseler, V., McGuffog, C., Bishop, A., Cowan, P., McCaughan, G., Dwyer, K., Bowen, D., et al (2013). Differential migration of passenger leukocytes and rapid deletion of naive alloreactive CD8 T cells after mouse liver transplantation. *Liver Transplantation*, 19(11), 1224-1235. [More Information]

Cunningham, E., Tay, S., Wang, C., Rtshiladze, M., Wang, Z., McGuffog, C., Cubitt, J., McCaughan, G., Alexander, I., Bertolino, P., Sharland, A., Bowen, D., Bishop, A. (2013). Gene therapy for tolerance: high-level expression of donor major histocompatibility complex in the liver overcomes naive and memory alloresponses to skin grafts. *Transplantation*, 95(1), 70-77. [More Information]

Bowen, D., Shackel, N. (2013). Hepatitis C Pathogenesis and Outcomes After Liver Transplantation: Probing MicroRNA Expression for New Insights. *Liver Transplantation*, 19(4), 355-357. [More Information]

McCaughan, G., Bowen, D., Bertolino, P. (2013). Operational tolerance in liver transplantation: Shall we predict or promote? *Liver Transplantation*, 19(9), 933-936. [More Information]

Prakoso, E., Jones, C., Koorey, D., Strasser, S., Bowen, D., McCaughan, G., Shackel, N. (2013). Terlipressin Therapy for Moderate to Severe Hyponatremia in Patients with Liver Failure. *Internal Medicine Journal*, 43(3), 240-246. [More Information]

2012

Rahman, W., Huang, P., Belov, L., Chrisp, J., Christopherson, R., Stapelberg, P., Warner, F., George, J., Bowen, D., Strasser, S., Koorey, D., Sharland, A., McCaughan, G., Shackel, N. (2012). Analysis of human liver disease using a cluster of differentiation (CD) antibody microarray. *Liver International*, 32(10), 1527-1534. [More Information]

Bowen, D. (2012). Finding a role for Th17 cells in hepatitis C pathogenesis. *Journal of Gastroenterology and Hepatology*, 27(2), 188-191. [More Information]

Bowen, D. (2012). Immune Responses to HCV: Implications for Therapy. In Geoffrey W. McCaughan, John G. McHutchison, Jean-Michel Pawlotsky (Eds.), *Advanced Therapy for Hepatitis C*, (pp. 17-24). Chichester, United Kingdom: Wiley-Blackwell Publishing.

Holz, L., Benseler, V., Vo, M., McGuffog, C., Van Rooijen, N., McCaughan, G., Bowen, D., Bertolino, P. (2012). Naive CD8 T cell activation by liver bone marrow-derived cells leads to a "neglected" IL-2(low) Bim(high) phenotype, poor CTL function and cell death. *Journal of Hepatology*, 57(4), 830-836. [More Information]

Bishop, A., Bertolino, P., Bowen, D., McCaughan, G. (2012). Tolerance in liver transplantation. *Best Practice & Research: Clinical Gastroenterology*, 26(1), 73-84. [More Information]

Barbier, L., Tay, S., McGuffog, C., Triccas, J., McCaughan, G.,

Bowen, D., Bertolino, P. (2012). Two lymph nodes draining the mouse liver are the preferential site of DC migration and T cell activation. *Journal of Hepatology*, 57(2), 352-358. [More Information]

2011

Wood, N., Linn, M., Bowen, D. (2011). Exhausted or just sleeping: Awakening virus-specific responses in chronic hepatitis C virus infection. *Hepatology*, 54(5), 1879-1882. [More Information]

Benseler, V., Warren, A., Vo, M., Holz, L., Tay, S., Le Couteur, D., Breen, E., Allison, A., Van Rooijen, N., McCaughan, G., Bowen, D., McCaughan, G., Bertolino, P., et al (2011). Hepatocyte entry leads to degradation of autoreactive CD8 T cells. *Proceedings of the National Academy of Sciences of the United States of America*, 108(40), 16735-16740. [More Information]

McCaughan, G., Shackel, N., Bowen, D. (2011). Liver transplantation and hepatitis C: will understanding the interleukin-28B polymorphisms improve outcomes? *Liver Transplantation*, 17(3), 219-221. [More Information]

McCaughan, G., Bowen, D. (2011). Pathogenesis of cholestatic hepatitis C. *Journal of Hepatology*, 54, 392-394. [More Information]

Benseler, V., Tay, S., Bowen, D., Bertolino, P. (2011). Role of the Hepatic Parenchyma in Liver Transplant Tolerance: a Paradigm Revisited. *Digestive Diseases*, 29(4), 391-401. [More Information]

Wang, C., Cordoba, S., Hu, M., Bertolino, P., Bowen, D., Sharland, A., Allen, R., Alexander, S., McCaughan, G., Bishop, A. (2011). Spontaneous acceptance of mouse kidney allografts is associated with increased Foxp3 expression and differences in the B and T cell compartments. *Transplant Immunology*, 24(3), 149-156. [More Information]

2010

Holz, L., Warren, A., Le Couteur, D., Bowen, D., Bertolino, P. (2010). CD8+ T cell tolerance following antigen recognition on hepatocytes. *Journal of Autoimmunity*, 34(1), 15-22. [More Information]

Holz, L., Bowen, D., Bertolino, P. (2010). Mechanisms of T cell death in the liver: to Bim or not to Bim? *Digestive Diseases*, 28(1), 14-24. [More Information]

Fuller, M., Shoukry, N., Gushima, T., Bowen, D., Callendret, B., Campbell, K., Hasselschwert, D., Hughes, A., Walker, C. (2010). Selection-driven immune escape is not a significant factor in the failure of CD4 T cell responses in persistent hepatitis C virus infection. *Hepatology*, 51(2), 378-387. [More Information]

Shackel, N., Bowen, D., McCaughan, G. (2010). Snipping away at hepatitis C. *Hepatology*, 51(2), 703-705. [More

Information]

Bowen, D. (2010). Toward small animal models for the study of human hepatitis viruses. *Hepatology*, 52(1), 382-388. [More Information]

2009

McCaughan, G., Shackel, N., Bertolino, P., Bowen, D. (2009). Molecular and cellular aspects of hepatitis C virus reinfection after liver transplantation: how the early phase impacts on outcomes. *Transplantation*, 87(8), 1105-1111. [More Information]

Bowen, D., Zekry, A., Bertolino, P., Shackel, N., McCaughan, G. (2009). Pathology and pathogenesis of hepatitis C. In G. Dore, M. Temple-Smith, A. Lloyd (Eds.), *Hepatitis C: An Expanding Perspective*, (pp. 43-75). East Hawthorn, Victoria: IP Communications.

Velazquez, V., Bowen, D., Walker, C. (2009). Silencing of T lymphocytes by antigen-driven programmed death in recombinant adeno-associated virus vector-mediated gene therapy. *Blood*, 113(3), 538-545. [More Information]

2008

Bertolino, P., McCaughan, G., Bowen, D. (2008). Immunological Parameters Influencing Adaptive Immune Responses to the Hepatitis C Virus. In Emilio Jirillo (Eds.), *Hepatitis C Virus Disease: Immunobiology and Clinical Applications*, (pp. 39-70). United States: Springer. [More Information]

Holz, L., Benseler, V., Bowen, D., Bouillet, P., Strasser, A., O'Reilly, L., D'Avigdor, W., Bishop, A., McCaughan, G., Bertolino, P. (2008). Intrahepatic Murine CD8 T-Cell Activation Associates With a Distinct Phenotype Leading to Bim-Dependent Death. *Gastroenterology*, 135(3), 989-997. [More Information]

Ramalingam, R., Meyer-Olson, D., Shoukry, N., Bowen, D., Walker, C., Kalams, S. (2008). Kinetic analysis by real-time PCR of Hepatitis C Virus (HCV)-specific T cells in peripheral blood and liver after challenge with HCV. *Journal of Virology*, 82(21), 10487-10492. [More Information]

Holz, L., McCaughan, G., Benseler, V., Bertolino, P., Bowen, D. (2008). Liver tolerance and the manipulation of immune outcomes. *Inflammation and Allergy: Drug Targets*, 7(1), 6-18. [More Information]

Bowen, D. (2008). Of mice and molecular mimicry: Modeling autoimmune hepatitis. *Hepatology*, 48(3), 1013-1015. [More Information]

Bowen, D., Shoukry, N., Grakoui, A., Fuller, M., Cawthon, A., Dong, C., Hasselschwert, D., Brasky, K., Freeman, G., Seth, N., et al (2008). Variable patterns of programmed death-1 expression on fully functional memory T cells after spontaneous resolution of hepatitis C virus infection. *Journal of Virology*, 82(10), 5109-5114. [More Information]

2007

Bertolino, P., Bowen, D., Benseler, V. (2007). T cells in the liver: there is life beyond the graveyard. *Hepatology*, 45(6), 1580-1582. [More Information]

Benseler, V., McCaughan, G., Schlitt, H., Bishop, A., Bowen, D., Bertolino, P. (2007). The liver: a special case in transplantation tolerance. *Seminars in Liver Disease*, 27(2), 194-213. [More Information]

2006

Dahlke, M., Loi, R., Warren, A., Holz, L., Popp, F., Weiss, D., Piso, P., Bowen, D., McCaughan, G., Schlitt, H., Bertolino, P. (2006). Immune-mediated hepatitis drives low-level fusion between hepatocytes and adult bone marrow cells. *Journal of Hepatology*, 44(2), 334-341. [More Information]

Warren, A., Le Couteur, D., Fraser, R., Bowen, D., McCaughan, G., Bertolino, P. (2006). T lymphocytes interact with hepatocytes through fenestrations in murine liver sinusoidal endothelial cells. *Hepatology*, 44(5), 1182-1190. [More Information]

2005

Bowen, D., Walker, C. (2005). Adaptive immune responses in acute and chronic hepatitis C virus infection. *Nature*, 436(7053), 946-952. [More Information]

Bertolino, P., Bowen, D., Zen, M., McCaughan, G. (2005). Autoimmune hepatitis in transgenic mouse models: what lessons can be learnt? In H. P. Dienes, U. Leuschner, A. W. Lohse, M. P. Manns (Eds.), *Autoimmune Liver Disease: Proceedings of the Falk Symposium No. 142*, (pp. 60-72). The Netherlands: Springer.

Bertolino, P., Schrage, A., Bowen, D., Klugewitz, K., Ghani, S., Eulenburger, K., Holz, L., Hogg, N., McCaughan, G., Hamann, A. (2005). Early intrahepatic antigen-specific retention of naïve CD8+ T cells is predominantly ICAM-1/LFA-1 dependent in mice. *Hepatology*, 42(5), 1063-1071. [More Information]

Bowen, D., McCaughan, G., Bertolino, P. (2005). Intrahepatic immunity: a tale of two sites? *Trends in Immunology*, 26(10), 512-517. [More Information]

Bowen, D., Walker, C. (2005). Mutational escape from CD8+ T cell immunity: HCV evolution, from chimpanzees to man. *The Journal of Experimental Medicine*, 201(11), 1709-1714. [More Information]

Sun, J., Tumurbaatar, B., Jia, J., Diao, H., Bodola, F., Lemon, S., Tang, W., Bowen, D., McCaughan, G., Bertolino, P., et al (2005). Parenchymal expression of CD86/B7.2 contributes to hepatitis C virus-related liver injury. *Journal of Virology*, 79(16), 10730-10739. [More Information]

Benseler, V., Warren, A., Holz, L., Gengos, M., Bowen, D., Le Couteur, D., Schlitt, H., McCaughan, G., Bertolino, P. (2005).

The liver promotes antigen-specific retention and rapid clearance of naïve CD8(+) T cells activated in situ. *Tissue Antigens: immune response genetics*, 66(5), 359-360.

Bowen, D., Walker, C. (2005). The origin of quasispecies: Cause or consequence of chronic hepatitis C viral infection? *Journal of Hepatology*, 42(3), 408-417. [More Information]

2004

McCaughan, G., Bertolino, P., Bowen, D., Zen, M., Holz, L., Davis, T. (2004). The Site Of Primary T Cell Activation Is A Determinant Of The Balance Between Intrahepatic Tolerance And Immunity. *Journal of Clinical Investigation*, 114(5), 701-712. [More Information]

2002

Bowen, D., Warren, A., Davis, T., Hoffmann, M., McCaughan, G., Fazekas de St Groth, B., Bertolino, P. (2002). Cytokine-dependent bystander hepatitis due to intrahepatic murine CD8+ T-cell activation by bone marrow-derived cells. *Gastroenterology*, 123(4), 1252-1264. [More Information]

Zekry, A., Bishop, A., Bowen, D., Gleeson, M., Guney, S., Painter, D., McCaughan, G. (2002). Intrahepatic cytokine profiles associated with posttransplantation hepatitis C virus-related liver injury. *Liver Transplantation*, 8(3), 292-301. [More Information]

Yan, Y., Putten, K., Bowen, D., Painter, D., Kohar, J., Sharland, A., McCaughan, G., Bishop, A. (2002). Postoperative administration of donor B cells induces rat kidney allograft acceptance: lack of association with TH2 cytokine expression in long-term accepted grafts. *Transplantation*, 73(7), 1123-1130. [More Information]

Bertolino, P., McCaughan, G., Bowen, D. (2002). Role of primary intrahepatic T-cell activation in the 'liver tolerance effect'. *Immunology and Cell Biology*, 80(1), 84-92. [More Information]

2001

Bertolino, P., Bowen, D., McCaughan, G., Fazekas de St Groth, B. (2001). Antigen-Specific Primary Activation of CD8(+) T Cells Within the Liver. *Journal of Immunology*, 166, 5430-5438.

Yan, Y., Shastry, S., Richards, C., Wang, C., Bowen, D., Sharland, A., Painter, D., McCaughan, G., Bishop, A. (2001). Posttransplant administration of donor leukocytes induces long-term acceptance of kidney or liver transplants by an activation-associated immune mechanism. *Journal of Immunology*, 166, 5258-5264.

2000

McCaughan, G., Gorrell, M., Bishop, A., Abbott, C., Shackel, N., McGuinness, P., Levy, M., Sharland, A., Bowen, D., Yu, M., Slaitini, L., Napoli, J., et al (2000). Molecular pathogenesis of liver disease: an approach to hepatic inflammation, cirrhosis and liver transplant tolerance. *Immunological Reviews*, 174(1), 172-191. [More Information]