

Publications

SomnoSuite and PhysioSuite

SomnoSuite

1. Baldwin, Jessie, Brian Collins, Patricia G. Wolf, Kristina Martinez, Wan Shen, Chia-Chi Chuang, Wei Zhong et al. "Table grape consumption reduces adiposity and markers of hepatic lipogenesis and alters gut microbiota in butter fat-fed mice." *The Journal of Nutritional Biochemistry* (2015).
2. Bian, Fang, et al. "Differential Effects of Dexamethasone and Doxycycline on Inflammation and MMP Production in Alkali-Burned Corneas Associated with Dry Eye." *The Ocular Surface* (2016).
3. Bian, Fang, Flavia SA Pelegrino, Stephen C. Pflugfelder, Eugene A. Volpe, De-Quan Li, and Cintia S. de Paiva. "Desiccating Stress-Induced MMP Production and Activity Worsens Wound Healing in Alkali-Burned CorneasDesiccating Stress and Alkali Burn." *Investigative Ophthalmology & Visual Science* 56, no. 8 (2015): 4908-4918.
4. Damen, Frederick W., Amelia R. Adelsperger, Katherine E. Wilson, and Craig J. Goergen. "Comparison of Traditional and Integrated Digital Anesthetic Vaporizers." *Journal of the American Association for Laboratory Animal Science: JAALAS* 54, no. 6 (2015): 756-762.
5. Foote, Christopher A., Jorge A. Castorena-Gonzalez, Marius C. Staiculescu, Philip S. Clifford, Michael A. Hill, Gerald A. Meininger, and Luis A. Martinez-Lemus. "Brief serotonin exposure initiates arteriolar inward remodeling processes in vivo that involve transglutaminase activation and actin cytoskeleton reorganization." *American Journal of Physiology-Heart and Circulatory Physiology* (2015): ajpheart-00666.
6. Hernández-Reséndiz, Sauri, Francisco Correa, Wylly R. García-Niño, Mabel Buelna-Chontal, Francisco J. Roldán, Ixchel Ramírez-Camacho, Carolina Delgado-Toral et al. "Cardioprotection by curcumin post-treatment in rats with established chronic kidney disease." *Cardiovascular Drugs and Therapy* (2015): 1-10.
7. Manousiouthakis, Eleana, Monica Mendez, Madeline C. Garner, Prisca Exertier, and Takako Makita. "Venous endothelin guides sympathetic innervation of the developing mouse heart." *Nature communications* 5 (2014).
8. Shen, Di-Fei, Qing-Qing Wu, Jian Ni, Wei Deng, Cong Wei, Zhen-Hua Jia, Heng Zhou, Meng-Qiao Zhou, Zhou-Yan Bian, and Qi-Zhu Tang. "Shensongyangxin protects against

pressure overload-induced cardiac hypertrophy." *Molecular Medicine Reports*.

9. Shen, Wan, Jessie Baldwin, Brian Collins, Lindsay Hixson, Kuan-Ting Lee, Timothy Herberg, Joseph Starnes et al. "Low level of trans-10, cis-12 conjugated linoleic acid decreases adiposity and increases browning independent of inflammatory signaling in overweight Sv129 mice." *The Journal of Nutritional Biochemistry* (2015).
10. Tsukamoto, Atsushi, Kazuya Serizawa, Reiichiro Sato, Jumpei Yamazaki, and Tomo Inomata. "Vital signs monitoring during injectable and inhalant anesthesia in mice." *Experimental Animals* 64, no. 1 (2015): 57.
11. Tsukamoto, Atsushi, Mami Iimuro, SATO Reiichiro, Jumpei Yamazaki, and Tomo Inomata. "Effect of midazolam and butorphanol premedication on inhalant isoflurane anesthesia in mice." *Experimental Animals* 64, no. 2 (2015): 139.
12. Wang, Tao, Olivia Hurwitz, Steven G. Shimada, Lintao Qu, Kai Fu, Pu Zhang, Chao Ma, and Robert H. LaMotte. "Chronic Compression of the Dorsal Root Ganglion Enhances Mechanically Evoked Pain Behavior and the Activity of Cutaneous Nociceptors in Mice." *PLoS one* 10, no. 9 (2015): e0137512.
13. Zhao, Zhen, Abhay P. Sagare, Qingyi Ma, Matthew R. Halliday, Pan Kong, Cassandra Kisler, Ethan A. Winkler et al. "Central role for PICALM in amyloid- β blood-brain barrier transcytosis and clearance." *Nature neuroscience* (2015).

MouseVent

1. *Adams, Sean, and Cholawat Pacharinsak. "Mouse Anesthesia and Analgesia." *Current protocols in mouse biology* (2014): 51-63. (MouseVent used as example)
2. Cao, Zhijuan, Adithya Balasubramanian, and Sean P. Marrelli. "Pharmacologically induced hypothermia via TRPV1 channel agonism provides neuroprotection following ischemic stroke when initiated 90 min after reperfusion." *American Journal of Physiology-Regulatory, Integrative and Comparative Physiology* 306, no. 2 (2014): R149-R156.
3. Chakrabarti, A., M. J. Novotny, L. Ireland, B. M. Waite, M. C. Seeds, and R. D. Hite. "Reduced Lung Compliance And Phospholipase-Mediated Depletion Of Phosphatidylglycerol In A Murine Ards Model." *Am J Respir Crit Care Med* 191 (2015): A2055.

4. Danziger, Zachary C., and Warren M. Grill. "Dynamics of the Sensory Response to Urethral Flow Over Multiple Time Scales in Rat." *The Journal of Physiology* (2015).
5. Leite, Sara, Sara Rodrigues, Marta Tavares-Silva, José Oliveira-Pinto, Mohamed Alaa, Mahmoud Abdellatif, Dulce Fontoura et al. "Afterload-induced diastolic dysfunction contributes to high filling pressures in experimental heart failure with preserved ejection fraction." *American Journal of Physiology-Heart and Circulatory Physiology* (2015): ajpheart-00397.
6. Ma, Chao, Hong Nie, Qunhao Gu, Parul Sikand, and Robert H. LaMotte. "In vivo responses of cutaneous C-mechanosensitive neurons in mouse to punctate chemical stimuli that elicit itch and nociceptive sensations in humans." *Journal of neurophysiology* 107, no. 1 (2012): 357-363.
7. Ma, C., H. Nie, Q. Gu, P. Sikand, and R. H. LaMotte. "In vivo responses of cutaneous C-mechanosensitive." *J. Neurosci* 32, no. 42 (2012): 14532-14537.
8. Moon-Massat, Paula, Saad H. Mullah, Rania Abutarboush, Biswajit K. Saha, Georgina Pappas, Ashraful Haque, Charles Auker, Richard M. McCarron, Francoise Arnaud, and Anke Scultetus. "Cerebral vasoactivity and oxygenation with oxygen carrier M101 in rats." *Journal of Neurotrauma* ja (2015).
9. Mullah, Saad H., et al. "Perfluorocarbon NVX-108 Increased Cerebral Oxygen Tension after Traumatic Brain Injury in Rats." *Brain Research* (2016).
10. Philips, Prejesh, Yan Li, Suping Li, Charles R. St Hill, and Robert CG Martin. "Efficacy of irreversible electroporation in human pancreatic adenocarcinoma: advanced murine model." *Molecular Therapy—Methods & Clinical Development* 2 (2015).
11. Philips, Prejesh, Yan Li, and Robert CG Martin II. "Low-energy DC current ablation in a mouse tumor model." In *Electroporation Protocols*, pp. 257-265. Springer New York, 2014.
12. Sahara, Makoto, Emil M. Hansson, Oliver Wernet, Kathy O. Lui, Daniela Später, and Kenneth R. Chien. "Manipulation of a VEGF-Notch signaling circuit drives formation of functional vascular endothelial progenitors from human pluripotent stem cells." *Cell research* 24, no. 7 (2014): 820-841.
13. Shen, Di-Fei, Qing-Qing Wu, Jian Ni, Wei Deng, Cong Wei, Zhen-Hua Jia, Heng Zhou, Meng-Qiao Zhou, Zhou-Yan Bian, and Qi-Zhu Tang. "Shensongyangxin protects against

pressure overload-induced cardiac hypertrophy." *Molecular Medicine Reports*.

14. Tarantini, Stefano, Peter Hertelendy, Zsuzsanna Tucsek, M. Noa Valcarcel-Ares, Nataliya Smith, Akos Menyhart, Eszter Farkas et al. "Pharmacologically-induced neurovascular uncoupling is associated with cognitive impairment in mice." *Journal of Cerebral Blood Flow & Metabolism* (2015).
15. Toth, Peter, Zsuzsanna Tucsek, Stefano Tarantini, Danuta Sosnowska, Tripti Gautam, Matthew Mitschelen, Akos Koller, William E. Sonntag, Anna Csiszar, and Zoltan Ungvari. "IGF-1 deficiency impairs cerebral myogenic autoregulation in hypertensive mice." *Journal of Cerebral Blood Flow & Metabolism* (2014).
16. Toth, Peter, Stefano Tarantini, Zsuzsanna Tucsek, Nicole M. Ashpole, Danuta Sosnowska, Tripti Gautam, Praveen Ballabh et al. "Cardiovascular and Cerebrovascular Aging—New Mechanisms and Insights: Resveratrol treatment rescues neurovascular coupling in aged mice: role of improved cerebrovascular endothelial function and downregulation of NADPH oxidase." *American Journal of Physiology-Heart and Circulatory Physiology* 306, no. 3 (2014): H299.
17. Toth, Peter, Stefano Tarantini, Zsuzsanna Tucsek, Nicole M. Ashpole, Danuta Sosnowska, Tripti Gautam, Praveen Ballabh et al. "Resveratrol treatment rescues neurovascular coupling in aged mice: role of improved cerebrovascular endothelial function and downregulation of NADPH oxidase." *American Journal of Physiology-Heart and Circulatory Physiology* 306, no. 3 (2014): H299-H308.
18. Tucsek, Zsuzsanna, Peter Toth, Stefano Tarantini, Danuta Sosnowska, Tripti Gautam, Junie P. Warrington, Cory B. Giles et al. "Aging Exacerbates Obesity-induced Cerebrovascular Rarefaction, Neurovascular Uncoupling, and Cognitive Decline in Mice." *The Journals of Gerontology Series A: Biological Sciences and Medical Sciences* (2014): glu080.
19. Wang, Xuebing, Shaolin Ma, Yang Liu, Wei Xu, and Zhanxia Li. "Effects and Mechanism Analysis of Combined Infusion by Levosimendan and Vasopressin on Acute Lung Injury in Rats Septic Shock." *Cell biochemistry and biophysics* (2014): 1-7.
20. Zhang, Tianhe C., John J. Janik, Ryan V. Peters, Gang Chen, Ru-Rong Ji, and Warren M. Grill. "Spinal Sensory Projection Neuron Responses to Spinal Cord Stimulation Are Mediated by Circuits Beyond Gate Control." *Journal of neurophysiology* (2015): jn-00147.

21. Zu, HongXu, QingHua Li, and PeiXin Huang. "Expression of Treg Subsets on Intestinal T Cell Immunity and Endotoxin Translocation in Porcine Sepsis After Severe Burns." *Cell biochemistry and biophysics* (2014): 1-6.

RightTemp

1. Abdellatif, Mahmoud, et al. "Spectral transfer function analysis of respiratory hemodynamic fluctuations predicts end-diastolic stiffness in preserved ejection fraction heart failure." *American Journal of Physiology-Heart and Circulatory Physiology* 310.1 (2016): H4-H13.
2. *Adams, Sean, and Cholawat Pacharinsak. "Mouse Anesthesia and Analgesia." *Current protocols in mouse biology* (2014): 51-63. (RightTemp used as example)
3. Bing, Chenchen, Michelle Ladouceur-Wodzak, Clinton R. Wanner, John M. Shelton, James A. Richardson, and Rajiv Chopra. "Trans-cranial opening of the blood-brain barrier in targeted regions using a stereotaxic brain atlas and focused ultrasound energy." *Journal of therapeutic ultrasound* 2, no. 1 (2014): 13.
4. Buchta, Jessica N., Bethany S. Zarndt, Lindsey S. Garver, Tobin Rowland, Meng Shi, Silas A. Davidson, and Edgar D. Rowton. "Blood-Feeding Behaviors of *Anopheles stephensi* but not *Phlebotomus papatasi* are Influenced by Actively Warming Guinea Pigs (*Cavia porcellus*) Under General Anesthesia 1." *Journal of the American Mosquito Control Association* 31, no. 2 (2015): 149-154.
5. Cantu, David, Kendall Walker, Lauren Andresen, Amaro Taylor-Weiner, David Hampton, Giuseppina Tesco, and Chris G. Dulla. "Traumatic Brain Injury Increases Cortical Glutamate Network Activity by Compromising GABAergic Control." *Cerebral Cortex* (2014): bhu041.
6. Craig, Amanda J., Gary D. Housley, and Thomas Fath. "Modeling Excitotoxic Ischemic Brain Injury of Cerebellar Purkinje Neurons by Intravital and In Vitro Multi-photon Laser Scanning Microscopy." *Laser Scanning Microscopy and Quantitative Image Analysis of Neuronal Tissue*. Springer New York, 2014. 105-127.
7. Desjardins, Michèle, Romain Berti, Joël Lefebvre, Simon Dubeau, and Frédéric Lesage. "Aging-related differences in cerebral capillary blood flow in anesthetized rats." *Neurobiology of aging* 35, no. 8 (2014): 1947-1955.

8. Gottschalk, Sven, Thomas F. Fehm, X. Luis Dean-Ben, and Daniel Razansky. "Five-dimensional optoacoustic tomography for real-time whole brain neuroimaging of stimulus-evoked responses." In *Neural Engineering (NER), 2015 7th International IEEE/EMBS Conference on*, pp. 873-875. IEEE, 2015.
9. Gottschalk, Sven, Thomas Felix Fehm, Xosé Luís Deán-Ben, and Daniel Razansky. "Noninvasive real-time visualization of multiple cerebral hemodynamic parameters in whole mouse brains using five-dimensional optoacoustic tomography." *Journal of Cerebral Blood Flow & Metabolism* (2015).
10. Guevara, Edgar, Nataliya Sadekova, H el ene Girouard, and Fr ed eric Lesage. "Optical imaging of resting-state functional connectivity in a novel arterial stiffness model." *Biomedical optics express* 4, no. 11 (2013): 2332-2346.
11. Hori, Tomohide, Feng Chen, Ann-Marie T. Baine, Lindsay B. Gardner, and Justin H. Nguyen. "Fulminant liver failure model with hepatic encephalopathy in the mouse." *Annals of Gastroenterology: Quarterly Publication of the Hellenic Society of Gastroenterology* 24, no. 4 (2011): 294.
12. Hori, Tomohide, Norifumi Ohashi, Feng Chen, Ann-Marie T. Baine, Lindsay B. Gardner, Toshiyuki Hata, Shinji Uemoto, and Justin H. Nguyen. "Simple and reproducible hepatectomy in the mouse using the clip technique." *World journal of gastroenterology: WJG* 18, no. 22 (2012): 2767.
13. Hori, Tomohide, Norifumi Ohashi, Feng Chen, Ann-Marie T. Baine, Lindsay B. Gardner, Sura Jermanus, and Justin H. Nguyen. "Simple and sure methodology for massive hepatectomy in the mouse." *Annals of Gastroenterology: Quarterly Publication of the Hellenic Society of Gastroenterology* 24, no. 4 (2011): 307.
14. Hwang, Yoonha, Hwanjun Yoon, Kibaek Choe, Ji Ho Park, and Pilhan Kim. "In Vivo Real-time Observation of ICG Pharmacokinetics by NIR Laser-scanning Confocal Microscopy." In *CLEO: Applications and Technology*, pp. ATh4J-5. Optical Society of America, 2015.
15. Hwang, Yoonha, Jinhyo Ahn, Jungho Mun, Sangyoon Bae, Young Uk Jeong, Nikolay A. Vinokurov, and Pilhan Kim. "In vivo analysis of THz wave irradiation induced acute inflammatory response in skin by laser-scanning confocal microscopy." *Optics Express* 22, no. 10 (2014): 114
16. Koch, Jan C., Johanna Kn oferle, Lars T onges, Uwe Michel, Mathias B ahr, and Paul Lingor. "Imaging of rat optic nerve axons in vivo." *Nature protocols* 6, no. 12 (2011): 1887-1896.

17. Lindsay, Robin S., Kaitlin Corbin, Ashley Mahne, Bonnie E. Levitt, Matthew J. Gebert, Eric J. Wigton, Brenda J. Bradley et al. "Antigen Recognition in the Islets Changes with Progression of Autoimmune Islet Infiltration." *The Journal of Immunology* 194, no. 2 (2015): 522-530.
18. Leite, Sara, Sara Rodrigues, Marta Tavares-Silva, José Oliveira-Pinto, Mohamed Alaa, Mahmoud Abdellatif, Dulce Fontoura et al. "Afterload-induced diastolic dysfunction contributes to high filling pressures in experimental heart failure with preserved ejection fraction." *American Journal of Physiology-Heart and Circulatory Physiology* (2015): ajpheart-00397.
19. Lubitz, Dag KJE, Kimberly L. Simpson, and Rick Lin. "Right Thing at a Wrong Time?. Adenosine A3 Receptors and Cerebroprotection in Stroke." *Annals of the New York Academy of Sciences* 939, no. 1 (2001): 85-96.
20. Ma, Chao, Hong Nie, Qunhao Gu, Parul Sikand, and Robert H. LaMotte. "In vivo responses of cutaneous C-mechanosensitive neurons in mouse to punctate chemical stimuli that elicit itch and nociceptive sensations in humans." *Journal of neurophysiology* 107, no. 1 (2012): 357-363.
21. Ma, C., H. Nie, Q. Gu, P. Sikand, and R. H. LaMotte. "In vivo responses of cutaneous C-mechanosensitive." *J. Neurosci* 32, no. 42 (2012): 14532-14537.
22. Montgomery, Rusty L., Thomas G. Hullinger, Hillary M. Semus, Brent A. Dickinson, Anita G. Seto, Joshua M. Lynch, Christianna Stack, Paul A. Latimer, Eric N. Olson, and Eva van Rooij. "Therapeutic inhibition of miR-208a improves cardiac function and survival during heart failure." *Circulation* 124, no. 14 (2011): 1537-1547.
23. Mulik, Rohit S., Chenchen Bing, Michelle Ladouceur-Wodzak, Imalka Munaweera, Rajiv Chopra, and Ian R. Corbin. "Localized Delivery of Low-Density Lipoprotein Docosahexaenoic Acid Nanoparticles to the Rat Brain using Focused Ultrasound." *Biomaterials* (2016).
24. Poinsette, Katherine, Uma Maheswari Selvaraj, Sterling B. Ortega, Erik J. Plautz, Xiangmei Kong, Jeffrey M. Gidday, and Ann M. Stowe. "Quantification of Neurovascular Protection Following Repetitive Hypoxic Preconditioning and Transient Middle Cerebral Artery Occlusion in Mice." *JoVE (Journal of Visualized Experiments)* 99 (2015): e52675-e52675.
25. Ravenelle, R., H. B. Santolucito, E. M. Byrnes, J. J. Byrnes, and S. T. Donaldson. "Housing environment modulates physiological and behavioral responses to anxiogenic stimuli in

trait anxiety male rats." *Neuroscience* 270 (2014): 76-87.65-11475.

26. Rodriguez, Elena, Julia S. Barthold, Portia A. Kreiger, Milena Hirata Armani, Jordan Wang, Katherine A. Michelini, Marla R. Wolfson et al. "The orl rat is more responsive to methacholine challenge than wild type." *Pulmonary pharmacology & therapeutics* 29, no. 2 (2014): 199-208.
27. Rodriguez, Elena, Lauren Sakowski, Grace M. Hobson, Milena Hirata Armani, Portia A. Kreiger, Yan Zhu, Scott A. Waldman, and Thomas H. Shaffer. "Plp1 gene duplication inhibits airway responsiveness and induces lung inflammation." *Pulmonary pharmacology & therapeutics* 30 (2015): 22-31.
28. Sadekova, Nataliya, Diane Vallerand, Edgar Guevara, Frédéric Lesage, and Hélène Girouard. "Carotid calcification in mice: a new model to study the effects of arterial stiffness on the brain." *Journal of the American Heart Association* 2, no. 3 (2013): e000224.
29. Sadler, Katelyn E., Jarred M. Stratton, Jennifer J. DeBerry, and Benedict J. Kolber. "Optimization of a Pain Model: Effects of Body Temperature and Anesthesia on Bladder Nociception in Mice." *PloS one* 8, no. 11 (2013): e79617.
30. Spankovich, Christopher, et al. "Assessment of thermal treatment via irrigation of external ear to reduce cisplatin-induced hearing loss." *Hearing research* 332 (2016): 55-60.
31. Stephany, Céleste-Élise, Leanne LH Chan, Sherveen N. Parivash, Hilary M. Dorton, Mariel Piechowicz, Shenfeng Qiu, and Aaron W. McGee. "Plasticity of binocularity and visual acuity are differentially limited by nogo receptor." *The Journal of Neuroscience* 34, no. 35 (2014): 11631-11640.
32. Toth, Peter, Zsuzsanna Tucsek, Stefano Tarantini, Danuta Sosnowska, Tripti Gautam, Matthew Mitschelen, Akos Koller, William E. Sonntag, Anna Csiszar, and Zoltan Ungvari. "IGF-1 deficiency impairs cerebral myogenic autoregulation in hypertensive mice." *Journal of Cerebral Blood Flow & Metabolism* (2014).
33. Toth, Peter, Stefano Tarantini, Zsuzsanna Tucsek, Nicole M. Ashpole, Danuta Sosnowska, Tripti Gautam, Praveen Ballabh et al. "Resveratrol treatment rescues neurovascular coupling in aged mice: role of improved cerebrovascular endothelial function and downregulation of NADPH oxidase." *American Journal of Physiology-Heart and Circulatory Physiology* 306, no. 3 (2014): H299-H308.

34. TSUKAMOTO, Atsushi, Kazuya SERIZAWA, Reiichiro SATO, Jumpei YAMAZAKI, and Tomo INOMATA. "Vital Signs Monitoring during Injectable and Inhalant Anesthesia in Mice." *Experimental Animals* (2014).
35. Wang, Chuanmin, Zane Wang, Richard Allen, G. Alex Bishop, and Alexandra F. Sharland. "A Modified Method for Heterotopic Mouse Heart Transplantation." *JoVE (Journal of Visualized Experiments)* 88 (2014): e51423-e51423.
36. Xu, Zhaobin, Jenna Alloush, Eric Beck, and Noah Weisleder. "A Murine Model of Myocardial Ischemia-reperfusion Injury through Ligation of the Left Anterior Descending Artery." *JoVE (Journal of Visualized Experiments)* 86 (2014): e51329-e51329.
37. Yang, Lijuan, Enci Mary Kan, Jia Lu, Chunyun Wu, and Eng-Ang Ling. "Expression of 2', 3'-cyclic nucleotide 3'-phosphodiesterase (CNase) and its roles in activated microglia in vivo and in vitro." *Journal of neuroinflammation* 11, no. 1 (2014): 148.
38. Zarndt, Bethany S., Jessica N. Buchta, Lindsey S. Garver, Silas A. Davidson, Edgar D. Rowton, and Kenneth E. Despain. "Use of a Far-Infrared Active Warming Device in Guinea Pigs (*Cavia porcellus*)." *Journal of the American Association for Laboratory Animal Science: JAALAS* 54, no. 6 (2015): 779-782.
39. Zhang, Tianhe C., John J. Janik, Ryan V. Peters, Gang Chen, Ru-Rong Ji, and Warren M. Grill. "Spinal Sensory Projection Neuron Responses to Spinal Cord Stimulation Are Mediated by Circuits Beyond Gate Control." *Journal of neurophysiology* (2015): jn-00147.

MouseStat

1. Abdellatif, Mahmoud, et al. "Spectral transfer function analysis of respiratory hemodynamic fluctuations predicts end-diastolic stiffness in preserved ejection fraction heart failure." *American Journal of Physiology-Heart and Circulatory Physiology* 310.1 (2016): H4-H13.
2. *Adams, Sean, and Cholawat Pacharinsak. "Mouse Anesthesia and Analgesia." *Current protocols in mouse biology* (2014): 51-63. (MouseStat used as example)
3. Bing, Chenchen, Michelle Ladouceur-Wodzak, Clinton R. Wanner, John M. Shelton, James A. Richardson, and Rajiv Chopra. "Trans-cranial opening of the blood-brain barrier in targeted regions using a stereotaxic brain atlas and focused ultrasound energy."

Journal of therapeutic ultrasound 2, no. 1 (2014): 13.

4. Brazhe, Alexey, Claus Mathiesen, and Martin Lauritzen. "Multiscale vision model highlights spontaneous glial calcium waves recorded by 2-photon imaging in brain tissue." *Neuroimage* 68 (2013): 192-202.
5. Bühler, Dominik, Kathrin Schüller, and Nikolaus Plesnila. "Protocol for the Induction of Subarachnoid Hemorrhage in Mice by Perforation of the Circle of Willis with an Endovascular Filament." *Translational stroke research* 5, no. 6 (2014): 653-659.
6. Buijs, Stephanie, and Frank André Maurice Tuytens. "Evaluating the effect of semi-group housing of rabbit does on their offspring's fearfulness: can we use the open-field test?." *Applied Animal Behaviour Science* (2014).
7. Chang, Y. V., Y. A. Feng, E. H. Clayton, and P. V. Bayly. "Measurement of ferret brain tissue stiffness in vivo using MR elastography." In *Proc. Intl. Soc. Mag. Reson. Med*, vol. 19, p. 3494. 2011.
8. Chauvel, Virginie, Jean Schoenen, and Sylvie Multon. "Influence of Ovarian Hormones on Cortical Spreading Depression and Its Suppression by L-kynurenine in Rat." *PloS one* 8, no. 12 (2013): e82279.
9. Chopra, Swati, Vsevolod Y. Polotsky, and Jonathan C. Jun. "Sleep Apnea Research In Animals: Past, Present, and Future." *American journal of respiratory cell and molecular biology* (2015).
10. Craig, Amanda J., Gary D. Housley, and Thomas Fath. "Modeling Excitotoxic Ischemic Brain Injury of Cerebellar Purkinje Neurons by Intravital and In Vitro Multi-photon Laser Scanning Microscopy." *Laser Scanning Microscopy and Quantitative Image Analysis of Neuronal Tissue*. Springer New York, 2014. 105-127.
11. D'Abbondanza, Josephine A., Jinglu Ai, Elliot Lass, Hoyee Wan, Shakira Brathwaite, Michael K. Tso, Charles Lee, Philip A. Marsden, and R. Loch Macdonald. "Robust effects of genetic background on responses to subarachnoid hemorrhage in mice." *Journal of Cerebral Blood Flow & Metabolism* (2015): 0271678X15612489.
12. Desjardins, Michèle, Romain Berti, Joël Lefebvre, Simon Dubeau, and Frédéric Lesage. "Aging-related differences in cerebral capillary blood flow in anesthetized rats." *Neurobiology of aging* 35, no. 8 (2014): 1947-1955.

13. Gagnon, Kenneth B., Sally Caine, Nazanin Samadi, Mercedes Martinson, Melanie van der Loop, Jane Alcorn, L. Dean Chapman, G. Belev, and H. Nichol. "Design of a mouse restraint for synchrotron-based computed tomography imaging." *Journal of Synchrotron Radiation* 22, no. 5 (2015): 0-0.
14. Gottschalk, Sven, Thomas F. Fehm, X. Luis Dean-Ben, and Daniel Razansky. "Five-dimensional optoacoustic tomography for real-time whole brain neuroimaging of stimulus-evoked responses." In *Neural Engineering (NER), 2015 7th International IEEE/EMBS Conference on*, pp. 873-875. IEEE, 2015.
15. Guevara, Edgar, Nataliya Sadekova, H el ene Girouard, and Fr ed eric Lesage. "Optical imaging of resting-state functional connectivity in a novel arterial stiffness model." *Biomedical optics express* 4, no. 11 (2013): 2332-2346.
16. Haberl, Nadine, Stephanie Hirn, Martin Holzer, Gabriele Zuchtriegel, Markus Rehberg, and Fritz Krombach. "Effects of acute systemic administration of TiO₂, ZnO, SiO₂, and Ag nanoparticles on hemodynamics, hemostasis and leukocyte recruitment." *Nanotoxicology* 0 (2015): 1-9.
17. Hill, Timothy M., et al. "Border Patrol Gone Awry: Lung NKT Cell Activation by Francisella tularensis Exacerbates Tularemia-Like Disease." *PLOS Pathog* 11.6 (2015): e1004975.
18. Jochmans-Lemoine, Alexandra, Gabriella Villalpando, Marcelino Gonzales, Ibane Valverde, Rudy Soria, and Vincent Joseph. "Divergent physiological responses in laboratory rats and mice raised at high altitude." *The Journal of experimental biology* 218, no. 7 (2015): 1035-1043.
19. Kargl, J., L. Andersen, C. Hasen ohrl, D. Feuersinger, A. Stan ci c, A. Fauland, C. Magnes et al. "GPR55 promotes migration and adhesion of colon cancer cells indicating a role in metastasis." *British journal of pharmacology* (2015).
20. Kaufmann, Dan, Emily A. Bates, Boris Yagen, Meir Bialer, Gerald H. Saunders, Karen Wilcox, H. Steve White, and K. C. Brennan. "sec-Butylpropylacetamide (SPD) has antimigraine properties." *Cephalalgia* (2015): 0333102415612773.
21. Kommajosyula, Srinivasa P., Marcus E. Randall, and Carl L. Faingold. "Inhibition of Adenosine Metabolism Induces Changes in Post-ictal Depression, Respiration, and Mortality in Genetically Epilepsy Prone Rats." *Epilepsy Research* (2015).
22. Kozberg, Mariel G., Brenda R. Chen, Sarah E. DeLeo, Matthew B. Bouchard, and Elizabeth MC Hillman. "Resolving the transition from negative to positive blood oxygen

level-dependent responses in the developing brain." *Proceedings of the National Academy of Sciences* 110, no. 11 (2013): 4380-4385.

23. Lee, Mary YK, et al. "Intermittent hypoxia induces NFκB-dependent endothelial activation via adipocyte-derived mediators." *American Journal of Physiology-Cell Physiology* (2016): ajpccell-00240.
24. Leite, Sara, Sara Rodrigues, Marta Tavares-Silva, José Oliveira-Pinto, Mohamed Alaa, Mahmoud Abdellatif, Dulce Fontoura et al. "Afterload-induced diastolic dysfunction contributes to high filling pressures in experimental heart failure with preserved ejection fraction." *American Journal of Physiology-Heart and Circulatory Physiology* (2015): ajpheart-00397.
25. Legband, Nathan, Keely Buesing, Mark Borden, and Benjamin Terry. "The Treatment of Acute Respiratory Distress Syndrome in Rats With a Peritoneal Dosing System." *Journal of Medical Devices* 9, no. 2 (2015): 020929.
26. Ma, Chao, Hong Nie, Qunhao Gu, Parul Sikand, and Robert H. LaMotte. "In vivo responses of cutaneous C-mechanosensitive neurons in mouse to punctate chemical stimuli that elicit itch and nociceptive sensations in humans." *Journal of neurophysiology* 107, no. 1 (2012): 357-363.
27. Ma, C., H. Nie, Q. Gu, P. Sikand, and R. H. LaMotte. "In vivo responses of cutaneous C-mechanosensitive." *J. Neurosci* 32, no. 42 (2012): 14532-14537.
28. Mathiesen, Claus, Alexey Brazhe, Kirsten Thomsen, and Martin Lauritzen. "Spontaneous calcium waves in Bergman glia increase with age and hypoxia and may reduce tissue oxygen." *Journal of Cerebral Blood Flow & Metabolism* 33, no. 2 (2013): 161-169.
29. McIntyre, Brendan AS, Cantas Alev, Rami Mechael, Kyle R. Salci, Jung Bok Lee, Aline Fiebig-Comyn, Borhane Guezguez, Yuping Wu, Guojun Sheng, and Mickie Bhatia. "Expansive generation of functional airway epithelium from human embryonic stem cells." *Stem cells translational medicine* 3, no. 1 (2014): 7.
30. Mullah, Saad H., et al. "Perfluorocarbon NVX-108 Increased Cerebral Oxygen Tension after Traumatic Brain Injury in Rats." *Brain Research* (2016).
31. Pawela, C. P., A. G. Hudetz, and J. S. Hyde. "Propofol infusion with physiological monitoring improves success for BOLD fMRI in rats." In *Proc 13th Annual Meeting ISMRM*, p. 1045. 2005.

32. Philips, Prejesh, Yan Li, Suping Li, Charles R. St Hill, and Robert CG Martin. "Efficacy of irreversible electroporation in human pancreatic adenocarcinoma: advanced murine model." *Molecular Therapy—Methods & Clinical Development* 2 (2015).
33. Qiu, Lin, Changlian Zhu, Timea Bodogan, Marta Gómez-Galán, Yaodong Zhang, Kai Zhou, Tao Li et al. "Acute and long-term effects of brief sevoflurane anesthesia during the early postnatal period in rats." *Toxicological Sciences* (2015): kfv219.
34. Rodriguez, Elena, Julia S. Barthold, Portia A. Kreiger, Milena Hirata Armani, Jordan Wang, Katherine A. Michelini, Marla R. Wolfson et al. "The orl rat is more responsive to methacholine challenge than wild type." *Pulmonary pharmacology & therapeutics* 29, no. 2 (2014): 199-208.
35. Rodriguez, Elena, Lauren Sakowski, Grace M. Hobson, Milena Hirata Armani, Portia A. Kreiger, Yan Zhu, Scott A. Waldman, and Thomas H. Shaffer. "Plp1 gene duplication inhibits airway responsiveness and induces lung inflammation." *Pulmonary pharmacology & therapeutics* 30 (2015): 22-31.
36. Sadekova, Nataliya, Diane Vallerand, Edgar Guevara, Frédéric Lesage, and Hélène Girouard. "Carotid calcification in mice: a new model to study the effects of arterial stiffness on the brain." *Journal of the American Heart Association* 2, no. 3 (2013): e000224.
37. Sadler, Katelyn E., Jarred M. Stratton, Jennifer J. DeBerry, and Benedict J. Kolber. "Optimization of a Pain Model: Effects of Body Temperature and Anesthesia on Bladder Nociception in Mice." *PloS one* 8, no. 11 (2013): e79617.
38. Sawant-Pokam, P. M., et al. "Mechanisms of Neuronal Silencing After Cortical Spreading Depression." *Cerebral Cortex* (2016): bhv328.
39. Schüller, Kathrin, Dominik Bühler, and Nikolaus Plesnila. "A Murine Model of Subarachnoid Hemorrhage." *JoVE (Journal of Visualized Experiments)* 81 (2013): e50845-e50845.
40. Skotak, Maciej, Fang Wang, Aaron Alai, Aaron Holmberg, Seth Harris, Robert C. Switzer, and Namas Chandra. "Rat injury model under controlled field-relevant primary blast conditions: Acute response to a wide range of peak overpressures." *Journal of neurotrauma* 30, no. 13 (2013): 1147-1160.
41. Stephany, Céleste-Élise, Leanne LH Chan, Sherveen N. Parivash, Hilary M. Dorton, Mariel Piechowicz, Shenfeng Qiu, and Aaron W. McGee. "Plasticity of binocularity and visual

acuity are differentially limited by nogo receptor." *The Journal of Neuroscience* 34, no. 35 (2014): 11631-11640.

42. Torolira, Daniel, Lucie Suchomelova, Claude G. Wasterlain, and Jerome Niquet. "Widespread Neuronal Injury In A Model Of Cholinergic Status Epilepticus In Postnatal Day 7 Rat Pups." *Epilepsy Research* (2015).
43. TSUKAMOTO, Atsushi, Kazuya SERIZAWA, Reiichiro SATO, Jumpei YAMAZAKI, and Tomo INOMATA. "Vital Signs Monitoring during Injectable and Inhalant Anesthesia in Mice." *Experimental Animals* (2014).
44. Urban, Alan, Emilie Mace, Clément Brunner, Marc Heidmann, Jean Rossier, and Gabriel Montaldo. "Chronic assessment of cerebral hemodynamics during rat forepaw electrical stimulation using functional ultrasound imaging." *NeuroImage* 101 (2014): 138-149.
45. Weidling, John, Sara Sameni, Jonathan RT Lakey, and Elliot Botvinick. "Method measuring oxygen tension and transport within subcutaneous devices." *Journal of biomedical optics* 19, no. 8 (2014): 087006-087006.
46. Young, Kevin W., Stojan Radic, Evgeny Myslivets, Shawn M. O'Connor, and Richard L. Lieber. "Resonant Reflection Spectroscopy of Biomolecular Arrays in Muscle." *Biophysical Journal* 107, no. 10 (2014): 2352-2360.
47. Zhang, Jingdong, Jianxun Xia, and Huangui Xiong. "23 Techniques for Extracellular Recordings." *Current Laboratory Methods in Neuroscience Research* (2013): 325. (MouseSTAT used as example)
48. Zhang, Tianhe C., John J. Janik, Ryan V. Peters, Gang Chen, Ru-Rong Ji, and Warren M. Grill. "Spinal Sensory Projection Neuron Responses to Spinal Cord Stimulation Are Mediated by Circuits Beyond Gate Control." *Journal of neurophysiology* (2015): jn-00147.

CapnoScan

1. Abdellatif, Mahmoud, et al. "Spectral transfer function analysis of respiratory hemodynamic fluctuations predicts end-diastolic stiffness in preserved ejection fraction heart failure." *American Journal of Physiology-Heart and Circulatory Physiology* 310.1 (2016): H4-H13.

2. *Adams, Sean, and Cholawat Pacharinsak. "Mouse Anesthesia and Analgesia." *Current protocols in mouse biology* (2014): 51-63. (CapnoScan used as example)
3. Leite, Sara, Sara Rodrigues, Marta Tavares-Silva, José Oliveira-Pinto, Mohamed Alaa, Mahmoud Abdellatif, Dulce Fontoura et al. "Afterload-induced diastolic dysfunction contributes to high filling pressures in experimental heart failure with preserved ejection fraction." *American Journal of Physiology-Heart and Circulatory Physiology* (2015): ajpheart-00397.
4. Toth, Peter, Stefano Tarantini, Zsuzsanna Tucsek, Nicole M. Ashpole, Danuta Sosnowska, Tripti Gautam, Praveen Ballabh et al. "Resveratrol treatment rescues neurovascular coupling in aged mice: role of improved cerebrovascular endothelial function and downregulation of NADPH oxidase." *American Journal of Physiology-Heart and Circulatory Physiology* 306, no. 3 (2014): H299-H308.
5. *Tremoleda, Jordi L., Angela Kerton, and Willy Gsell. "Anaesthesia and physiological monitoring during in vivo imaging of laboratory rodents: considerations on experimental outcomes and animal welfare." *EJNMMI research* 2, no. 1 (2012): 1-23. (CapnoScan used as example)
6. *Zhang, Jingdong, Jianxun Xia, and Huangui Xiong. "23 Techniques for Extracellular Recordings." *Current Laboratory Methods in Neuroscience Research* (2013): 325. (CapnoScan used as example)