

October 20, 2020	<a href="#">Modulation of vascular response after injury in the rat Achilles tendon alters healing capacity</a>	Tendons are relatively hypovascular but become hypervascular during both injury and degeneration.
October 16, 2020	<a href="#">Clinically-applicable perfluorocarbon-loaded nanoparticles for in vivo photoacoustic, 19f magnetic resonance and fluorescent imaging</a>	Photoacoustic imaging (PAI) is an emerging biomedical imaging technique that is now coming to the clinic.
September 09, 2020	<a href="#">Tetrazine-Derived Near-Infrared Dye as a Facile Reagent for Developing Targeted Photoacoustic Imaging Agents</a>	A new photoacoustic (PA) dye was developed as a simple-to-use reagent for creating targeted PA imaging agents.
January 01, 2018	<a href="#">Ultrasound as a New Imaging Tool to Assess Pathological Change of Joints in Preclinical Mouse Models of Osteoarthritis</a>	Murine osteoarthritis (OA) models are important for exploring OA pathology and treatment in the pre-clinical study.
October 19, 2021	<a href="#">Regional variation of corneal stromal deformation measured by high-frequency ultrasound elastography</a>	The cornea's mechanical response to intraocular pressure elevations may alter in ectatic diseases such as keratoconus.
October 19, 2021	<a href="#">Intercellular arc signaling regulates vasodilation</a>	Injury responses require communication between different cell types in the skin.
October 18, 2021	<a href="#">Nerve Growth Factor-Targeted Molecular Theranostics Based on Molybdenum Disulfide Nanosheet-Coated Gold Nanorods (MoS<sub>2</sub>-AuNR) for Osteoarthritis Pain</a>	Osteoarthritis (OA) is a leading cause of chronic pain in the elderly worldwide.
October 18, 2021	<a href="#">Limited Scar Resection for Chronic Achilles Tendon Repair: Use of a Rat Model</a>	Background: Achilles tendon rupture diagnosis is frequently missed, leading to the development of a chronic rupture that requires surgical interventio
July 07, 2021	<a href="#">In vivo photoacoustic imaging for monitoring treatment outcome of corneal neovascularization with metformin eye drops</a>	Corneal neovascularization (CNV) compromises corneal avascularity and visual acuity.
June 25, 2021	<a href="#">Real-time visualisation of peripheral nerve trauma during subepineural injection in pig brachial plexus using micro-ultrasound</a>	Background: Nerve damage is consistently demonstrated after subepineural injection in animal studies, but not after purposeful injection in patients p
June 21, 2021	<a href="#">Hypoxia-induced miR-210 modulates the inflammatory response and fibrosis upon acute ischemia</a>	Hypoxia-induced miR-210 is a crucial component of the tissue response to ischemia, stimulating angiogenesis and improving tissue regeneration.
June 07, 2021	<a href="#">Polydatin prevents calcium pyrophosphate crystal-induced arthritis in mice</a>	Background: Polydatin is a stilbenoid with important antioxidant, anti-inflammatory, and immunomodulating properties.
June 07, 2021	<a href="#">Ultrasonography study of the skin wound healing process in gilthead seabream (Sparus aurata)</a>	This work aimed to carry out an in vivo study of the skin healing process in gilthead seabream (Sparus aurata) after being experimentally wounded.
March 25, 2021	<a href="#">Crumbs proteins stabilize the cone mosaics of photoreceptors and improve vision in zebrafish</a>	Although the unique organization of vertebrate cone mosaics was first described long ago, both their underlying molecular basis and physiological sign
March 12, 2021	<a href="#">Suppression of hypoxia inducible factor 1<math>\alpha</math> by low molecular weight heparin mitigates ventilation induced diaphragm dysfunction in a murine endotoxemia model</a>	Mechanical ventilation (MV) is required to maintain life for patients with sepsis related acute lung injury but can cause diaphragmatic myotrauma with
March 08, 2021	<a href="#">Hydration State and Hyaluronidase Treatment Significantly Affect Porcine Vocal Fold Biomechanics</a>	Objectives: The understanding of vocal fold hydration state, including dehydrated, euhydrated, rehydrated tissue, and how hydration affects vocal fold

March 01, 2021	<a href="#">Ultrasonography validation for early alteration of diaphragm echodensity and function in the mdx mouse model of Duchenne muscular dystrophy</a>	The mdx mouse model of Duchenne muscular dystrophy is characterized by functional and structural alterations of the diaphragm since early stages of pa
March 01, 2021	<a href="#">Photoacoustic Imaging and Sensing: A New Way to See the Eye</a>	Purpose: Photoacoustics (optoacoustics) is a hybrid technology utilizing light excitation of acoustic responses in targets of interest.
March 01, 2021	<a href="#">Hemodynamic Assay of Hind Limb in Multiple Animal Models</a>	Introduction: Measuring hemodynamic characteristics of injured limbs is paramount to early identification of potentially damaging ischemic conditions,
February 23, 2021	<a href="#">Multispecies Evaluation of a Long-Acting Tenofovir Alafenamide Subdermal Implant for HIV Prophylaxis</a>	New HIV-1 infection rates far outpace the targets set by global health organizations, despite important progress in curbing the progression of the epi
February 23, 2021	<a href="#">Ultrasound Monitoring of Thymus Involution in Septic Mice</a>	Thymus involution is characterized by a progressive regression of thymus size and contributes to immunosuppression in sepsis.
January 18, 2021	<a href="#">A novel mouse model of obstructive sleep apnea by bulking agent-induced tongue enlargement results in left ventricular contractile dysfunction</a>	Aims Obstructive sleep apnea (OSA) is a widespread disease with high global socio-economic impact.
January 04, 2021	<a href="#">Ultrasound-guided platelet-rich plasma injection and multimodality ultrasound examination of peripheral nerve crush injury</a>	Ultrasound-guided platelet-rich plasma (PRP) injection is able to make up for the limitations of applying a single growth factor.
November 03, 2020	<a href="#">Comparison of photoacoustic and fluorescence tomography for the in vivo imaging of ICG-labelled liposomes in the medullary cavity in mice</a>	Few reports quantitatively compare the performance of photoacoustic tomography (PAT) versus fluorescence molecular tomography (FMT) in vivo.
November 03, 2020	<a href="#">Evaluation of Hemodynamics in a Murine Hindlimb Ischemia Model Using Spatial Frequency Domain Imaging</a>	Background and Objectives: Spatial frequency domain imaging (SFDI), an optical imaging technique capable of quantitatively measuring tissue hemodynami
October 19, 2020	<a href="#">Deficiency of <math>\beta</math>-arrestin2 exacerbates inflammatory arthritis by facilitating plasma cell formation</a>	$\beta$ -arrestin2 ( $\beta$ -arr2) is, a key protein that mediates desensitization and internalization of G protein-coupled receptors and participates in inflammato
October 19, 2020	<a href="#">IOP-induced regional displacements in the optic nerve head and correlation with peripapillary sclera thickness</a>	Mechanical insult induced by intraocular pressure (IOP) is likely a driving force in the disease process of glaucoma.
October 16, 2020	<a href="#">Ergogenic Effect of BCAAs and L-Alanine Supplementation: Proof-of-Concept Study in a Murine Model of Physiological Exercise</a>	Background: Branched-chain amino acids (BCAAs: leucine, isoleucine, valine) account for 35% of skeletal muscle essential amino acids (AAs).
October 16, 2020	<a href="#">Dual-modal magnetic resonance and photoacoustic tracking and outcome of transplanted tendon stem cells in the rat rotator cuff injury model</a>	Stem cells have been used to promote the repair of rotator cuff injury, but their fate after transplantation is not clear.
October 16, 2020	<a href="#">Long-Term Monitoring of Donor Xenogeneic Testis Tissue Grafts and Cell Implants in Recipient Mice Using Ultrasound Biomicroscopy</a>	Testis tissue xenografting and testis cell aggregate implantation from various donor species into recipient mice are novel models for the study and ma
September 09, 2020	<a href="#">EphA7+ perivascular cells as myogenic and angiogenic precursors improving skeletal muscle regeneration in a muscular dystrophic mouse model</a>	Skeletal muscle has a capacity for muscular regeneration mediated by satellite cells (SCs) and non-SCs.

March 30, 2020	<a href="#">Cutaneous optical coherence tomography for longitudinal volumetric assessment of intradermal volumes in a mouse model</a>	Clinical evaluation of skin lesions requires precise and reproducible technologies for their qualitative and quantitative assessment.
January 01, 2020	<a href="#">3D High-Frequency Ultrasound Imaging of Cartilage-Bone Interface Compared with Micro-CT</a>	Cartilage-bone interface (CBI) is a complex structure which bears important information in pathophysiology of osteoarthritis (OA).
July 01, 2019	<a href="#">Accuracy of Ultrasound-Guided versus Landmark-Guided Intra-articular Injection for Rat Knee Joints</a>	Abstract—Our aim was to test the effectiveness of ultrasound-guided intra-articular (IA) injection into the knee joint of rodents by an inexperienced
January 01, 2019	<a href="#">Assessment of Age-related Oxygenation Changes in Calf Skeletal Muscle by Photoacoustic Imaging: A Potential Tool for Peripheral Arterial Disease</a>	Peripheral artery disease is often asymptomatic, and various imaging and nonimaging techniques have been used for assessment and monitoring treatments
January 01, 2019	<a href="#">Non Invasive Ultrasound Quantification of Scar Tissue Volume Identifies Early Functional Changes During Tendon Healing</a>	Tendon injuries are very common and disrupt the transmission of forces from muscle to bone, leading to impaired function and quality of life.
January 01, 2019	<a href="#">Fibro-Adipogenic Remodeling of the Diaphragm in Obesity-Associated Respiratory Dysfunction</a>	Respiratory dysfunction is a common complication of obesity, conferring cardiovascular morbidity, increased mortality and often necessitating mechanic
December 16, 2018	<a href="#">Improving Stem Cell Delivery to the Trabecular Meshwork Using Magnetic Nanoparticles</a>	Glaucoma is a major cause of blindness and is frequently associated with elevated intraocular pressure.
December 12, 2018	<a href="#">Biceps Detachment Preserves Joint Function in a Chronic Massive Rotator Cuff Tear Rat Model</a>	Background: Lesions of the long head of the biceps tendon are often associated with massive rotator cuff tears (MRCTs), and biceps tenotomy is frequen
December 01, 2018	<a href="#">Photoacoustic imaging for monitoring periodontal health: A first human study</a>	The gold-standard periodontal probe is an aging tool that can detect periodontitis and monitor gingival health but is highly error-prone, does not ful
November 24, 2018	<a href="#">Indocyanine Green labeling for optical and photoacoustic imaging of Mesenchymal Stem Cells after in vivo transplantation</a>	The transplantation of Mesenchymal Stem Cells (MSCs) holds great promise for the treatment of a plethora of human diseases, but new non-invasive proce
November 15, 2018	<a href="#">Lycium Barbarum Polysaccharides Improve Retinopathy in Diabetic Sprague-Dawley Rats</a>	Diabetic retinopathy (DR) has become the most frequent cause of impaired visual acuity and blindness in working-age population in developed countries.
August 22, 2018	<a href="#">Hydrogen peroxide induced tendinopathic changes in a rat model of patellar tendon injury</a>	Tendinopathy includes cases with chronic tendon pain and spontaneous tendon ruptures, which is putatively resulted from failed tendon healing.
July 25, 2018	<a href="#">Regional Deformation of the Optic Nerve Head and Peripapillary Sclera During IOP Elevation</a>	PURPOSE: To measure the deformation of the porcine optic nerve head (ONH) and peripapillary sclera (PPS) in response to intraocular pressure (IOP) ele
July 05, 2018	<a href="#">Titin-based mechanosensing modulates muscle hypertrophy</a>	Background Titin is an elastic sarcomeric filament that has been proposed to play a key role in mechanosensing and trophicity of muscle.
June 01, 2018	<a href="#">Non-uniformity in pre-insertional Achilles tendon is not influenced by changing knee angle during isometric contractions</a>	Achilles tendinopathy remains a prevalent condition among recreational and high-level athletes.

March 26, 2018	<a href="#">Positive End-expiratory Pressure Ventilation Induces Longitudinal Atrophy in Diaphragm Fibers</a>	RATIONALE: Diaphragm weakness in critically ill patients prolongs ventilator dependency and duration of hospital stay, and increases mortality and hea
March 01, 2018	<a href="#">Strain imaging of the lateral collateral ligament using high frequency and conventional ultrasound imaging: An ex-vivo comparison</a>	Recent first attempts of in situ ultrasound strain imaging in collateral ligaments encountered a number of challenges and illustrated a clear need for
January 01, 2018	<a href="#">Photoacoustic imaging of synovial tissue hypoxia in experimental post-traumatic osteoarthritis.</a>	OBJECTIVES: This pilot study aimed to investigate the feasibility of non-invasively assessing synovial tissue hypoxia in vivo using photoacoustic (PA)
January 01, 2018	<a href="#">Nicotine impairs intra-substance tendon healing after full thickness injury in a rat model</a>	Nicotine is harmful to many bodily systems; however, the effects of nicotine on intra-substance tendon healing remain largely unexplored.
January 01, 2018	<a href="#">High-frequency spectral ultrasound imaging (SUSI) visualizes early post-traumatic heterotopic ossification (HO) in a mouse model.</a>	PURPOSE Early treatment of heterotopic ossification (HO) is currently limited by delayed diagnosis due to limited visualization at early time points.
January 01, 2018	<a href="#">Optimal range of injection rates for a lymphatic drug delivery system</a>	The lymphatic drug delivery system (LDDS) is a new technique that permits the injection of drugs into a sentinel lymph node (SLN) at an early stage of
January 01, 2018	<a href="#">Prevascularization of dermal substitutes with adipose tissue-derived microvascular fragments enhances early skin grafting</a>	Split-thickness skin grafts (STSG) are still the gold standard for the treatment of most skin defects.
January 01, 2018	<a href="#">Development and evaluation of a CEACAM6-targeting theranostic nanomedicine for photoacoustic-based diagnosis and chemotherapy of metastatic cancer</a>	Metastasis is the leading cause of cancer-related deaths.
January 01, 2018	<a href="#">Validation of ultrasound as a diagnostic tool to assess vocal cord motion in an animal feasibility study</a>	Background: Post-thyroidectomy dysphonia can result from recurrent laryngeal nerve (RLN) injury.
January 01, 2018	<a href="#">High-Frequency Ultrasound Imaging of Tidemark In Vitro in Advanced Knee Osteoarthritis</a>	High-frequency ultrasound imaging has been widely adopted for assessment of the degenerative changes of articular cartilage in osteoarthritis (OA).
September 01, 2017	<a href="#">Cystic fibrosis transmembrane conductance regulator mediates tenogenic differentiation of tendon-derived stem cells and tendon repair: accelerating tendon injury healing by intervening in its downstream signaling</a>	Tendons are a mechanosensitive tissue, which enables them to transmit to bone forces that are derived from muscle.
June 01, 2017	<a href="#">Growth hormone secretagogues prevent dysregulation of skeletal muscle calcium homeostasis in a rat model of cisplatin-induced cachexia</a>	BACKGROUND Cachexia is a wasting condition associated with cancer types and, at the same time, is a serious and dose-limiting side effect of cancer ch
January 10, 2017	<a href="#">Biodegradable Magnesium Screws Accelerate Fibrous Tissue Mineralization at the Tendon-Bone Insertion in Anterior Cruciate Ligament Reconstruction Model of Rabbit</a>	The incorporation of tendon graft into bone tunnel is one of the most challenging clinical issues in anterior cruciate ligament (ACL) reconstruction.
January 01, 2016	<a href="#">Stretching reduces skin thickness and improves subcutaneous tissue mobility in a murine model of systemic sclerosis</a>	OBJECTIVE Although physical therapy can help preserve mobility in patients with systemic sclerosis (SSc), stretching has not been used systematically
January 01, 2016	<a href="#">Aging leads to inferior Achilles tendon mechanics and altered ankle function in rodents</a>	Spontaneous rupture of the Achilles tendon is increasingly common in the middle aged population.

January 01, 2016	<a href="#">Dynamic weight bearing analysis is effective for evaluation of tendinopathy using a customized corridor with multi-directional force sensors in a rat model</a>	Few studies discuss kinetic changes in tendinopathy models.
January 01, 2016	<a href="#">Ultrahigh Frequency Ultrasound Imaging of the Hand : A New Diagnostic Tool for Hand Surgery</a>	Background: Ultrasonography is a cost-effective, noninvasive, and expedient imaging modality with numerous clinical applications.
November 11, 2016	<a href="#">Photoacoustic Imaging for the Detection of Hypoxia in the Rat Femoral Artery and Skeletal Muscle Microcirculation</a>	Photoacoustic (PA) imaging is an emerging technology that combines structural and functional imaging of tissues using laser and ultrasound energy.
November 01, 2016	<a href="#">Local administration of Trolox, a vitamin E analog, reduced tendon adhesion in a chicken model of flexor digitorum profundus tendon injury</a>	Background Hand flexor tendon injuries are compromised with tendon adhesion.
November 01, 2016	<a href="#">Postinjury biomechanics of Achilles tendon vary by sex and hormone status</a>	Achilles tendon ruptures are common injuries.
October 01, 2016	<a href="#">Small Fractions of Muscular Dystrophy Embryonic Stem Cells Yield Severe Cardiac and Skeletal Muscle Defects in Adult Mouse Chimeras</a>	Duchenne muscular dystrophy (DMD) is characterized by the loss of the protein dystrophin, leading to muscle fragility, progressive weakening, and susc
September 01, 2016	<a href="#">Visualization of haemophilic arthropathy in F8 -/- rats by ultrasonography and micro-computed tomography</a>	A major complication of haemophilia is haemophilic arthropathy (HA), a debilitating disorder with an incompletely defined pathobiology.
February 01, 2016	<a href="#">In vivo longitudinal study of rodent skeletal muscle atrophy using ultrasonography</a>	Muscle atrophy is a widespread ill condition occurring in many diseases, which can reduce quality of life and increase morbidity and mortality.
January 01, 2015	<a href="#">LOW-MAGNITUDE HIGH-FREQUENCY VIBRATION ENHANCED MESENCHYMAL STEM CELL RECRUITMENT IN OSTEOPOROTIC FRACTURE HEALING THROUGH THE SDF-1 / CXCR4 PATHWAY</a>	Low-magnitude high-frequency vibration (LMHFV) has been proven to promote osteoporotic fracture healing.
January 01, 2015	<a href="#">Validation of ultrasonography for non-invasive assessment of diaphragm function in muscular dystrophy</a>	Abstract Duchennemuscular dystrophy (DMD) is a severe, degenerativemuscle disease caused by dystrophin mutations.
January 01, 2015	<a href="#">Systemic Administration of Allogeneic Mesenchymal Stem Cells Does Not Halt Osteoporotic Bone Loss in Ovariectomized Rats.</a>	Mesenchymal stem cells (MSCs) have innate ability to self-renew and immunosuppressive functions, and differentiate into various cell types.
January 01, 2015	<a href="#">High-resolution 3D volumetry versus conventional measuring techniques for the assessment of experimental lymphedema in the mouse hindlimb</a>	Secondary lymphedema is a common complication of cancer treatment characterized by chronic limb swelling with interstitial inflammation.
January 01, 2015	<a href="#">Photoacoustic imaging of real-time oxygen changes in chronic leg ulcers after topical application of a haemoglobin spray: a pilot study</a>	Objective: To use a non-invasive measurement of oxygen saturation in chronic leg ulcers after the application of a topical haemoglobin spray to invest
January 01, 2015	<a href="#">Intratendinous Injection of Hyaluronate Induces Acute Inflammation: A Possible Detrimental Effect</a>	Abstract Hyaluronate (HA) is therapeutic for tendinopathy, but an intratendinous HA injection is usu- ally painful; thus, it is not suggested for clin
January 14, 2015	<a href="#">Accuracy of ultrasound-guided intra-articular injections in guinea pig knees</a>	OBJECTIVE: Dunkin Hartley guinea pigs, a commonly used animal model of osteoarthritis, were used to determine if high frequency ultrasound can ensure

October 23, 2014	<a href="#">Measurement of Endothelium-Dependent Vasodilation in Mice.</a>	OBJECTIVE: Endothelium-dependent, flow-mediated vasodilation after an increase in shear stress at the endothelial lining of conduit arteries during re
April 15, 2014	<a href="#">Exercise performance and peripheral vascular insufficiency improve with AMPK activation in high-fat diet-fed mice</a>	Intermittent claudication is a form of exercise intolerance characterized by muscle pain during walking in patients with peripheral artery disease (PA
July 15, 2013	<a href="#">Glucose-stimulated insulin secretion causes an insulin-dependent nitric oxide-mediated vasodilation in the blood supply of the rat sciatic nerve</a>	This study tested the hypothesis that acute hyperglycemia reduces sciatic nerve blood flow in Sprague-Dawley rats.
January 01, 2013	<a href="#">Injection of Vessel-Derived Stem Cells Prevents Dilated Cardiomyopathy and Promotes Angiogenesis and Endogenous Cardiac Stem Cell Proliferation in mdx/utrn<sup>-/-</sup> but Not Aged mdx Mouse Models for Duchenne Muscular Dystrophy</a>	Duchenne muscular dystrophy (DMD) is the most common form of muscular dystrophy.
September 01, 2012	<a href="#">Y1R control of sciatic nerve blood flow in the Wistar Kyoto rat.</a>	We hypothesized that neuropeptide Y (NPY) exerts vasoconstrictor properties in sciatic nerve blood supply by a Y1 receptor (Y1R) mechanism.
November 15, 2011	<a href="#">Ultrasound biomicroscopy for biomechanical characterization of healthy and injured triceps surae of rats.</a>	This work describes the use of ultrasound biomicroscopy (UBM) to follow up the degeneration-regeneration process after a laceration injury induced in
January 15, 2011	<a href="#">Ultrasound-guided needle positioning near the sciatic nerve to elicit compound muscle action potentials from the gastrocnemius muscle of the rat.</a>	The use of ultrasound-guided electrode positioning in near-nerve myography was investigated.
June 01, 2008	<a href="#">Muscle ultrasound in neuromuscular disorders.</a>	Muscle ultrasound is a useful tool in the diagnosis of neuromuscular disorders, as these disorders result in muscle atrophy and intramuscular fibrosis
May 01, 2008	<a href="#">Limb Stress-Rest Perfusion Imaging With Contrast Ultrasound for the Assessment of Peripheral Arterial Disease Severity</a>	OBJECTIVES: We hypothesized that stress-rest perfusion imaging of skeletal muscle in the lower extremity with contrast-enhanced ultrasound (CEU) could