

## Department Publications FY16

Baig, M. S., Zaichick, S. V., Mao, M., de Abreu, A. L., Bakhshi, F. R., Hart, P. C., Saqib, U., Deng, J., Chatterjee, S., Block, M. L., Vogel, S. M., Malik, A. B., Consolaro, M. E., Christman, J. W., **Minshall, R. D.**, Gantner, B. N., & Bonini, M. G. (2015). NOS1-derived nitric oxide promotes NF- $\kappa$ B transcriptional activity through inhibition of suppressor of cytokine signaling-1. *The Journal of Experimental Medicine*, 212(10), 1725-1738.

**Beck-Schimmer, B.**, Bonvini, J. M., Braun, J., Seeberger, M., Neff, T. A., Risch, T. J., Stuber, F., Vogt, A., Weder, W., Schneiter, D., Filipovic, M., & Puhan, M. (2016). Which anesthesia regimen is best to reduce morbidity and mortality in lung surgery?: A multicenter randomized controlled trial. *Anesthesiology*, 125(2), 313-321.

**Beck-Schimmer, B.**, Bonvini, J. M., Schadde, E., Dutkowski, P., Oberkofler, C. E., Lesurtel, M., DeOliveira, M. L., Figueira, E. R., Rocha Filho, J. A., Auler, J. O., Jr, D'Albuquerque, L. A., Reyntjens, K., Wouters, P., Rogiers, X., Debaerdemaeker, L., Ganter, M. T., Weber, A., Puhan, M. A., Clavien, P. A., & Breitenstein, S. (2015). Conditioning with sevoflurane in liver transplantation: Results of a multicenter randomized controlled trial. *Transplantation*, 99(8), 1606-1612.

**Beck-Schimmer, B.**, & Shafer, S. L. (2016). How "volatile" is the protection provided by inhalational anesthetics? *Anesthesiology*, 124(6), 1213-1214.

Bonvini, J. M., **Beck-Schimmer, B.**, Kuhn, S. J., Gruber, S. M., Neff, T. A., & Schlapfer, M. (2015). Late post-conditioning with sevoflurane after cardiac surgery--are surrogate markers associated with clinical outcome? *PloS One*, 10(7), e0132165.

**Changyaleket, B.**, Xu, H., Vetri, F., Valyi-Nagy, T., **Paisansathan, C.**, Chong, Z. Z., Pelligrino, D. A., & Testai, F. D. (2016). Intracerebroventricular application of S100B selectively impairs pial arteriolar dilating function in rats. *Brain Research*, 1634, 171-178.

Chen, W., Epshtain, Y., Ni, X., **Dull, R. O.**, Cress, A. E., Garcia, J. G., & Jacobson, J. R. (2015). Role of integrin beta4 in lung endothelial cell inflammatory responses to mechanical stress. *Scientific Reports*, 5, 16529.

Chignalia, A. Z., Oliveira, M. A., Debbas, V., **Dull, R. O.**, Laurindo, F. R., Touyz, R. M., Carvalho, M. H., Fortes, Z. B., & Tostes, R. C. (2015). Testosterone induces leucocyte migration by NADPH oxidase-driven ROS- and COX2-dependent mechanisms. *Clinical Science (London, England : 1979)*, 129(1), 39-48.

Chong, Z. Z., **Changyaleket, B.**, Xu, H., **Dull, R. O.**, & **Schwartz, D. E.** (2016). Identifying S100B as a biomarker and a therapeutic target for brain injury and multiple diseases. *Current Medicinal Chemistry*, 23(15), 1571-1596.

Dupree, J. L., Polak, P. E., Hensley, K., Pelligrino, D., & **Feinstein, D. L.** (2015). Lanthionine ketimine ester provides benefit in a mouse model of multiple sclerosis. *Journal of Neurochemistry*, 134(2), 302-314.

**Feinstein, D. L.**, Akpa, B. S., Ayee, M. A., Boullerne, A. I., Braun, D., Brodsky, S. V., Gidalevitz, D., Hauck, Z., Kalinin, S., Kowal, K., Kuzmenko, I., Lis, K., Marangoni, N., Martynowycz, M. W., Rubinstein, I., van Breemen, R., Ware, K., & **Weinberg, G.** (2016). The emerging threat of superwarfarins: History, detection, mechanisms, and countermeasures. *Annals of the New York Academy of Sciences*, 1374(1), 111-122.

**Feinstein, D. L.**, Kuhlmann, P., & Mucchetti, P. J. (2015). Accountable care organizations and antitrust enforcement: Promoting competition and innovation. *Journal of Health Politics, Policy and Law*, 40(4), 875-886.

**Feinstein, D. L.**, & Skoff, R. P. (2016). Glial cell biology in the great lakes region. *Journal of Neuroinflammation*, 13(1), 69-016-0534-6.

Fettiplace, M. R., Akpa, B. S., Rubinstein, I., & **Weinberg, G.** (2015). Confusion about infusion: Rational volume limits for intravenous lipid emulsion during treatment of oral overdoses. *Annals of Emergency Medicine*, 66(2), 185-188.

Fettiplace, M. R., Kowal, K., Ripper, R., Young, A., Lis, K., Rubinstein, I., Bonini, M., Minshall, R., & **Weinberg, G.** (2016). Insulin signaling in bupivacaine-induced cardiac toxicity: Sensitization during recovery and potentiation by lipid emulsion. *Anesthesiology*, 124(2), 428-442.

Fettiplace, M. R., & **Weinberg, G.** (2015). Past, present, and future of lipid resuscitation therapy. *JPEN.Journal of Parenteral and Enteral Nutrition*, 39(1 Suppl), 72S-83S.

Fettiplace, M. R., & **Weinberg, G.** (2016). In reply. *Annals of Emergency Medicine*, 67(3), 419-420.

Hart, P. C., Ratti, B. A., Mao, M., Ansenberger-Fricano, K., Shajahan-Haq, A. N., Tyner, A. L., **Minshall, R. D.**, & Bonini, M. G. (2016). Caveolin-1 regulates cancer cell metabolism via scavenging Nrf2 and suppressing MnSOD-driven glycolysis. *Oncotarget*, 7(1), 308-322.

Hauck, Z. Z., **Feinstein, D. L.**, & van Breemen, R. B. (2016). LC-MS-MS analysis of brodifacoum isomers in rat tissue. *Journal of Analytical Toxicology*, 40(4), 304-309.

Herrmann, I. K., **Beck-Schimmer, B.**, Schumacher, C. M., Gschwind, S., Kaech, A., Ziegler, U., Clavien, P. A., Gunther, D., Stark, W. J., Graf, R., & Schlegel, A. A. (2016). In vivo risk evaluation of carbon-coated iron carbide nanoparticles based on short- and long-term exposure scenarios. *Nanomedicine (London, England)*, 11(7), 783-796.

Herrmann, I. K., Schlegel, A. A., Graf, R., Stark, W. J., & **Beck-Schimmer, B.** (2015). Magnetic separation-based blood purification: A promising new approach for the removal of disease-causing compounds? *Journal of Nanobiotechnology*, 13, 49-015-0110-8.

Jacobson, M., Roth Z'graggen, B., Graber, S. M., Schumacher, C. M., Stark, W. J., Dumrese, C., Mateos, J. M., Aemisegger, C., Ziegler, U., Urner, M., Herrmann, I. K., & **Beck-Schimmer, B.** (2015). Uptake of ferromagnetic carbon-encapsulated metal nanoparticles in endothelial cells: Influence of shear stress and endothelial activation. *Nanomedicine (London, England)*, 10(24), 3537-3546.

Kryukova, O. V., Tikhomirova, V. E., Golukhova, E. Z., Evdokimov, V. V., Kalantarov, G. F., Trakht, I. N., **Schwartz, D. E.**, **Dull, R. O.**, Gusakov, A. V., Uporov, I. V., Kost, O. A., & **Danilov, S. M.** (2015). Tissue specificity of human angiotensin I-converting enzyme. *PloS One*, 10(11), e0143455.

**Lee, H. Y.**, & Hans, S. L. (2015). Prenatal depression and young low-income mothers' perception of their children from pregnancy through early childhood. *Infant Behavior & Development*, 40, 183-192.

Levinsky, A., Papyan, S., **Weinberg, G.**, Stadheim, T., & Eide, P. K. (2016). Non-invasive estimation of static and pulsatile intracranial pressure from transcranial acoustic signals. *Medical Engineering & Physics*, 38(5), 477-484.

Linecker, M., Limani, P., Botea, F., Popescu, I., Alikhanov, R., Efanov, M., Kim, P., Khatkov, I., Raptis, D. A., Tschuor, C., **Beck-Schimmer, B.**, Bonvini, J., Wirsching, A., Kron, P., Slankamenac, K., Humar, B., Graf, R., Petrowsky, H., & Clavien, P. A. (2015). "A randomized, double-blind study of the effects of omega-3 fatty acids (omegaven) on outcome after major liver resection". *BMC Gastroenterology*, 15, 102-015-0331-1.

**Malik, K. M.**, Nelson, A., & Benzon, H. (2016). Disease-modifying antirheumatic drugs for the treatment of low back pain: A systematic review of the literature. *Pain Practice : The Official Journal of World Institute of Pain*, 16(5), 629-641.

**Malik, K. M.**, Nelson, A. M., Avram, M. J., Robak, S. L., & Benzon, H. T. (2015). Efficacy of pregabalin in the treatment of radicular pain: Results of a controlled trial. *Anesthesiology and Pain Medicine*, 5(4), e28110.

Marangoni, M. N., Martynowycz, M. W., Kuzmenko, I., Braun, D., Polak, P. E., **Weinberg, G.**, Rubinstein, I., Gidalevitz, D., & **Feinstein, D. L.** (2016). Membrane cholesterol modulates superwarfarin toxicity. *Biophysical Journal*, 110(8), 1777-1788.

Muller-Edenborn, B., Kania, G., Osto, E., Jakob, P., Krasniqi, N., **Beck-Schimmer, B.**, Blyszzuk, P., & Eriksson, U. (2016). Lidocaine enhances contractile function of ischemic myocardial regions in mouse model of sustained myocardial ischemia. *PloS One*, 11(5), e0154699.

Piegeler, T., Schlapfer, M., **Dull, R. O., Schwartz, D. E.**, Borgeat, A., **Minshall, R. D., & Beck-Schimmer, B.** (2015). Clinically relevant concentrations of lidocaine and ropivacaine inhibit TNFalpha-induced invasion of lung adenocarcinoma cells in vitro by blocking the activation of akt and focal adhesion kinase. *British Journal of Anaesthesia*, 115(5), 784-791.

**Roth, S.** (2015). Inhaled anesthesia, apoptosis, and the developing retina: A window into the brain? *Anesthesia and Analgesia*, 121(5), 1117-1118.

**Roth, S.**, Dreixler, J. C., Mathew, B., Balyasnikova, I., Mann, J. R., Boddapoti, V., Xue, L., & Lesniak, M. S. (2016). Hypoxic-preconditioned bone marrow stem cell medium significantly improves outcome after retinal ischemia in rats. *Investigative Ophthalmology & Visual Science*, 57(7), 3522-3532.

Schimmer, R. C., Urner, M., Voigtsberger, S., Booy, C., Roth Z'Graggen, B., **Beck-Schimmer, B., & Schlapfer, M.** (2016). Inflammatory kidney and liver tissue response to different hydroxyethylstarch (HES) preparations in a rat model of early sepsis. *PloS One*, 11(3), e0151903.

Urner, M., Schlapfer, M., Herrmann, I. K., Hasler, M., Schimmer, R. R., Booy, C., Roth Z'gaggen, B., Rehrauer, H., Aigner, F., **Minshall, R. D., Stark, W. J., & Beck-Schimmer, B.** (2015). Insight into the beneficial immunomodulatory mechanism of the sevoflurane metabolite hexafluoro-2-propanol in a rat model of endotoxaemia. *Clinical and Experimental Immunology*, 181(3), 468-479.

Vasques, F., Behr, A. U., **Weinberg, G.**, Ori, C., & Di Gregorio, G. (2015). A review of local anesthetic systemic toxicity cases since publication of the american society of regional anesthesia recommendations: To whom it may concern. *Regional Anesthesia and Pain Medicine*, 40(6), 698-705.

Visvabharathy, L., Xayarath, B., **Weinberg, G.**, Shilling, R. A., & Freitag, N. E. (2015). Propofol increases host susceptibility to microbial infection by reducing subpopulations of mature immune effector cells at sites of infection. *PloS One*, 10(9), e0138043.

Ware, K. M., **Feinstein, D. L.**, Rubinstein, I., **Weinberg, G.**, Rovin, B. H., Hebert, L., Muni, N., Cianciolo, R. E., Satoskar, A. A., Nadasy, T., & Brodsky, S. V. (2015). Brodifacoum induces early hemoglobinuria and late hematuria in rats: Novel rapid biomarkers of poisoning. *American Journal of Nephrology*, 41(4-5), 392-399.

**Weinberg, G.** (2016). Local anesthetic systemic toxicity and liposuction: Looking back, looking forward. *Anesthesia and Analgesia*, 122(5), 1250-1252.

**Weinberg, G.**, & O'Connor, M. (2016). Focus on physiology to improve cardiopulmonary resuscitation. *Anesthesia and Analgesia*, 122(3), 587-589.

Xu, H., Testai, F. D., Valyi-Nagy, T., N Pavuluri, M., Zhai, F., Nanegrungsunk, D., **Paisansathan, C.**, & Pelligrino, D. A. (2015). VAP-1 blockade prevents subarachnoid

hemorrhage-associated cerebrovascular dilating dysfunction via repression of a neutrophil recruitment-related mechanism. *Brain Research*, 1603, 141-149.

Yan, Z., Wang, Z. G., Segev, N., Hu, S., **Minshall, R. D., Dull, R. O.**, Zhang, M., Malik, A. B., & **Hu, G.** (2016). Rab11a mediates vascular endothelial-cadherin recycling and controls endothelial barrier function. *Arteriosclerosis, Thrombosis, and Vascular Biology*, 36(2), 339-349.

Zalunardo, M. P., Schlapfer, M., **Beck-Schimmer, B.**, Seifert, B., Spahn, D. R., & Bettex, D. (2015). Impact of cytokine release on ventricular function after hepatic reperfusion: A prospective observational echocardiographic study with tissue doppler imaging. *BMC Anesthesiology*, 15, 107-015-0080-2.