

Title	Journal	Link	Publication date	References	Top Paper
Longitudinal Ultrasound Imaging of an Individual Fetus In Utero Using an Echogenic Marker	Ultrasound in Medicine and Biology		2026	Ruiyan, Tan, Sarah K., Debebe, Owen, Botelho, Cameron, Goddard, Brian J., Nieman, John G., Sled	Yes
Circadian Disruption Impacts Fetal Development in Mice Using High-Frequency Ultrasound	Journal of Circadian Rhythms		2024	Samantha M., Britz, Shay, Nelson, Kylie M., Earhart, James K., Pru, Emily E., Schmitt	Yes
In-ovo echocardiography for application in cardiovascular research	Basic Research in Cardiology		2023	Niklas, Hegemann, Willem, Bintig, Paul Lennard, Perret, Judith, Rees, Alessandra, Viperino, Britta, Eickholt, Wolfgang M., Kuebler, Michael, Höpfner, Bianca, Nietzsche, Jana, Grune	Yes
Functional photoacoustic imaging for placental monitoring: A mini review	IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control.		2023	Vinoin Devpaul, Vincely, Carolyn L., Bayer	Yes
Embryonic echocardiography for assessment of congenital and functional cardiac defects	STAR Protocols	https://doi.org/10.1016/j.xpro.2021.100980	2021	Ivan, Menendez-Montes, Maria, Villalba-Orero, Beatriz, Escobar, Silvia, Martin-Puig	Yes
Method to Locate the Uterine Artery in Mice for Micro-Ultrasound Doppler Blood Velocity Examination	The Guide to Investigation of Mouse Pregnancy		2014	Dawei, Qu, S. Lee, Adamson, Yu-Qing, Zhou	Yes
A Protocol for Evaluating Vital Signs and Maternal-Fetal Parameters Using High-Resolution Ultrasound in Pregnant Mice	STAR Protocols	https://doi.org/10.1016/j.xpro.2020.100134	2020	Jose, Galaz, Roberto, Romero, Marcia, Arenas-Hernandez, Bogdan, Panaitescu, Valeria, Garcia-Flores, Nardhy, Gomez-Lopez	Yes
Novel insights into the genetic landscape of congenital heart disease with systems genetics	Progress in Pediatric Cardiology	https://doi.org/10.1016/j.ppedcard.2019.101128	2019	George C., Gabriel, Cecilia W., Lo	Yes
IL-10 producing B cells rescue mouse fetuses from inflammation-driven fetal death and are able to modulate T cell immune responses	Scientific Reports	http://dx.doi.org/10.1038/s41598-019-45860-2	2019	Mandy, Busse, Kim-Norina Jutta, Campe, Desiree, Nowak, Anne, Schumacher, Susanne, Plenagl, Stefanie, Langwisch, Gisa, Tiegs, Annegret, Reinhold, Ana Claudia, Zenclussen	Yes
Placenta-specific drug delivery by trophoblast-targeted nanoparticles in mice	Theranostics		2018	Baozhen, Zhang, Lunbo, Tan, Yan, Yu, Baobei, Wang, Zhilong, Chen, Jinyu, Han, Mengxia, Li	Yes
Spectral photoacoustic imaging of age-related reproductive tract collagen changes in a mouse model of prolapse	Photoacoustics		2026	Andrew C., Markel, Viraj, Puri, Mari J.E., Domingo, Kristin S., Miller, Carolyn L., Bayer	No
Tumor necrosis factor alpha inhibition improves fetal growth in a rat model of preeclampsia	Placenta		2026	Laura E., Coats, Nathan, Campbell, Dylan, Solise, Gabrielle M., Chamoun, Adam Z., Rawls, Alexandra, Demesa, Ty, Turner, Baoying, Zheng, Barbara T., Alexander, Babbette, LaMarca	No
Reception of conspecific cues alters testicular gene expression and improves fertility in boreal chorus frogs (Pseudacris maculata)	Scientific Reports	https://www.nature.com/articles/s41598-026-43613-6	2026	Jeffrey P., Ethier, Hyojin, Lee, Stacey A., Robinson, Vance L., Trudeau	No
Ultrasound-guided selective occlusion of uteroplacental canal vessels in the mouse alters fetal growth and placental development	American Journal of Physiology-Heart and Circulatory Physiology	https://journals.physiology.org/doi/10.1152/ajpheart.00603.2025	2026	Sarah K., Debebe, Anum, Rahman, Taylor, DeYoung, Lindsay S., Cahill, W. Tony, Parks, Christopher K., Macgowan, John C., Kingdom, John G., Sled	No
The protective effect of maternal electroacupuncture on prenatal nicotine exposure-induced intrauterine growth restriction in rats by improving placental angiogenesis	Chinese Medicine (United Kingdom)		2026	Xiaoxuan, Liu, Bo, Ji, Yitian, Liu, Liyu, Liu, Yang, Fang, Shiqi, Guo, Ling, Zhang, Tingting, Guo, Reiko, Sakurai, Virender K., Rehan	No

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Prolonged exposure to nitrate in drinking water does not adversely impact prenatal or birth outcomes in a rat model	Regulatory Toxicology and Pharmacology		2026	Leaf R., Kardol, Avalon, Gray, Amina, Rhaman, Alexander N., Larcombe, Christine, Jeffries-Stokes, Annette, Stokes, Sarah, Bourke, Sujata, Shinde, Kevin, Croft, Caitlin S., Wyrwoll	No
miR-155 suppresses angiotensin II type 1 receptor synthesis during placental morphogenesis	Cell Death Discovery		2025	Anya L., Arthurs, Eugenie R., Lumbers, Lachlan, Schofield, Celine, Lees, Peck Y., Chin, Alison S., Care, Sarah A., Robertson, John E., Schjenken, Kirsty G., Pringle	No
From light to sound: Seeing and hearing the placenta in health and disease	Sci. Adv	https://www.science.org	2026	Donghyun, Lee, Jiwoong, Kim, Jinseok, Heo, Hyunseo, Jeon, Shiyang, Chang, Wonseok, Choi, Chulhong, Kim, Zhifen, Yang	No
Rare cases of plural breeding in captive and wild naked mole-rats: insights into social and reproductive dynamics	Mammalian Biology		2025	Michaela, Wetzel, Stanton, Braude, Heribert, Hofer, Susanne, Holtze, Florian, Sicks, Karol, Szafranski, Thomas B., Hildebrandt	No
Maternal cholesterol deficiency predisposes congenital heart defects risk	Signal Transduction and Targeted Therapy		2025	Yayun, Gu, Jimiao, Gao, Hong, Lv, Yan, Zhou, Tao, Jiang, Jia, Guo, Wanting, Ma, Yiwei, Cheng, Xia, Chi, Qi, Xi, Kan, Ye, Jiangbo, Du, Jiong, Li, Cheng, Wang, Juncheng, Dai, Hongxia, Ma, Guangfu, Jin, Yuan, Lin, Hongbing, Shen, Zhibin, Hu	No
Endothelial Protective Effects of Ferulic Acid in Pre-eclampsia Treatment	American Journal of Physiology-Cell Physiology		2025	Xiaoli, Zhang, Xiaoyong, Zhao, Liangzhi, Wu, Fengming, Li, Mingyang, Xu, Yongquan, Pan, Taiquan, Lv, Kongbin, Yang, Ruiman, Li	No
Prenatal paroxetine dysregulates monoamine homeostasis and affects placental hemodynamics in the rat fetoplacental unit	Biomedicine and Pharmacotherapy		2025	Hana, Horackova, Ivana, Musilova-Kacerovska, Cilia, Abad, Rona, Karahoda, Veronika, Vachalova, Ramon, Portillo, Mireia, Viñas-Noguera, Kasin, Yadunandam, Daniel, Heblík, Eva, Cifkova, Miroslav, Lisa, Martin, Sterba, Jaroslav, Stranik, Alexandre, Bonnin, Frantisek, Staud	No
IL-33 Signaling Inhibition Leads to a Preeclampsia-Like Phenotype in Pregnant Rats	American Journal of Reproductive Immunology		2024	Xi, Wang, Corbin A., Shields, Deanna, Thompson, Jie, McKay, Rachel, Wilson, Marcus K., Robbins, Hannah, Glenn, Molly, Fontenot, Jan M., Williams, Denise C., Cornelius	No
Cancer stem cells release interleukin-33 within large oncosomes to promote immunosuppressive differentiation of macrophage precursors	Immunity		2024	Hannah L., Erickson, Sachiko, Taniguchi, Anish, Raman, Justin J., Leitenberger, Sanjay V., Malhotra, Naoki, Oshimori	No
Ectoderm barcoding reveals neural and cochlear compartmentalization	Science	https://www.science.org	2025	Sandra, de Haan, Jingyan, He, Agustin A, Corbat, Lenka, Belicova, Michael, Ratz, Elin, Vinsland, Jonas, Frisé, Matthew W, Kelley, Emma R, Andersson	No
Gestational exposure to micro and nanoplastics differentially impacts cardiac development and function in male and female rats throughout the lifespan	Toxicology and Applied Pharmacology	https://linkinghub.elsevier.com/retrieve/pii/S0041008X25002832	2025	Chelsea M., Cary, Samantha, Adams, Gina, Moreno, Talia N., Seymore, Marianne, Polunas, Michael, Goedken, Xiang, Wang, Edward, Yurkow, Phoebe A., Stapleton	No

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Single pulmonary nanopolystyrene exposure in late-stage pregnancy dysregulates maternal and fetal cardiovascular function	Toxicological Sciences		2024	C. M., Cary, S. B., Fournier, S., Adams, X., Wang, E. J., Yurkow, P. A., Stapleton	No
Cerebral organoids display dynamic clonal growth and tunable tissue replenishment	Nature Cell Biology		2024	Dominik, Lindenhofer, Simon, Haendeler, Christopher, Esk, Jamie B., Littleboy, Clarisse, Brunet Avalos, Julia, Naas, Florian G., Pflug, Eline G.P., van de Ven, Daniel, Reumann, Alexandre D., Baffet, Arndt, von Haeseler, Jürgen A., Knoblich	No
Reduced fetal cerebral blood flow predicts perinatal mortality in a mouse model of prenatal alcohol and cannabinoid exposure	BMC Pregnancy and Childbirth		2024	Slara Kate, Rouzer, Anirudh, Sreeram, Rajesh C., Miranda	No
Gestational exposure to air pollutants perturbs metabolic and placenta-fetal phenotype	Reproductive Toxicology		2024	Amit, Ganguly, Shubhamoy, Ghosh, Bo Chul, Shin, Marlin, Touma, Madhuri, Wadehra, Sherin U., Devaskar	No
Fertility protection during chemotherapy treatment by boosting the NAD(P)+ metabolome	EMBO Molecular Medicine		2024	Wing Hong Jonathan, Ho, Maria B., Marinova, Dave R., Listijono, Michael J., Bertoldo, Dulama, Richani, Lynn Jee, Kim, Amelia, Brown, Angelique H., Riepsamen, Safaa, Cabot, Emily R., Frost, Sonia, Bustamante, Ling, Zhong, Kaisa, Selesniemi, Derek, Wong, Romanthi, Madawala, Maria, Marchante, Dale M., Goss, Catherine, Li, Toshiyuki, Araki, David J., Livingston, Nigel, Turner, David A., Sinclair, Kirsty A., Walters, Hayden A., Homer, Robert B., Gilchrist, Lindsay E., Wu	No
An endogenous aryl hydrocarbon receptor ligand induces preeclampsia-like phenotypes in rats	The Journal of Physiology	https://doi.org/10.1113/jp287503#support-information-section	2025	Ying-Jie, Zhao, Chi, Zhou, Si-Yan, Zhang, Jay S, Mishra, Hui-Hui, Li, Wei, Lei, Kai, Wang, Sathish, Kumar, Jing, Zheng, Y-j, Zhao, C, Zhou, Zhao, Y-j, Wei, Y-y, Zhang, S-y, Li, H-h, others J, Physiol, J, Zheng	No
Choroid plexus extracellular vesicle transport of blood-borne insulin-like growth factor 1 to the hippocampus of the immature brain	PNAS Nexus		2024	Niklas, Ortenlöf, Suvi, Vallius, Helena, Karlsson, Claes, Ekström, Amanda, Kristiansson, Bo, Holmqvist, Stanislava, Pankratova, Norman, Barton, David, Ley, Magnus, Gram	No
Biomimetic nanostructural materials based on placental amniotic membrane-derived nanofibers for self-healing and anti-adhesion during cesarean section	Biomaterials		2025	Honglei, Zhu, Fenghua, Liu, Yuru, Liao, Huayan, Li, Kunjie, Gao, Xiaomei, Liang, Haoyuan, Jiang, Feng, Chen, Jianwei, Wu, Qian, Wang, Yifeng, Wang, Xintao, Shuai, Xiao, Yi	No
In vivo analysis of puerarin from Pueraria tuberosa as a promising galactagogue	Bioinformation	https://www.bioinformation.net/020/9732063002001574.htm	2024	Kiran R., Giri, Kamlesh M, Palandurkar, Udit, Agrawal, Ved, Prakash, Amit, Singh, Anshuman, Trigonayat	No
GRB2 regulation of essential signaling pathways in the endometrium is critical for implantation and decidualization	Nature Communications		2025	Dinh Nam, Tran, Yeon Jeong, Hwang, Keun Cheon, Kim, Rong, Li, Ryan M., Marquardt, Chen, Chen, Steven L., Young, Bruce A., Lessey, Tae Hoon, Kim, Yong Pil, Cheon, Jae Wook, Jeong	No

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IL-1β stimulates ADAMTS9 expression and contributes to preterm prelabor rupture of membranes	Cell Communication and Signaling		2025	Jiasong, Cao, Yixin, Wang, Qimei, Lin, Shuqi, Wang, Yongmei, Shen, Lei, Zhang, Wen, Li, Ling, Chen, Chunliu, Liu, Shihan, Yao, Ling, Shuai, Xu, Chen, Zongjin, Li, Ying, Chang	No
Cytomegalovirus Worsens Necrotizing Enterocolitis Severity in Mice via Increased Toll-Like Receptor 4 Signaling	CMGH		2025	Daniel, Scheese, Peng, Lu, Hannah, Moore, Koichi, Tsuboi, Cody, Tragesser, Johannes, Duess, Zachariah, Raouf, Maame F., Sampah, Daphne, Klerk, Mahmoud, El Baassiri, Hee seong, Jang, Sierra, Williams-McLeod, Asuka, Ishiyama, Steve N., Steinway, Sanxia, Wang, Menghan, Wang, Thomas, Prindle, William B., Fulton, Chhinder P., Sodhi, David J., Hackam	No
Quantitative Ultrasound-Based Characterization of Placental Tissue Microstructure in a Rat Model of Preeclampsia	Ultrasound in Medicine and Biology		2025	Andrew C., Markel, Cameron, Hoerig, Allan K.N., de Alencar, Kenneth F., Swan, Alexander D., Gleed, Lili, Shi, Gabriella, Pridjian, Jonathan, Mamou, Carolyn L., Bayer	No
Multi-parametric quantitative evaluation of murine cervical remodeling during pregnancy and postpartum	Scientific Reports		2025	Yan, Yan, Jose, Galaz, Joshua, Marvald, Tanzy, Love, Steven, Yellon, Nardhy, Gomez-Lopez, Mohammad, Mehrmohammadi	No
Development of autonomic innervation at the venous pole of the heart: bridging the gap from mice to human	Journal of Translational Medicine		2025	Fleur, Zwanenburg, Thomas A., Bos, Arend D.J., Ten Harkel, Monique C., Haak, Nathan D., Hahurij, Robert E., Poelmann, Conny J., van Munsteren, Lambertus J., Wisse, Nico A., Blom, Marco C., DeRuiter, Monique R.M., Jongbloed	No
Impact of low nitrate/nitrite diet and nitrate supplementation on litter size and fetal and placental growth in pregnant mice	Nitric Oxide - Biology and Chemistry		2025	Hager M., Kowash, Teresa, Tropea, Mark R., Dilworth, Jon O., Lundberg, Eddie, Weitzberg, Carina, Nihlen, Elizabeth C., Cottrell	No
The chromatin regulator Ankrd11 controls cardiac neural crest cell-mediated outflow tract remodeling and heart function	Nature Communications		2024	Yana, Kibalnyk, Elia, Afanasiev, Ronan M.N., Noble, Adrienne E.S., Watson, Irina, Poverennaya, Nicole L., Dittmann, Maria, Alexiou, Kara, Goodkey, Amanda A., Greenwell, John R., Ussher, Igor, Adameyko, James, Massey, Daniel, Graf, Stephane L., Bourque, Jo Anne, Stratton, Anastassia, Voronova	No
The dimethadione-exposed rat fetus: an animal model for the prenatal ultrasound characterization of ventricular septal defect	BMC Cardiovascular Disorders		2023	Yiru, Yang, Guo Rong, Lyu, Shaozheng, He, Hainan, Yang, Shangqing, Li	No
GRB2 regulation of essential signaling pathways in the endometrium is critical for implantation and decidualization	Nature Communications	https://www.nature.com/articles/s41467-025-57173-2	2025	Dinh Nam, Tran, Yeon Jeong, Hwang, Keun Cheon, Kim, Rong, Li, Ryan M., Marquardt, Chen, Chen, Steven L., Young, Bruce A., Lessey, Tae Hoon, Kim, Yong-Pil, Cheon, Jae-Wook, Jeong	No

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Development of autonomic innervation at the venous pole of the heart: bridging the gap from mice to human	Journal of Translational Medicine	https://translational-medicine.biomedcentral.com/articles/10.1186/s12967-024-06...	2025	Fleur, Zwanenburg, Thomas A., Bos, Arend D. J., Ten Harkel, Monique C., Haak, Nathan D., Hahurij, Robert E., Poelmann, Conny J., van Munsteren, Lambertus J., Wisse, Nico A., Blom, Marco C., DeRuiter, Monique R. M., Jongbloed	No
Prenatal hormone stress triggers embryonic cardiac hypertrophy outcome by ubiquitin-dependent degradation of mitochondrial mitofusin 2	iScience		2024	Chang Yu, Yan, Yue, Ye, Han Lu, Mu, Tong, Wu, Wen Shan, Huang, Yan Ping, Wu, Wan Yang, Sun, Lei, Liang, Wen Jun, Duan, Shu Hua, Ouyang, Rui Ting, Huang, Rong, Wang, Xin Xin, Sun, Hiroshi, Kurihara, Yi Fang, Li, Rong Rong, He	No
Phosphodiesterases Mediate the Augmentation of Myogenic Constriction by Inhibitory G Protein Signaling and is Negatively Modulated by the Dual Action of RGS2 and 5	Function		2024	Bo, Sun, Nia, Smith, Alethia J., Dixon, Patrick, Osei-Owusu	No
Maternal exposure to polyethylene micro- and nanoplastics impairs umbilical blood flow but not fetal growth in pregnant mice	Scientific Reports		2024	Jenna, Hanrahan, Katherine L., Steeves, Drew P., Locke, Thomas M., O'Brien, Alexandre S., Maekawa, Roshanak, Amiri, Christopher K., Macgowan, Ahmet A., Baschat, John C., Kingdom, André J., Simpson, Myrna J., Simpson, John G., Sled, Karl J., Jobst, Lindsay S., Cahill	No
Inhibition of Caspase 1 Reduces Blood Pressure, Cytotoxic NK Cells, and Inflammatory T-Helper 17 Cells in Placental Ischemic Rats	International Journal of Molecular Sciences		2024	Corbin A., Shields, Geilda A., Tardo, Xi, Wang, Gregory, Peacock, Marcus, Robbins, Hannah, Glenn, Rachel, Wilson, Jan M., Williams, Denise C., Cornelius	No
Evaluation of recombinant human IGF-1/IGFBP-3 on intraventricular hemorrhage prevention and survival in the preterm rabbit pup model	Scientific Reports		2023	Claes, Ekström, Niklas, Ortenlöf, Amanda, Kristiansson, Bo, Holmqvist, Åsa, Jungner, Suvi, Vallius, Xiaoyang, Wang, Ann, Hellström, Norman, Barton, Galen, Carey, David, Ley, Magnus, Gram	No
AT1-AA Infusion during Pregnancy Impairs CBF Autoregulation Postpartum	International Journal of Cerebrovascular Disease and Stroke		2023	Nathan, Campbell, Luke, Strong, Xing, Fang, Jane J, Border, Owen, Herrock, Ty, Turner, Evangelina, Deer, Lorena, Amaral, Ralf, Dechend, Richard J, Roman, Babbette, LaMarca	No
Blockade of IL-6R prevents preterm birth and adverse neonatal outcomes		www.thelancet.com	2023	Marcelo, Farias-Jofre, Roberto, Romero, Jose, Galaz, Yi, Xu, Derek, Miller, Valeria, Garcia-Flores, Marcia, Arenas-Hernandez, Andrew D, Winters, Bruce A, Berkowitz, Robert H, Podolsky, Yimin, Shen, Tomi, Kanninen, Bogdan, Panaitescu, Catherine R, Glazier, Roger, Pique-Regi, Kevin R, Theis, Nardhy, Gomez-Lopez	No

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Targeting the TCA cycle can ameliorate widespread axonal energy deficiency in neuroinflammatory lesions	Nature Metabolism		2023	Yi Heng, Tai, Daniel, Engels, Giuseppe, Locatelli, Ioanna, Emmanouilidis, Caroline, Fecher, Delphine, Theodorou, Stephan A., Müller, Simon, Licht-Mayer, Mario, Kreutzfeldt, Ingrid, Wagner, Natalia Prudente, de Mello, Sofia Natsouko, Gkotzamani, Laura, Trovò, Arek, Kendirli, Almir, Aljović, Michael O., Breckwoldt, Ronald, Naumann, Florence M., Bareyre, Fabiana, Perocchi, Don, Mahad, Doron, Merkler, Stefan F., Lichtenthaler, Martin, Kerschensteiner, Thomas, Misgeld	No
Cis P-tau is a central circulating and placental etiologic driver and therapeutic target of preeclampsia	Nature Communications		2023	Sukanta, Jash, Sayani, Banerjee, Shubin, Cheng, Bin, Wang, Chenxi, Qiu, Asami, Kondo, Jan, Ernerudh, Xiao Zhen, Zhou, Kun Ping, Lu, Surendra, Sharma	No
In Utero dimethadione exposure causes postnatal disruption in cardiac structure and function in the rat	Toxicological Sciences		2014	Kristiina L., Aasa, Elizabeth, Pursell, Michael A., Adams, Terence R.S., Ozolinš	No
Neutrophil infiltration leads to fetal growth restriction by impairing the placental vasculature in DENV-infected pregnant mice		www.thelancet.com	2023	Yingying, Zhang, Ziyang, Sheng, Qiaozhu, Chen, Anni, Zhou, Jiaying, Cao, Feiyang, Xue, Yanzhen, Ye, Na, Wu, Na, Gao, Dongying, Fan, Libo, Liu, Yuetong, Li, Peigang, Wang, Li, Liang, Deshan, Zhou, Fuchun, Zhang, Fang, Li, Jing, An	No
Radiotherapy exposure directly damages the uterus and causes pregnancy loss	JCI insight		2023	Meaghan J., Griffiths, Sarah A., Marshall, Fiona L., Cousins, Lauren R., Alesi, Jordan, Higgins, Saranya, Giridharan, Urooz C., Sarma, Ellen, Menkhorst, Wei, Zhou, Alison S., Care, Jacqueline F., Donoghue, Sarah J., Holdsworth-Carson, Peter Aw, Rogers, Evdokia, Dimitriadis, Caroline E., Gargett, Sarah A., Robertson, Amy L., Winship, Karla J., Hutt	No
Sustained Elevated Circulating Activin A Impairs Global Longitudinal Strain in Pregnant Rats: A Potential Mechanism for Preeclampsia-Related Cardiac Dysfunction	Cells		2022	Bhavisha A., Bakrania, Ana C., Palei, Umesh, Bhattarai, Yingjie, Chen, Joey P., Granger, Sajid, Shahul	No
Neural labeling and manipulation by neonatal intraventricular viral injection in mice	STAR Protocols	https://doi.org/10.1016/j.xpro.2021.101081	2022	Mengzhe, Wang, Thomas, Misgeld, Monika S., Brill	No
Development of an embryo transfer model to study uterine contributions to pregnancy in vivo in mice	Reproduction and Fertility		2022	Meaghan J., Griffiths, Lauren R., Alesi, Amy L., Winship, Karla J., Hutt	No
Noninvasive Dual-Modality Photoacoustic-Ultrasonic Imaging to Detect Mammalian Embryo Abnormalities after Prenatal Exposure to Methylmercury Chloride (MMC): A Mouse Study	Environmental Health Perspectives		2022	Qi, Qiu, Yali, Huang, Bei, Zhang, Doudou, Huang, Xin, Chen, Zhongxiong, Fan, Jinpei, Lin, Wensheng, Yang, Kai, Wang, Ning, Qu, Juan, Li, Zhihong, Li, Jingyu, Huang, Shenrui, Li, Jiaying, Zhang, Gang, Liu, Gang, Rui, Xiaoyuan, Chen, Qingliang, Zhao	No
A mechanistic basis for the malignant progression of salivary gland tumors	iScience	https://doi.org/10.1016/j.isci.2021.103508	2021	Sachiko, Taniguchi, Yuya, Tanaka, Ajit, Elhance, Naoki, Oshimori	No

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BCG-trained innate immunity leads to fetal growth restriction by altering immune cell profile in the mouse developing placenta	Journal of Leukocyte Biology	https://onlinelibrary.wiley.com/doi/10.1002/JLB.4A0720-458RR	2021	Yipu, Dang, Camille, Souchet, Fabiana, Moresi, Mohamed, Jeljeli, Bruno, Raquillet, Carole, Nicco, Sandrine, Chouzenoux, Isabelle, Lagoutte, Louis, Marcellin, Frederic, Batteux, Ludivine, Doridot	No
Diabetic pregnancy as a novel risk factor for cardiac dysfunction in the offspring—the heart as a target for fetal programming in rats	Diabetologia		2021	Till, Schütte, Sarah M., Kedziora, Nadine, Haase, Florian, Herse, Natalia, Alenina, Dominik N., Müller, Michael, Bader, Michael, Schupp, Ralf, Dechend, Michaela, Golic, Kristin, Kräker	No
Maternal B cell signaling orchestrates fetal development in mice	Development	https://journals.biologists.com/dev/article/149/8/dev199783/272539/Maternal-B-c...	2022	Mandy, Busse, Stefanie, Langwisch, Kerry, Tedford, Klaus-Dieter, Fischer, Ana Claudia, Zenclussen	No
Gestational Intermittent Hypoxia Induces Sex-Specific Impairment in Endothelial Mechanisms and Sex Steroid Hormone Levels in Male Rat Offspring	Reproductive Sciences	https://doi.org/10.1007/s43032-021-00739-4	2021	Ruolin, Song, Jay S., Mishra, Sri Vidya, Danguubiyam, Kathleen M., Antony, Tracy L., Baker, Jyoti J., Watters, Sathish, Kumar	No
A mouse model of hypoplastic left heart syndrome demonstrating left heart hypoplasia and retrograde aortic arch flow	DMM Disease Models and Mechanisms		2021	Anum, Rahman, Taylor, DeYoung, Lindsay S., Cahill, Yohan, Yee, Sarah K., Debebe, Owen, Botelho, Mike, Seed, Rajiv R., Chaturvedi, John G., Sled	No
Highly efficient manipulation of nervous system gene expression with NEPTUNE	Cell Reports Methods		2021	Katrin, Mangold, Jan, Mašek, Jingyan, He, Urban, Lendahl, Elaine, Fuchs, Emma R., Andersson	No
Normalization of wall shear stress as a physiological mechanism for regulating maternal uterine artery expansive remodeling during pregnancy	FASEB BioAdvances		2021	Eliyahu V., Khankin, Nga Ling, Ko, Maurizio, Mandala, S. Ananth, Karumanchi, George, Osol	No
Interferon γ neutralization reduces blood pressure, uterine artery resistance index, and placental oxidative stress in placental ischemic rats	American Journal of Physiology-Regulatory, Integrative and Comparative Physiology		2021	Olivia K., Travis, Geilda A., Tardo, Chelsea, Giachelli, Shani, Siddiq, Henry T., Nguyen, Madison T., Crosby, Tyler D., Johnson, Andrea K., Brown, George W., Booz, Alex N., Smith, Jan Michael, Williams, Denise C., Cornelius	No
Interpretation of wave reflections in the umbilical arterial segment of the fetoplacental circulation: computational modeling of the fetoplacental arterial tree	IEEE Transactions on Biomedical Engineering	https://ieeexplore.ieee.org/document/9435944/	2021	Rojan, Saghian, Lindsay, Cahill, Anum, Rahman, Joseph, Steinman, Greg, Stortz, John, Kingdom, Christopher, Macgowan, John G., Sled	No
Enhanced antioxidant capacity prevents epitranscriptomic and cardiac alterations in adult offspring gestationally-exposed to ENM	Nanotoxicology	https://doi.org/10.1080/17435390.2021.1921299	2021	Amina, Kunovac, Quincy A., Hathaway, Mark V., Pinti, Andrya J., Durr, Andrew D., Taylor, William T., Goldsmith, Krista L., Garner, Timothy R., Nurkiewicz, John M., Hollander	No
Dietary protein source contributes to the risk of developing maternal syndrome in the Dahl salt-sensitive rat	Pregnancy Hypertension	https://doi.org/10.1016/j.preghy.2021.04.002	2021	John Henry, Dasinger, Justine M., Abais-Battad, John D., Bukowy, Hayley, Lund, Ammar J., Alsheikh, Daniel J., Fehrenbach, Jeylan, Zemaj, David L., Mattson	No
The effect of xenon on fetal neurodevelopment following maternal sevoflurane anesthesia and laparotomy in rabbits	Neurotoxicology and Teratology	https://doi.org/10.1016/j.ntt.2021.106994	2021	Sarah, Devroe, Lennart, Van der Veeken, Tom, Bleeser, Johannes, Van der Merwe, Roselien, Meeusen, Marc, Van de Velde, Jan, Deprest, Steffen, Rex	No
Is My Mouse Pregnant? High-Frequency Ultrasound Assessment	Journal of Visualized Experiments	https://www.jove.com/v/61893/is-my-mouse-pregnant-high-frequency-ultrasound-ass...	2021	Colin K. L., Phoon, Mindong, Ren	No

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Repeated mutation of a developmental enhancer contributed to human thermoregulatory evolution	Proceedings of the National Academy of Sciences of the United States of America		2021	Daniel, Aldea, Yuji, Atsuta, Blerina, Kokalari, Stephen F., Schaffner, Rexxi D., Prasasya, Adam, Aharoni, Heather L., Dingwall, Bailey, Warder, Yana G., Kamberov	No
Activation of angiotensin type 2 receptor attenuates testosterone-induced hypertension and uterine vascular resistance in pregnant rats	Biology of Reproduction		2021	Jay S, Mishra, Sathish, Kumar	No
Progesterone receptor isoform B regulates the Oxt-Plcl2-Trpc3 pathway to suppress uterine contractility	Proceedings of the National Academy of Sciences of the United States of America		2021	Mary C., Peavey, San Pin, Wu, Rong, Li, Jian, Liu, Olivia M., Emery, Tianyuan, Wang, Lecong, Zhou, Margeaux, Wetendorf, Chandra, Yallampalli, William E., Gibbons, John P., Lydon, Francesco J., DeMayo	No
Chronic hypertension and pregnancy outcomes: Systematic review and meta-analysis	BMJ (Online)		2014	Kate, Bramham, Bethany, Parnell, Catherine, Nelson-Piercy, Paul T., Seed, Lucilla, Poston, Lucy C., Chappell	No
Echocardiographic assessment of fetal cardiac function in the uterine artery ligation rat model of IUGR	Pediatric Research	http://dx.doi.org/10.1038/s41390-020-01356-8	2021	Yichen, Dai, Dan, Zhao, Ching Kit, Chen, Choon Hwai, Yap	No
Adverse maternal and fetal outcomes in a novel experimental model of pregnancy after recovery from renal ischemia-reperfusion injury	Journal of the American Society of Nephrology		2021	Ellen E., Gillis, Michael W., Brands, Jennifer C., Sullivan	No
Metabolomic differences in blastocoel and uterine fluids collected in vivo by ultrasound biomicroscopy on rabbit embryos	Biology of Reproduction		2021	Sophie, Calderari, Nathalie, Daniel, Eve, Mourier, Christophe, Richard, Michele, Dahirel, Franck, Lager, Carmen, Marchiol, Gilles, Renault, Julie, Gatien, Lydie, Nadal-Desbarats, Pascale, Chavatte-Palmer, Véronique, Duranthon	No
Ultrahigh-Frequency Echocardiography of Autonomic Devoid Phox2B Homozygous Embryos Does Not Reveal a Significant Cardiac Phenotype before Embryo Death	Ultrasound in Medicine and Biology		2020	Deepa, Mokshagundam, William, Kowalski, Iris, Garcia-Pak, Brenda, Klaunberg, Joseph, Nam, Yoh suke, Mukouyama, Linda, Leatherbury	No
Cystathionine γ-lyase promotes estrogen-stimulated uterine artery blood flow via glutathione homeostasis	Redox Biology	https://doi.org/10.1016/j.redox.2020.101827	2020	Rachael, Bok, Damian D., Guerra, Ramón A., Lorca, Sara A., Wennersten, Peter S., Harris, Abhishek K., Rauniyar, Sally P., Stabler, Kenneth N., MacLean, James R., Roede, Laura D., Brown, K. Joseph, Hurt	No
AT1-receptor autoantibody exposure in utero contributes to cardiac dysfunction and increased glycolysis in fetal mice	Acta Biochimica et Biophysica Sinica		2020	Lina, Bai, Meili, Wang, Suli, Zhang, Mingming, Yue, Yuhao, Guo, Pengli, Wang, Huirong, Liu	No
High resolution ultrasound imaging for repeated measure of wound tissue morphometry, biomechanics and hemodynamics under fetal, adult and diabetic conditions	PloS one	http://dx.doi.org/10.1371/journal.pone.0241831	2020	Surya C., Gnyawali, Mithun, Sinha, Mohamed S., El Masry, Brian, Wulff, Subhadip, Ghatak, Fidel, Soto-Gonzalez, Traci A., Wilgus, Sashwati, Roy, Chandan K., Sen	No
Maternal regulation of inflammatory cues is required for induction of preterm birth	JCI insight		2020	Monica, Cappelletti, Jessica R., Doll, Traci E., Stankiewicz, Matthew J., Lawson, Vivien, Sauer, Bingqiang, Wen, Vladimir V., Kalinichenko, Xiaofei, Sun, Tamara, Tilburgs, Senad, Divanovic	No

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Macrophage Immune Memory Controls Endometriosis in Mice and Humans	Cell Reports		2020	Mohamed, Jejelji, Luiza G.C., Riccio, Sandrine, Chouzenoux, Fabiana, Moresi, Laurie, Toullec, Ludivine, Doridot, Carole, Nicco, Mathilde, Bourdon, Louis, Marcellin, Pietro, Santulli, Mauricio S., Abrão, Charles, Chapron, Frédéric, Batteux	No
Early Gestational Exposure to Inhaled Ozone Impairs Maternal Uterine Artery and Cardiac Function	Toxicological Sciences		2020	Marcus, Garcia, Raul, Salazar, Thomas, Wilson, Selita, Lucas, Guy, Herbert, Tamara, Young, Jessica, Begay, Jesse L, Denson, Katherine, Zychowski, Ryan, Ashley, Stephanie, Byrum, Samuel, Mackintosh, Barry E, Bleske, Andrew K, Ottens, Matthew J, Campen	No
Differential physiological role of BIN1 isoforms in skeletal muscle development, function and regeneration	Disease Models & Mechanisms		2020	Ivana, Prokic, Belinda S., Cowling, Candice, Kutchukian, Christine, Kretz, Hichem, Tasfaout, Vincent, Gache, Josiane, Hergueux, Olivia, Wendling, Arnaud, Ferry, Anne, Toussaint, Christos, Gavrilidis, Vasugi, Nattarayan, Catherine, Koch, Jeanne, Lainé, Roy, Combe, Laurent, Tîret, Vincent, Jacquemond, Fanny, Pilot-Storck, Jocelyn, Laporte	No
Cardiac, renal and uterine hemodynamics changes throughout pregnancy in rats with a prolonged high fat diet from an early age	PloS one		2020	Lidia, Oltra, Virginia, Reverte, Antonio, Tapia, Juan M., Moreno, Francisco J., Salazar, María T., Llinás	No
Exercise-induced 3'-sialyllactose in breast milk is a critical mediator to improve metabolic health and cardiac function in mouse offspring	Nature Metabolism	http://dx.doi.org/10.1038/s42255-020-0223-8	2020	Johan E., Harris, Kelsey M., Pinckard, Katherine R., Wright, Lisa A., Baer, Peter J., Arts, Eaman, Abay, Vikram K., Shettigar, Adam C., Lehnig, Bianca, Robertson, Kendra, Madaris, Tyler J., Canova, Clark, Sims, Laurie J., Goodyear, Aline, Andres, Mark T., Ziolo, Lars, Bode, Kristin I., Stanford	No
Microenvironment stiffness requires decellularized cardiac extracellular matrix to promote heart regeneration in the neonatal mouse heart	Acta Biomaterialia	https://doi.org/10.1016/j.actbio.2020.06.032	2020	Xinming, Wang, Subhadip, Senapati, Akinola, Akinbote, Bhargavee, Gnanasambandam, Paul S.H., Park, Samuel E., Senyo	No
The alarmin interleukin-1α causes preterm birth through the NLRP3 inflammasome	Molecular Human Reproduction		2020	K, Motomura, R, Romero, V, Garcia-Flores, Y, Leng, Y, Xu, J, Galaz, R, Slutsky, D, Levenson, N, Gomez-Lopez	No
Transplacental sildenafil rescues lung abnormalities in the rabbit model of diaphragmatic hernia	Thorax		2016	Francesca M., Russo, Jaan, Toelen, M. Patrice, Eastwood, Julio, Jimenez, Andre Hadyeme, Miyague, Greetje Vande, Velde, Philip, Dekoninck, Uwe, Himmelreich, Patrizia, Vergani, Karel, Allegaert, Jan, Deprest	No
A pictorial essay on fetal rabbit anatomy using micro-ultrasound and magnetic resonance imaging	Prenatal Diagnosis		2014	Philip, Dekoninck, Masayuki, Endo, Inga, Sandaite, Jute, Richter, Luc, De Catte, Ben, Van Calster, Jaan, Toelen, Uwe, Himmelreich, Filip, Claus, Jan, Deprest	No
AMP-activated protein kinase activator AICAR attenuates hypoxia-induced murine fetal growth restriction in part by improving uterine artery blood flow	Journal of Physiology			Sydney L., Lane, Julie A., Houck, Alexandra S., Doyle, Elise S., Bales, Ramón A., Lorca, Colleen G., Julian, Lorna G., Moore	No

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Cell Fate Potential of NG2 Progenitors	Scientific Reports		2020	Rebeca, Sánchez-González, Ana, Bribián, Laura, López-Mascaraque	No
Mutation of LRP1 in cardiac neural crest cells causes congenital heart defects by perturbing outflow lengthening	Communications Biology	http://dx.doi.org/10.1038/s42003-020-1035-9	2020	Jiuan-Huey I., Lin, Timothy N., Feinstein, Anupma, Jha, Jacob T., McCleary, Juan, Xu, Angelo B., Arrigo, Grace, Rong, Lindsey M., Maclay, Taylor, Ridge, XinXiu, Xu, Cecilia W., Lo	No
Cancer During Pregnancy: The Role of Vascular Toxicity in Chemotherapy-Induced Placental Toxicity	Cancers	https://www.mdpi.com/2072-6694/12/5/1277	2020	Hadas, Bar-Joseph, Fedro Alessandro, Peccatori, Tal, Goshen-Lago, Fulvia Milena, Cribiù, Giovanna, Scarfone, Irit, Miller, Luba, Nemerovsky, Mattan, Levi, Ruth, Shalgi, Irit, Ben-Aharon	No
Dermal exposure to the UV filter benzophenone-3 during early pregnancy affects fetal growth and sex ratio of the progeny in mice	Archives of Toxicology	http://link.springer.com/10.1007/s00204-020-02776-5	2020	Clarisa Guillermina, Santamaria, Nicole, Meyer, Anne, Schumacher, Maria Laura, Zenclussen, Carla Mariela, Teglia, Maria Julia, Culzoni, Ana Claudia, Zenclussen, Horacio Adolfo, Rodriguez	No
Transient callosal projections of L4 neurons are eliminated for the acquisition of local connectivity	Nature Communications	http://dx.doi.org/10.1038/s41467-019-12495-w	2019	N. S., De León Reyes, S., Mederos, I., Varela, L. A., Weiss, G., Perea, M. J., Galazo, M., Nieto	No
“Females Are Not Just ‘Protected’ Males”: Sex-Specific Vulnerabilities in Placenta and Brain after Prenatal Immune Disruption	eneuro	http://eneuro.org/lookup/doi/10.1523/ENEURO.0358-19.2019	2019	Amy E., Braun, Pamela A., Carpentier, Brooke A., Babineau, Aditi R., Narayan, Michelle L., Kielhold, Hyang Mi, Moon, Archana, Shankar, Jennifer, Su, Vidya, Saravanapandian, Ursula, Haditsch, Theo D., Palmer	No
Heterogeneous Cellular Contributions to Elastic Laminae Formation in Arterial Wall Development	Circulation Research	https://www.ahajournals.org/doi/10.1161/CIRCRESAHA.119.315348	2019	Chien-Jung, Lin, Marius C., Staiculescu, Jie Z., Hawes, Austin J., Cocciolone, Bridget M., Hunkins, Robyn A., Roth, Chieh-Yu, Lin, Robert P., Mecham, Jessica E., Wagenseil	No
Identification of novel cerebellar developmental transcriptional regulators with motif activity analysis	BMC Genomics	https://bmcbgenomics.biomedcentral.com/articles/10.1186/s12864-019-6063-9	2019	Thomas J., Ha, Peter G. Y., Zhang, Remi, Robert, Joanna, Yeung, Douglas J., Swanson, Anthony, Mathelier, Wyeth W., Wasserman, Sujin, Im, Masayoshi, Itoh, Hideya, Kawaji, Timo, Lassmann, Carsten O., Daub, Erik, Arner, Piero, Carninci, Yoshihide, Hayashizaki, Alistair R. R., Forrest, Daniel, Goldowitz	No
Longitudinal characterization of local perfusion of the rat placenta using contrast-enhanced ultrasound imaging	Interface Focus	https://royalsocietypublishing.org/doi/10.1098/rsfs.2019.0024	2019	Dylan J., Lawrence, Kristie, Huda, Carolyn L., Bayer	No
β3-Adrenergic Activation Improves Maternal and Offspring Perinatal Outcomes in Diet-Induced Prepregnancy Obesity in Mice	Obesity	https://onlinelibrary.wiley.com/doi/abs/10.1002/oby.22561	2019	Jun-Kai, Zhang, Jun, Miao, Zu-Qin, Chen, Si-Zhang, Duan, Xin, Zhang, Wen-Jie, Ji, Jian-Min, Niu, Fei, Yuan, Xin, Zhou, Yu-Ming, Li, Zhuoli, Zhang	No
Biaxial biomechanical properties of the nonpregnant murine cervix and uterus	Journal of Biomechanics	https://doi.org/10.1016/j.jbiomech.2019.07.011	2019	Cassandra K., Conway, Hamna J., Qureshi, Victoria L., Morris, Elvis K., Danso, Laurephile, Desrosiers, Leise R., Knoepp, Craig J., Goergen, Kristin S., Miller	No
Effect of maternal betamethasone administration on feto-placental vascular resistance in the mouse	Biology of Reproduction	https://academic.oup.com/biolreprod/article/101/4/823/5535556	2019	Lindsay S., Cahill, Clare L., Whitehead, Sebastian R., Hobson, Greg, Stortz, John C., Kingdom, Ahmet, Baschat, Kellie E., Murphy, Lena, Serghides, Christopher K., Macgowan, John G., Sled	No

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Exposure to systemic and intrauterine inflammation leads to decreased pup survival via different placental mechanisms	Journal of Reproductive Immunology	https://linkinghub.elsevier.com/retrieve/pii/S0165037819300932	2019	Ji Yeon, Lee, Na E., Shin, Quan, Na, Jie, Dong, Anna, Chudnovets, Su, Li, Christopher M., Novak, Michael W., McLane, Jun, Lei, Irina, Burd	No
Maternal administration of tadalafil improves fetal ventricular systolic function in a Hey2 knockout mouse model of fetal heart failure	International Journal of Cardiology	https://doi.org/10.1016/j.ijcard.2019.12.013	2020	Takekazu, Miyoshi, Takashi, Hisamitsu, Hatsue, Ishibashi-Ueda, Kenji, Ikemura, Tomoaki, Ikeda, Mikiya, Miyazato, Kenji, Kangawa, Yusuke, Watanabe, Osamu, Nakagawa, Hiroshi, Hosoda	No
Fetal growth outcomes following peri-implantation exposure of Long-Evans rats to noise and ozone differ by sex	Biology of Sex Differences	https://bsd.biomedcentral.com/articles/10.1186/s13293-019-0270-6	2019	Colette N., Miller, Urmila P., Kodavanti, Erica J., Stewart, Mette C., Schladweiler, Judy H., Richards, Samantha J., Snow, Andres R., Henriquez, Wendy M., Oshiro, Aimen K., Farraj, Mehdi S., Hazari, Janice A., Dye	No
BOLD-MRI demonstrates acute placental and fetal organ hypoperfusion with fetal brain sparing in response to phenylephrine but not ephedrine	Placenta	https://doi.org/10.1016/j.placenta.2019.11.006	2020	Joel, Shapiro, Yehuda, Ginosar, Yuval, Gielchinsky, Uriel, Elchahal, Zohar, Bromberg, Nathalie, Corchia-Nachmanson, Rinat, Abramovitch	No
Trophoblast-induced spiral artery remodelling and uteroplacental haemodynamics in pregnant rats with increased blood pressure induced by heme oxygenase inhibition	Placenta	https://linkinghub.elsevier.com/retrieve/pii/S0143400419307076	2020	L., Oltra, V., Reverte, B., Garcés, G., Li Volti, J.M., Moreno, F.J., Salazar, M.T., Llinás	No
17-Hydroxyprogesterone caproate improves T cells and NK cells in response to placental ischemia: new mechanisms of action for an old drug	Pregnancy Hypertension	https://doi.org/10.1016/j.preghy.2019.11.005	2020	Jamil T., Elfarrá, Jesse N., Cottrell, Denise C., Cornelius, Mark W., Cunningham, Jessica L., Faulkner, Tarek, Ibrahim, Babbette, Lamarca, Lorena M., Amaral	No
Electrocardiogram-gated KiloHertz Visualisation (EKV) Ultrasound Allows Assessment of Neonatal Cardiac Structural and Functional Maturation and Longitudinal Evaluation of Regeneration After Injury	Ultrasound in Medicine & Biology	https://linkinghub.elsevier.com/retrieve/pii/S0301562919315121	2020	Raphael F.P., Castellán, Adrian, Thomson, Carmel M., Moran, Gillian A., Gray	No
Increased uterine artery blood flow in hypoxic murine pregnancy is not sufficient to prevent fetal growth restriction	Biology of Reproduction	https://academic.oup.com/biolreprod/article/102/3/660/5618863	2020	Sydney L., Lane, Alexandra S., Doyle, Elise S., Bales, Ramón A., Lorca, Colleen G., Julian, Lorna G., Moore	No
Speckle Tracking Echocardiography: New Ways of Translational Approaches in Preeclampsia to Detect Cardiovascular Dysfunction	International Journal of Molecular Sciences	https://www.mdpi.com/1422-0067/21/3/1162	2020	Kristin, Kräker, Till, Schütte, Jamie, O'Driscoll, Anna, Birukov, Olga, Patey, Florian, Herse, Dominik N., Müller, Basky, Thilaganathan, Nadine, Haase, Ralf, Dechend	No
Multipotency of mouse trophoblast stem cells	Stem Cell Research & Therapy	https://stemcellres.biomedcentral.com/articles/10.1186/s13287-020-1567-4	2020	Minmin, Hou, Junwen, Han, Gu, Li, Min-Young, Kwon, Jiani, Jiang, Sirisha, Emani, Elizabeth S., Taglauer, Jin-Ah, Park, Eun-Bee, Choi, Munender, Vodnala, Yick W., Fong, Sitaram M., Emani, Ivan O., Rosas, Mark A., Perrella, Xiaoli, Liu	No
Embryonic Barcoding of Equipotent Mammary Progenitors Functionally Identifies Breast Cancer Drivers	Cell Stem Cell	https://doi.org/10.1016/j.stem.2020.01.009	2020	Zhe, Ying, Slobodan, Beronja	No
Intrauterine exposure to chronic hypoxia in the rat leads to progressive diastolic function and increased aortic stiffness from early postnatal developmental stages	Physiological Reports	https://onlinelibrary.wiley.com/doi/abs/10.14814/phy2.14327	2020	Praveen, Kumar, Jude S., Morton, Amin, Shah, Victor, Do, Consolato, Sergi, Jesus, Serrano-Lomelin, Sandra T., Davidge, Donna, Beker, Jody, Levasseur, Lisa K., Hornberger	No

Title	Journal	Link	Publication date	References	Top Paper
Regulator of G Protein Signaling 2 Facilitates Uterine Artery Adaptation During Pregnancy in Mice	Journal of the American Heart Association	https://www.ahajournals.org/doi/10.1161/JAHA.118.010917	2019	Jennifer N., Koch, Shelby A., Dahlen, Elizabeth A., Owens, Patrick, Osei-Owusu	No
A Novel Phosphoglucomutase-deficient Mouse Model Reveals Aberrant Glycosylation and Early Embryonic Lethality	Journal of Inherited Metabolic Disease	https://onlinelibrary.wiley.com/doi/abs/10.1002/jimd.12110	2019	B. Balakrishnan, J. Verheijen, A. Lupo, K. Raymond, CT, Turgeon, Y, Yang, KL, Carter, KJ, Whitehead, T, Kozicz, E, Morava, K, Lai	No
Normalisation of circulating adiponectin levels in obese pregnant mice prevents cardiac dysfunction in adult offspring	International Journal of Obesity	http://www.nature.com/articles/s41366-019-0374-4	2019	Owen R., Vaughan, Fredrick J., Rosario, Theresa L., Powell, Thomas, Jansson	No
Exposure to 17α-ethinyl estradiol during early pregnancy affects fetal growth and survival in mice	Environmental Pollution	https://linkinghub.elsevier.com/retrieve/pii/S0269749119306943	2019	Nicole, Meyer, Clarisa Guillermina, Santamaria, Judith Elisabeth, Müller, Anne, Schumacher, Horacio Adolfo, Rodriguez, Ana Claudia, Zenclussen	No
Placental malperfusion in response to intrauterine inflammation and its connection to fetal sequelae	PLOS ONE	http://dx.plos.org/10.1371/journal.pone.0214951	2019	Solange N, Eloundou, Jiyeon, Lee, Dan, Wu, Jun, Lei, Mia C, Feller, Maide, Ozen, Yan, Zhu, Misun, Hwang, Bei, Jia, Han, Xie, Julia L, Clemens, Michael W., McLane, Samar, AlSaggaf, Nita, Nair, Marsha, Wills-Karp, Xiaobin, Wang, Ernest M, Graham, Ahmet, Baschat, Irina, Burd	No
Evaluation of Utero-placental and Fetal Hemodynamic Parameters Throughout Gestation in Pregnant Mice Using High-Frequency Ultrasound	Ultrasound in Medicine & Biology	https://linkinghub.elsevier.com/retrieve/pii/S0301562913010612	2014	Edgar, Hernandez-Andrade, Hyunyoung, Ahn, Gabor, Szalai, Steven J., Korzeniewski, Bing, Wang, Mary, King, Tinnakorn, Chaiworapongsa, Nandor Gabor, Than, Roberto, Romero	No
Placental vascular abnormalities in the mouse alters umbilical artery wave reflections	American Journal of Physiology-Heart and Circulatory Physiology	https://www.physiology.org/doi/10.1152/ajpheart.00733.2018	2019	Lindsay S., Cahill, Yu-Qing, Zhou, Johnathan, Hoggarth, Lisa X, Yu, Anum, Rahman, Greg, Stortz, Clare L, Whitehead, Ahmet, Baschat, John C, Kingdom, Christopher K, Macgowan, Lena, Serghides, John G, Sled	No
Ozone exposure during implantation increases serum bioactivity in HTR-8/SVneo trophoblasts	Toxicological Sciences	https://academic.oup.com/toxsci/advance-article/doi/10.1093/toxsci/kfz003/52885...	2019	Colette N, Miller, Erica J, Stewart, Samantha J, Snow, Wanda C, Williams, Judy H, Richards, Leslie C, Thompson, Mette C, Schladweiler, Aimen K, Farraj, Urmila P, Kodavanti, Janice A, Dye	No
Prenatal exposure to testosterone induces cardiac hypertrophy in adult female rats through enhanced Pkcδ expression in cardiac myocytes	Journal of Molecular and Cellular Cardiology	https://doi.org/10.1016/j.yjmcc.2019.01.008	2019	Min, Hou, Hang Chao, Gu, Hui Hui, Wang, Xin Mei, Liu, Cheng Liang, Zhou, Qian, Yang, Zi Ru, Jiang, Jing, Lin, Yi Mei, Wu, Yan Ting, Wu, Jian Zhong, Sheng, He Feng, Huang	No
Maternal cardiac messenger RNA expression of extracellular matrix proteins in mice during pregnancy and the postpartum period	Experimental Biology and Medicine	http://journals.sagepub.com/doi/10.1177/1535370218818457	2018	Megan E, Parrott, Esam, Aljrbi, Diane L, Biederman, Ryan N, Montalvo, Jeremy L, Barth, Holly A, LaVoie	No
Inflammation-Induced Intra-Amniotic Inflammation Induces Preterm Birth by Activating the NLRP3 Inflammasome	Biology of Reproduction	https://academic.oup.com/biolreprod/advance-article/doi/10.1093/biolre/joy261/5...	2018	Jonathan, Faro, Roberto, Romero, George, Schwenkel, Valeria, Garcia-Flores, Marcia, Arenas-Hernandez, Yaozhu, Leng, Yi, Xu, Derek, Miller, Sonia S, Hassan, Nardhy, Gomez-Lopez	No
Preclinical Ultrasound-Guided Photoacoustic Imaging of the Placenta in Normal and Pathologic Pregnancy	Molecular Imaging	http://journals.sagepub.com/doi/10.1177/1536012118802721	2018	Liliya M., Yamaleyeva, K. Bridget, Brosnihan, Lane M., Smith, Yao, Sun	No

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Sapropterin Treatment Prevents Congenital Heart Defects Induced by Pregestational Diabetes Mellitus in Mice	Journal of the American Heart Association	https://www.ahajournals.org/doi/10.1161/JAHA.118.009624	2018	Anish, Engineer, Tana, Saiyin, Xiangru, Lu, Andrew S., Kucey, Brad L., Urquhart, Thomas A., Drysdale, Kambiz, Norozi, Qingping, Feng	No
Cohort-based multiscale analysis of hemodynamic-driven growth and remodeling of the embryonic pharyngeal arch arteries	Development	http://dev.biologists.org/lookup/doi/10.1242/dev.162578	2018	Stephanie E., Lindsey, Jonathan T., Butcher, Irene E., Vignon-Clementel	No
Pregnancy-Associated Cardiac Hypertrophy in Corin-Deficient Mice: Observations in a Transgenic Model of Preeclampsia	Canadian Journal of Cardiology	https://doi.org/10.1016/j.cjca.2018.11.001	2019	Rachael C., Baird, Shuo, Li, Hao, Wang, Sathyamangla V., Naga Prasad, David, Majdalany, Uma, Perni, Qingyu, Wu	No
Aspirin pre-treatment modulates ozone-induced fetal growth restriction and alterations in uterine blood flow in rats	Reproductive Toxicology	https://linkinghub.elsevier.com/retrieve/pii/S0890623818304830	2019	Colette N., Miller, Urmila P., Kodavanti, Erica J., Stewart, Mette, Schaldweiler, Judy H., Richards, Allen D., Ledbetter, Leslie T., Jarrell, Samantha J., Snow, Andres R., Henriquez, Aimen K., Farraj, Janice A., Dye	No
Persistent reduction in sialylation of cerebral glycoproteins following postnatal inflammatory exposure	Journal of Neuroinflammation	https://jneuroinflammation.biomedcentral.com/articles/10.1186/s12974-018-1367-2	2018	Ekaterina P. Demina, Wylston C. Pierre, Annie L. A. Nguyen, Irene, Londono, Bela, Reiz, Chunxia, Zou, Radhika, Chakraborty, Christopher W. Cairo, Alexey V. Pshchzhetsky, Gregory A. Lodygensky	No
Repurposing simvastatin as a therapy for preterm labor: evidence from preclinical models	The FASEB Journal	https://www.fasebj.org/doi/10.1096/fj.201801104R	2018	Ashley K. Boyle, Sara F. Rinaldi, Adriano G. Rossi, Philippa T. K. Saunders, Jane E. Norman	No
Sex-specific effects of advanced maternal age on cardiovascular function in aged adult rat offspring	American Journal of Physiology-Heart and Circulatory Physiology	http://journals.sagepub.com/doi/full/10.3727/096368915X689622	2018	Amin, Shah, Christy-Lynn M., Cooke, Raven D., Kirschenman, Anita L., Quon, Jude S., Morton, Alison S., Care, Sandra T., Davidge	No
Ultrasound-guided spectral photoacoustic imaging of hemoglobin oxygenation during development	Biomedical Optics Express	https://www.osapublishing.org/abstract.cfm?URI=boe-8-2-757	2017	Carolyn L., Bayer, Bogdan J., Wlodarczyk, Richard H., Fennell, Stanislav Y., Emelianov	No
Comprehensive Evaluation of the Effectiveness and Safety of Placenta-Targeted Drug Delivery Using Three Complementary Methods	Journal of Visualized Experiments	http://www.ncbi.nlm.nih.gov/pubmed/30247484%0Ahttps://www.jove.com/video/58219/...	2018	Baozhen, Zhang, Zhilong, Chen, Jinyu, Han, Mengxia, Li, Nihar R., Nayak, Xiujun, Fan	No
Increased placental T cell trafficking results in adverse neurobehavioral outcomes in offspring exposed to sub-chronic maternal inflammation	Brain, Behavior, and Immunity		2018	Christopher M., Novak, Ji Yeon, Lee, Maide, Ozen, Michael E., Tsimis, Lauren M., Kucirka, Michael W., McLane, Li, Xie, Meredith, Kelleher, Han, Xie, Bei, Jia, Jun, Lei, Irina, Burd	No
Spontaneous Pregnancy Loss Mediated by Abnormal Maternal Inflammation in Rats Is Linked to Deficient Uteroplacental Perfusion	The Journal of Immunology	http://www.jimmunol.org/cgi/doi/10.4049/jimmunol.1002679	2011	S. J., Renaud, T., Cotechini, J. S., Quirt, S. K., Macdonald-Goodfellow, M., Othman, C. H., Graham	No
Comparative determination of placental perfusion by magnetic resonance imaging and contrast-enhanced ultrasound in a murine model of intrauterine growth restriction	Placenta	https://linkinghub.elsevier.com/retrieve/pii/S0143400418301292	2018	C.-J., Arthuis, V., Mendes, S., Mème, W., Mème, C., Rousselot, N., Winer, A., Novell, F., Perrotin	No
Endometrial regeneration using cell sheet transplantation techniques in rats facilitates successful fertilization and pregnancy	Fertility and Sterility	http://dx.doi.org/10.1016/j.fertnstert.2018.03.007	2018	Goro, Kuramoto, Tatsuya, Shimizu, Soichi, Takagi, Ken, Ishitani, Hideo, Matsui, Teruo, Okano	No
G-protein receptor kinases 2, 5 and 6 redundantly modulate Smoothed-GATA transcriptional crosstalk in fetal mouse hearts	Journal of Molecular and Cellular Cardiology	https://linkinghub.elsevier.com/retrieve/pii/S0022282818303729	2018	Antoinetta, Franco, Lihong, Zhang, Scot J., Matkovich, Attila, Kovacs, Gerald W., Dorn	No

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Bisphenol A exposure during early pregnancy impairs uterine spiral artery remodeling and provokes intrauterine growth restriction in mice	Scientific Reports	http://www.nature.com/articles/s41598-018-27575-y	2018	Judith Elisabeth, Müller, Nicole, Meyer, Clarisa Guillermina, Santamaria, Anne, Schumacher, Enrique Hugo, Luque, Maria Laura, Zencussen, Horacio Adolfo, Rodriguez, Ana Claudia, Zencussen	No
Mouse Oocytes Acquire Mechanisms That Permit Independent Cell Volume Regulation at the End of Oogenesis	Journal of Cellular Physiology	http://doi.wiley.com/10.1002/jcp.25581	2017	Samantha, Richard, Alina P., Tartia, Detlev, Boison, Jay M., Baltz	No
Maternal treatment with a placental-targeted antioxidant (MitoQ) impacts offspring cardiovascular function in a rat model of prenatal hypoxia	Pharmacological Research	https://doi.org/10.1016/j.phrs.2018.05.006	2018	Mais M, Aljunaidy, Jude S, Morton, Raven, Kirschenman, Tom, Phillips, C Patrick, Case	No
In Vivo Evaluation of the Cardiovascular System of Mouse Embryo and Fetus Using High Frequency Ultrasound		http://link.springer.com/10.1007/978-1-4939-7714-7_3	2018	Yu-Qing, Zhou, Lindsay S., Cahill, John G., Sled	No
Lipopolysaccharide-induced maternal inflammation induces direct placental injury without alteration in placental blood flow and induces a secondary fetal intestinal injury that persists into adulthood	American Journal of Reproductive Immunology		2018	Erin M., Fricke, Timothy G., Elgin, Huiyu, Gong, Jeff, Reese, Katherine N., Gibson-Corley, Robert M., Weiss, Kathy, Zimmerman, Noelle C., Bowdler, Karen M., Kalanter, David A., Mills, Mark A., Underwood, Steven J., Mcelroy	No
Three-dimensional visualization of extracellular matrix networks during murine development	Developmental Biology	https://doi.org/10.1016/j.ydbio.2017.12.022	2018	Andrea, Acuna, Michael A., Drakopoulos, Yue, Leng, Craig J., Goergen, Sarah, Calve	No
The large-conductance voltage- and Ca²⁺-activated K⁺ channel and its γ1-subunit modulate mouse uterine artery function during pregnancy	The Journal of Physiology	http://doi.wiley.com/10.1113/JP274524	2018	Ramón A., Lorca, Monali, Wakle-Prabakaran, William E, Freeman, Meghan K, Pillai, Sarah K, England	No
Diet-induced obesity alters the maternal metabolome and early placenta transcriptome and decreases placenta vascularity in the mouse	Biology of Reproduction	https://academic.oup.com/biolreprod/advance-article-abstract/doi/10.1093/biolre...	2018	Tami J, Stuart, Kathleen O', Neill, David, Condon, Issac, Sasson, Payel, Sen, Yunwei, Xia, Rebecca A, Simmons	No
Caveolin1 Identifies a Specific Subpopulation of Cerebral Cortex Callosal Projection Neurons (CPN) Including Dual Projecting Cortical Callosal/Frontal Projection Neurons (CPN/FPN)	Eneuro	http://eneuro.sfn.org/lookup/doi/10.1523/ENEURO.0234-17.2017	2018	Jessica L., MacDonald, Ryann M., Fame, Eva M., Gillis-Buck, Jeffrey D., Macklis	No
Visualizing Changes in Cdkn1c Expression Links Early-Life Adversity to Imprint Misregulation in Adults	Cell Reports		2017	Mathew, Van de Pette, Allifia, Abbas, Amelie, Feytout, Gráinne, McNamara, Ludovica, Bruno, Wilson K., To, Andrew, Dimond, Alessandro, Sardini, Zoe, Webster, James, McGinty, Eleanor J., Paul, Mark A., Ungless, Paul M.W., French, Dominic J., Withers, Anthony, Uren, Anne C., Ferguson-Smith, Matthias, Merckenschlager, Rosalind M., John, Amanda G., Fisher	No
Simultaneous ablation of uterine natural killer cells and uterine mast cells in mice leads to poor vascularization and abnormal doppler measurements that compromise fetal well-being	Frontiers in Immunology		2018	Nicole, Meyer, Thomas, Schüler, Ana Claudia, Zencussen	No
Trichloroethylene perturbs HNF4a expression and activity in the developing chick heart	Toxicology letters	https://doi.org/10.1016/j.toxlet.2017.12.027	2018	Alondra P., Harris, Kareem A., Ismail, Martha, Nunez, Ira, Martopullo, Alejandro, Lencinas, Ornella I., Selmin, Raymond B., Runyan	No
Lung function and pulmonary artery blood flow following prenatal maternal retinoic acid and imatinib in the nitrofen model of congenital diaphragmatic hernia	Journal of Pediatric Surgery	https://doi.org/10.1016/j.jpedsurg.2017.12.002	2018	Carmen Mesas, Burgos, Marcus G., Davey, John S., Riley, Huimin, Jia, Alan W., Flake, William H., Peranteau	No

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Uterine Artery Flow and Offspring Growth in Long-Evans Rats following Maternal Exposure to Ozone during Implantation	Environmental Health Perspectives	http://ehp.niehs.nih.gov/EHP2019	2017	Colette N, Miller, Janice A, Dye, Allen D, Ledbetter, Mette C, Schladweiler, Judy H, Richards, Samantha J, Snow, Charles E, Wood, Andres R, Henriquez, Leslie C, Thompson, Aimen K, Farraj, Mehdi S, Hazari, Urmila P, Kodavanti	No
Intermittent hypoxia in utero damages postnatal growth and cardiovascular function in rats	Journal of Applied Physiology		2018	Ling, Chen, Zahra Heidari, Zadi, Jin, Zhang, Steven M, Scharf, Eung-Kwon, Pae	No
A mouse model of antepartum stillbirth	American Journal of Obstetrics and Gynecology	http://dx.doi.org/10.1016/j.ajog.2017.06.009	2017	Anum, Rahman, Lindsay S, Cahill, Yu Qing, Zhou, Johnathan, Hoggarth, Monique Y, Rennie, Mike, Seed, Christopher K, Macgowan, John C, Kingdom, S Lee, Adamson, John G, Sled	No
The complex genetics of hypoplastic left heart syndrome	Nature Genetics	http://dx.doi.org/10.1038/ng.3870	2017	Xiaoqin, Liu, Hisato, Yagi, Shazina, Saeed, Abha S, Bais, George C, Gabriel, Zhaohan, Chen, Kevin A, Peterson, You, Li, Molly C, Schwartz, William T, Reynolds, Manush, Saydmohammed, Brian, Gibbs, Yijun, Wu, William, Devine, Bishwanath, Chatterjee, Nikolai T, Klena, Dennis, Kostka, Karen L., De Mesy Bentley, Madhavi K, Ganapathiraju, Phillip, Dexheimer, Linda, Leatherbury, Omar, Khalifa, Anchit, Bhagat, Maliha, Zahid, William, Pu, Simon, Watkins, Paul, Grossfeld, Stephen A, Murray, George A, Porter, Michael, Tsang, Lisa J, Martin, D Woodrow, Benson, Bruce J, Aronow, Cecilia W, Lo	No
Hemodynamic Forces Sculpt Developing Heart Valves through a KLF2-WNT9B Paracrine Signaling Axis	Developmental Cell		2017	Lauren M, Goddard, Anne Laure, Duchemin, Harini, Ramalingan, Bingruo, Wu, Mei, Chen, Sharika, Bamezai, Jisheng, Yang, Li, Li, Michael P., Morley, Tao, Wang, Marielle, Scherrer-Crosbie, David B., Frank, Kurt A., Engleka, Stephen C., Jameson, Edward E., Morrisey, Thomas J., Carroll, Bin, Zhou, Julien, Vermot, Mark L, Kahn	No
Prenatal mechanistic target of rapamycin complex 1 (mTORC1) inhibition by rapamycin treatment of pregnant mice causes intrauterine growth restriction and alters postnatal cardiac growth, morphology, and function	Journal of the American Heart Association		2017	Maria, Hennig, Saskia, Fiedler, Christian, Jux, Ludwig, Thierfelder, Jörg Detlef, Drenckhahn	No
Systemic Evaluation of Vascular Dysfunction by High-Resolution Sonography in an N x -Nitro- L -Arginine Methyl Ester Hydrochloride - Induced Mouse Model of Preeclampsia-Like Symptoms	Journal of Ultrasound in Medicine		2018	Ying, Zhao, Ning, Yang, Hanying, Li, Wei, Cai, Xin, Zhang	No
A neonatal rat model of increased right ventricular afterload by pulmonary artery banding	Journal of Thoracic and Cardiovascular Surgery	https://doi.org/10.1016/j.jtcvs.2017.06.016	2017	Shoubao, Wang, Lincal, Ye, Haifa, Hong, Chao, Tang, Minghui, Li, Zhen, Zhang, Jinfen, Liu	No
Gestational Stage and IFN-λ Signaling Regulate ZIKV Infection In Utero	Cell Host and Microbe	http://dx.doi.org/10.1016/j.chom.2017.08.012	2017	Brett W, Jagger, Jonathan J, Miner, Bin, Cao, Nitin, Arora, Amber M, Smith, Attila, Kovacs, Indira U, Mysorekar, Carolyn B, Coyne, Michael S, Diamond	No

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Phenotyping cardiac and structural birth defects in fetal and newborn mice	Birth Defects Research		2017	Xiaoqin, Liu, Andrew J, Kim, William, Reynolds, Yijen, Wu, Cecilia W, Lo	No
Histone deacetylase adaptation in single ventricle heart disease and a young animal model of right ventricular hypertrophy	Pediatric Research	http://dx.doi.org/10.1038/pr.2017.126	2017	Weston W, Blakeslee, Kimberly M., Demos-Davies, Douglas D., Lemon, Katharina M, Lutter, Maria A, Cavasin, Sam, Payne, Karin, Nunley, Carlin S., Long, Timothy A., McKinsey, Shelley D, Miyamoto	No
Persistence of risk factors associated with maternal cardiovascular disease following aberrant inflammation in rat pregnancy	Biology of Reproduction	http://academic.oup.com/biolreprod/article/97/1/143/3950272/Persistence-of-risk...	2017	Takafumi, Ushida, Shannyn K., Macdonald-Goodfellow, Allegra, Quadri, M Yat, Tse, Louise M, Winn, Stephen C, Pang, Michael A, Adams, Tomomi, Kotani, Fumitaka, Kikkawa, Charles H, Graham	No
Wnt11 regulates cardiac chamber development and disease during perinatal maturation	JCI Insight	http://www.ncbi.nlm.nih.gov/pubmed/28878122%0Ahttps://insight.jci.org/articles/...	2017	Marlin, Touma, Xuedong, Kang, Fuying, Gao, Yan, Zhao, Ashley A, Cass, Reshma, Biniwale, Xinshu, Xiao, Mansuoreh, Eghbali, Giovanni, Coppola, Brian, Reemtsen, Yibin, Wang	No
Monitoring health and reproductive status of olms (Proteus anguinus) by ultrasound	PLoS one		2017	Susanne, Holtze, Maja, Luka, Ivan, Cizelj, Frank, Mutschmann, Robert, Hermes, Frank, Go, Stanton, Braude, Anita, Szentiks	No
Photoacoustic imaging for in vivo quantification of placental oxygenation in mice	The FASEB Journal	http://www.fasebj.org/doi/10.1096/fj.201700047RR	2017	Liliya M., Yamaleyeva, Yao, Sun, Tiffaney, Bledsoe, Asia, Hoke, Susan B., Gurley, K. Bridget, Brosnihan	No
Ultrasound detection of altered placental vascular morphology based on hemodynamic pulse wave reflection.	American journal of physiology. Heart and circulatory physiology	http://ajpheart.physiology.org/lookup/doi/10.1152/ajpheart.00791.2016	2017	Anum, Rahman, Yu-Qing, Zhou, Yohan, Yee, Jun, Dazai, Lindsay S, Cahill, John, Kingdom, Christopher K, Macgowan, John G, Sled	No
Viscosity and haemodynamics in a late gestation rat fetoplacental arterial network	Biomechanics and Modeling in Mechanobiology	http://link.springer.com/10.1007/s10237-017-0892-8	2017	Nikhilesh, Bappoo, Lachlan J., Kelsey, Louis, Parker, Tim, Crough, Carmel M., Moran, Adrian, Thomson, Megan C., Holmes, Caitlin S., Wyrwoll, Barry J., Doyle	No
Temporally Distinct Six2-Positive Second Heart Field Progenitors Regulate Mammalian Heart Development and Disease	Cell Reports	http://dx.doi.org/10.1016/j.celrep.2017.01.002	2017	Zhengfang, Zhou, Jingying, Wang, Chaoshe, Guo, Weiting, Chang, Jian, Zhuang, Ping, Zhu, Xue, Li	No
Postnatal resveratrol supplementation improves cardiovascular function in male and female intrauterine growth restricted offspring	Physiological Reports	http://physreports.physiology.org/lookup/doi/10.14814/phy2.13109	2017	Amin, Shah, Anita, Quon, Jude S., Morton, Sandra T., Davidge	No
Serelaxin improves the pathophysiology of placental ischemia in the reduced uterine perfusion pressure rat model of preeclampsia	American Journal of Physiology - Regulatory, Integrative and Comparative Physiology	http://ajpregu.physiology.org/lookup/doi/10.1152/ajpregu.00192.2016	2016	Jose a, Santiago-Font, Lorena M., Amaral, Jessica, Faulkner, Tarek, Ibrahim, Venkata Ramana, Vaka, Mark W, Cunningham, Babbette, LaMarca	No
Three-Dimensional High-Frequency Ultrasonography for Early Detection and Characterization of Embryo Implantation Site Development in the Mouse	PLOS ONE	http://dx.plos.org/10.1371/journal.pone.0169312	2017	Mary C., Peavey, Corey L., Reynolds, Maria M., Szwarc, William E., Gibbons, Cecilia T., Valdes, Francesco J., DeMayo, John P., Lydon	No
Exposure to placental ischemia impairs postpartum maternal renal and cardiac function in rats	American Journal of Physiology - Regulatory, Integrative and Comparative Physiology	http://ajpregu.physiology.org/lookup/doi/10.1152/ajpregu.00510.2016	2017	Nina D, Paauw, Jaap A, Joles, Frank T, Spradley, Bhavisha, Bakrania, Zsuzsanna K, Zellenger, Arie, Franx, Marianne C, Verhaar, Joey P, Granger, A Titia, Lely	No

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Serelaxin treatment promotes adaptive hypertrophy but does not prevent heart failure in experimental peripartum cardiomyopathy	Cardiovascular Research	http://cardiovasres.oxfordjournals.org/lookup/doi/10.1093/cvr/cvw245	2017	Justus, Nonhoff, Melanie, Ricke-Hoch, Mirco, Mueller, Britta, Stapel, Tobias, Pfeffer, Martina, Kasten, Michaela, Scherr, Constantin, von Kaisenberg, Johann, Bauersachs, Arash, Haghikia, Denise, Hilfiker-Kleiner	No
Myocardial VHL-HIF Signaling Controls an Embryonic Metabolic Switch Essential for Cardiac Maturation	Developmental Cell	http://linkinghub.elsevier.com/retrieve/pii/S1534580716308243	2016	Ivan, Menendez-Montes, Beatriz, Escobar, Beatriz, Palacios, Manuel Jose, Gómez, Jose Luis, Izquierdo-Garcia, Lorena, Flores, Luis Jesus, Jiménez-Borreguero, Julian, Aragoes, Jesus, Ruiz-Cabello, Miguel, Torres, Silvia, Martin-Puig	No
The transcription factor GATA4 promotes myocardial regeneration in neonatal mice	EMBO Molecular Medicine	http://embomolmed.embopress.org/lookup/doi/10.15252/emmm.201606602	2017	Mona, Malek Mohammadi, Badder, Kattih, Andrea, Grund, Natali, Froese, Mortimer, Korf-Klingebl, Anna, Gigina, Ulrike, Schrameck, Carsten, Rudat, Qiangrong, Liang, Andreas, Kispert, Kai C, Wollert, Johann, Bauersachs, Joerg, Heineke	No
Gastric emptying is reduced in experimental NEC and correlates with the severity of intestinal damage	Journal of Pediatric Surgery	http://ovidsp.ovid.com/ovidweb.cgi?T=JS&CSC=Y&NEWS=N&PAGE=fulltext&D=emed18b&AN...	2017	Yuhki, Koike, Bo, Li, Carol, Lee, Shigang, Cheng, Hiromu, Miyake, Christopher, Welsh, Alison, Hock, Jaques, Belik, Augusto, Zani, Agostino, Pierro	No
TRPC4α and TRPC4β Similarly Affect Neonatal Cardiomyocyte Survival during Chronic GPCR Stimulation	PLOS ONE	http://dx.plos.org/10.1371/journal.pone.0168446	2016	Nadine, Kirschmer, Sandra, Bandleon, Viktor, von Ehrlich-Treuenstätt, Sonja, Hartmann, Alice, Schaaf, Anna-Karina, Lamprecht, Erick, Miranda-Laferte, Tanja, Langsenlehner, Oliver, Ritter, Petra, Eder	No
Vitamin D supplementation reduces some AT 1-AA-induced downstream targets implicated in preeclampsia including hypertension	American Journal of Physiology - Regulatory, Integrative and Comparative Physiology	http://ajpregu.physiology.org/lookup/doi/10.1152/ajpregu.00218.2016	2017	Jessica L, Faulkner, Lorena M, Amaral, Denise C, Cornelius, Mark W, Cunningham, Tarek, Ibrahim, Autumn, Heep, Nathan, Campbell, Nathan, Usry, Kedra, Wallace, Florian, Herse, Ralf, Dechend, Babbette, LaMarca	No
Stellate cells drive maturation of the entorhinal-hippocampal circuit	Science	http://www.sciencemag.org/lookup/doi/10.1126/science.aai8178	2017	Flavio, Donato, R. Irene, Jacobsen, May-Britt, Moser, Edvard I., Moser	No
Peptidomics Analysis of Transient Regeneration in the Neonatal Mouse Heart	Journal of Cellular Biochemistry	http://doi.wiley.com/10.1002/jcb.25933	2017	Yi, Fan, Qijun, Zhang, Hua, Li, Zijie, Cheng, Xing, Li, Yumei, Chen, Yahui, Shen, Guixian, Song, Lingmei, Qian	No
Hyaluronidase 2 Deficiency Causes Increased Mesenchymal Cells, Congenital Heart Defects, and Heart FailureCLINICAL PERSPECTIVE	Circulation: Cardiovascular Genetics	http://circgenetics.ahajournals.org/lookup/doi/10.1161/CIRCGENETICS.116.001598%...	2017	Biswajit, Chowdhury, Bo, Xiang, Michelle, Liu, Richard, Hemming, Vernon W, Dolinsky, Barbara, Triggs-Raine	No
Use of high-frequency ultrasound to study the prenatal development of cranial neural tube defects and hydrocephalus in Gldc-deficient mice	Prenatal Diagnosis	http://www.ncbi.nlm.nih.gov/pubmed/28056489%0Ahttp://doi.wiley.com/10.1002/pd.5...	2017	Maria C., Autuori, Yun J., Pai, Daniel J., Stuckey, Dawn, Savery, Anna M., Marconi, Valentina, Massa, Mark F., Lythgoe, Andrew J., Copp, Anna L., David, Nicholas D.E., Greene	No
Use of high-frequency ultrasound to study the prenatal development of cranial neural tube defects and hydrocephalus in Gldc-deficient mice	Prenatal Diagnosis	http://www.ncbi.nlm.nih.gov/pubmed/28056489%0Ahttp://doi.wiley.com/10.1002/pd.5...	2017	Maria C., Autuori, Yun J., Pai, Daniel J., Stuckey, Dawn, Savery, Anna M., Marconi, Valentina, Massa, Mark F., Lythgoe, Andrew J., Copp, Anna L., David, Nicholas D.E., Greene	No

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Tacrolimus in the prevention of adverse pregnancy outcomes and diabetes-associated embryopathies in obese and diabetic mice	Journal of Translational Medicine	http://translational-medicine.biomedcentral.com/articles/10.1186/s12967-017-113...	2017	Ahmad J. H., Albaghdadi, Melanie A., Hewitt, Samantha M., Putos, Michael, Wells, Terence R. S., Ozolinš, Frederick W. K., Kan	No
Real-Time Monitoring of Placental Oxygenation during Maternal Hypoxia and Hyperoxygenation Using Photoacoustic Imaging	PLOS ONE	http://dx.plos.org/10.1371/journal.pone.0169850	2017	Chloé J., Arthuis, Anthony, Novell, Florian, Raes, Jean-michel, Escoffre, Stéphanie, Lerondel, Alain, Le Pape, Ayache, Bouakaz, Franck, Perrotin	No
Maternal vascular responses to hypoxia in a rat model of intrauterine growth restriction	American Journal of Physiology - Regulatory, Integrative and Comparative Physiology	http://ajpregu.physiology.org/lookup/doi/10.1152/ajpregu.00119.2016	2016	Mais M., Aljunaidy, Jude S., Morton, Christy-Lynn, Cooke, Sandra T., Davidge	No
Mas receptor contributes to pregnancy-induced cardiac remodelling	Clinical Science	http://clinsci.org/cgi/doi/10.1042/CS20160095	2016	Cintia, do Carmo e Silva, Jônathas Fernandes Queiroz, de Almeida, Larissa Matuda, Macedo, Marcos Barrouin, Melo, Gustavo Rodrigues, Pedrino, F. C. A., dos Santos, Manoel Francisco, Biancardi, Robson Augusto Souza, dos Santos, Adryano Augustto Valladão, de Carvalho, Elizabeth Pereira, Mendes, Diego Basile, Colugnati, Renata, Mazaro-Costa, Carlos Henrique, de Castro	No
The chromatin binding protein Smyd1 restricts adult mammalian heart growth.	American journal of physiology. Heart and circulatory physiology	http://www.ncbi.nlm.nih.gov/pubmed/27663768	2016	Sarah, Franklin, Todd, Kimball, Tara L, Rasmussen, Manuel, Rosa Garrido, Haodong, Chen, Tam, Tran, Mickey R, Miller, Ricardo, Gray, Shanxi, Jiang, Shuxun, Ren, Yibin, Wang, Haley O, Tucker, Thomas M, Vondriska	No
Sema6D acts downstream of bone morphogenetic protein signalling to promote atrioventricular cushion development in mice	Cardiovascular Research	http://www.ncbi.nlm.nih.gov/pubmed/27557637	2016	Yin, Peng, Lanying, Song, Ding, Li, Robert, Kesterson, Jianbo, Wang, Lizhong, Wang, Gregg, Rokosh, Bingruo, Wu, Qin, Wang, Kai, Jiao	No