

Journal Articles (11)

1. Rancilio, N.J., [Dahl, S²](#), Athanasiadi, I., **Perez-Torres, C.J.*** (2017). Design, construction, and in vivo feasibility of a positioning device for irradiation of mice brains using a clinical linear accelerator and intensity modulated radiation therapy. *International Journal of Radiation Biology*. 93, 1321–1326.
2. Louis E*, Hernandez N, Dyke J, [Ma RE²](#), **Dydak U** (2017). In vivo Dentate Nucleus Gamma-aminobutyric Acid Concentration in Essential Tremor vs. Controls. *Cerebellum*. 2017 Oct 16. doi: 10.1007/s12311-017-0891-4.
3. Dyke JP*, [Cameron E²](#), Hernandez N, **Dydak U**, Louis ED (2017). Gray matter density loss in essential tremor: a lobule by lobule analysis of the cerebellum. *Cerebellum & ataxias*. 2017; 4:10. PMID: PMC5494891.
4. Mikkelsen M*, Barker PB, Bhattacharyya PK, Brix MK, Buur PF, Cecil KM, Chan KL, Chen DYT, Craven AR, Cuypers K, Dacko M, Duncan NW, **Dydak U**, [Edmondson DA²](#), Ende G, Ersland L, Gao F, Greenhouse I, Harris AD, He N, Heba S, Hsu TW, Jacobus FA, Jansen JFA, Kangarlu A, Lange T, Lebel RM, Li Y, Lin CYE, Liou JK, Lirng JF, Liu F, [Ma R²](#), Maes C, Moreno-Ortega M, Murray SO, Noah S, Noeske R, Noseworthy MD, Oeltschner G, Prisciandaro JJ, Puts NAJ, Roberts TPL, Sack M, Sailasuta N, Saleh MG, Schallmo MP, Simard N, Swinnen SP, Tenegthoff M, Truong P, Wang G, Wilkinson ID, Wittsack HJ, Xu H, Yan F, Zhang C, Zipunnikov V, Zöllner HJ, Edden RE (2017)., *Neuroimage*. 2017 Oct 1;159:32-45.
5. Wells EM*, [Liu Y](#), Rolle D, [Mostafaei F](#), Zheng W, **Nie LH***. In Vivo Measurement of Bone Manganese and Association with Manual Dexterity: a Pilot Study. *Environmental Research*, 160(2017)35-38
6. [Specht A](#), Marc Weisskopf, **Nie LH***. Theoretical Modelling of a Portable X-ray Tube Based KXRF System to Measure Lead in Bone. *Physiological Measurement*, 38(2017)575-585
7. [Specht AJ](#), [Mostafaei F](#), Lin Y, Xu J, **Nie LH***. Measurements of Strontium Levels in Human Bone in vivo Using X-ray Fluorescence. *Applied Spectroscopy*, 71(2017)1962-1968
8. [Hsieh M](#), [Liu Y](#), [Mostafaei F](#), Poulson J, **Nie LH***. A Feasibility Study of a Deuterium-deuterium Neutron Generator-based Boron Neutron Capture Therapy System for Treatment of Brain Tumors. *Medical Physics*, 44(2017)637-643
9. [Liu Y](#), [Mostafaei F](#), [Sowers D](#), [Hsieh M](#), Zheng W, **Nie LH***. Customized Compact Neutron Activation Analysis System to Quantify Manganese (Mn) in Bone In Vivo. *Physiological Measurement*, 38(2017)452-465
10. [Wang Y](#), [Specht A](#), [Liu Y](#), Finney L, Maxey E, Zheng W, Weisskopf M, **Nie LH***. Micro-distribution of Lead in Human Teeth Using Synchrotron μ -XRF. *X-ray Spectrometry*, 46(2017)19-26
11. [Specht A](#), Parish CN, [Wallens EK](#), Watson RT, **Nie LH***, Weisskopf MG. Validation of X-ray Fluorescence Bone Lead Measurements of Condor Bones. *Science of Total Environment*. 615(2018)398-403

Conference Presentations / Abstracts (27)

1. [Boria A²](#), [Perez-Torres C*](#) (2017) Resolving Issues To Accurately And Consistently Irradiate Mice With An X-Rad 320 Irradiator. HHS Fall Research Day. Poster
2. [McIlrath DR²](#), Adamson S, Shannahan J, [Perez-Torres C*](#) (2017) Correlation between MRI signal and SPION dose concentration within murine liver. HHS Fall Research Day. Poster
3. [Boria A²](#), [Perez-Torres C*](#) (2017) Resolving Issues To Accurately And Consistently Irradiate Mice With An X-Rad 320 Irradiator. Ohio River Valley AAPM Fall Symposium. Poster
4. [McIlrath DR²](#), Adamson S, Shannahan J, [Perez-Torres C*](#) (2017) Correlation between MRI signal and SPION dose concentration within murine liver. Ohio River Valley AAPM Fall Symposium. Poster
5. [Perez-Torres C*](#), [Dahl S²](#), Athanasiadi I., Rancilio N (2017) MRI and histological evaluation of the dose response of the mouse brain to 6MV photons. 63rd Annual Meeting Of The Radiation Research Society, Cancun, Mexico. Poster **Early Career Investigator Travel Award**
6. [Yuska R¹](#), [Dahl S²](#), Lyle LT, Rancilio N, [Perez-Torres C*](#) (2017) Evaluating the Differences Between Sexes of Mice in Response to Brain Radiation. 2017 Purdue Undergraduate Research Symposium. Poster
7. Castanares M, [Miles D.](#), [Stantz K.](#), *et al.* Investigations on the temporal evolution of antivascular effects induced by anti-angiogenic therapy using multiple imaging modalities in an orthotopic syngeneic mouse model. *Mol Imaging Biol* 19 (Suppl 1):S190, 2017.
8. [Miles D.](#), [Stantz K.](#), Moskvin V, Farr J. An Auxiliary Minibeam Collimator for Preclinical Proton Radiotherapy. *Medical Physics* 44(6): 3179-80, 2017. (Selected for CAMPUS Therapy ePoster Presentation)
9. [Klem M.](#), Moskvin V, Farr J, [Stantz K.](#) Fourier Space Guided RACT Design and Simulation. *Medical Physics* 44(6):3259, 2017. (Selected for Oral presentation)
10. [Cameron E²](#), [Dydk U.](#), Lin C. Quality Assurance of Diffusion Weighted Imaging: Comparison of a New ACR Phantom Based Method with the QIBA Method. Accepted for oral presentation at 103rd Scientific Assembly and Annual Meeting of the Radiological Society of North America, November 26 - December 1, Chicago, Illinois (**Oral presentation, RSNA student travel award**)
11. Bartolomeo L, [Wright AM¹](#), [Ma R²](#), Hummer TA, Francis MM, Visco AC, Mehdiyou N, Bolbecker AR, Hetrick WP, [Dydk U.](#), O'Donnell BF, Breier A. Relationship of auditory event related potentials with magnetic resonance spectroscopy in early stage psychosis. Accepted for presentation at Neuroscience 2017, Nov 11-15, 2017, Washington D.C.
12. [Cameron E²](#), Dyke JP, Louis ED, [Dydk U.](#) Cortical Gray Matter Volume Changes in Essential Tremor Subgroups. Oral presentation at the 59th annual meeting of the American Association of Physics in Medicine (AAPM), Denver, Colorado, July 30 – Aug 3, 2017. (**Oral presentation, travel award by Purdue Institute for Integrative Neuroscience**)
13. Louis E, Dyke J, [Cameron E²](#), Hernandez N, [Dydk U.](#) Gray Matter Density in Essential Tremor: A Lobule by Lobule Analysis of the Cerebellum. *21st International Congress of Parkinson's Disease and Movement Disorders, Vancouver, Canada, June 4-8, 2017*
14. Ukropec J, Slobodova L, Tirpakova V, Vajda M, Krumpolec P, Heckova E, [Ma R²](#), Klepochova R, Strka I, Vallova S, Sitovsky S, Kosutzka Z, Tsai CL, Pai MC, Turcani P, [Dydk U.](#) Bogner W, Krssak M, Valkovic P, Sedliak M, Ukropcova B. Effects of Exercise Training on Motor Functions, Cognition & Glucose Metabolism in Patients with Parkinson's disease. *Cell Symposia – Exercise Metabolism, Gothenburg, Sweden, May 21-23, 2017*

15. [Wright AM^{1,2}](#), [Ma R²](#), Hummer T, Francis M, Visco A, Mehdiyoun N, **Dydak U**, Breier A. Longitudinal MRS Study following Treatment of Early-Phase Psychosis with N-Acetylcysteine. *ISMRM 25th Scientific Meeting & Exhibition, Honolulu, HI, April 22-27,2017. Proc. Intl. Mag. Reson. Med. 25:2976. (ISMRM Educational Stipend)*
16. [Yeh CL²](#), Johnson CB, [Ma R²](#), [Dharmadhikari S²](#), Snyder S, **Dydak U**. Whole-Brain Visualization of Manganese Deposition in Welders. *ISMRM 25th Scientific Meeting & Exhibition, Honolulu, HI, April 22-27,2017. Proc. Intl. Mag. Reson. Med. 25:3047. (Magna Cum Laude Award (top 15%), 3rd Place winner in Molecular Imaging Study Section, ISMRM Educational Stipend)*
17. [Edmondson DA²](#), [Ma R²](#), [Yeh CL²](#), Zauber SE, Snyder S, [Ward E²](#), **Dydak U**. Occupational Manganese Exposure: Reversibility of Increased GABA Levels and Brain Mn Accumulation. *ISMRM 25th Scientific Meeting & Exhibition, Honolulu, HI, April 22-27,2017. Proc. Intl. Mag. Reson. Med. 25:562. (Magna Cum Laude Award (top 15%), oral power pitch presentation, ISMRM Educational Stipend)*
18. [Ma R²](#), Andronesi O, Bogner W, **Dydak U**. Brain-Structure-Specific Metabolite Quantification of MEGA-LASER 3D MRSI Data. *ISMRM 25th Scientific Meeting & Exhibition, Honolulu, HI, April 22-27,2017. Proc. Intl. Mag. Reson. Med. 25:1254. (Magna Cum Laude Award (top 15%), oral presentation)*
19. [Ma R²](#), Snyder S, Stock AK, Andronesi O, Bogner W, **Dydak U**. Using 3D MEGA-LASER MRSI to Study the Role of Basal Ganglia GABA and Glx in Response Selection in Manganese Neurotoxicology. *ISMRM 25th Scientific Meeting & Exhibition, Honolulu, HI, April 22-27,2017. Proc. Intl. Mag. Reson. Med. 25:5524. (2nd Place winner in Psychiatric MRI and MRS study section)*
20. Mikkelsen M, Brix MK, Buur PF, Cecil KM, Chan KL, Chen DYT, Craven AR, Cuypers K, Duncan NW, **Dydak U**, [Edmondson DA²](#), Ende G, Erslund L, Greenhouse I, Harris AD, Heba S, Hsu TW, Jansen JFA, Lebel RM, Lin CYE, Liou JK, Lirng JF, [Ma R²](#), Maes C, Murray SO, Noah S, Noeske R, Noseworthy MD, Oeltschner G, Prisciandaro JJ, Puts NAJ, Roberts TPL, Sack M, Sailasuta N, Saleh MG, Schallmo MP, Simard N, Swinnen SP, Tenegthoff M, Truong P, Wittsack HJ, Zipunnikov V, Zöllner HJ, Edden RE. **Integrative analysis of GABA-edited MRS data acquired at 19 research sites.** *ISMRM 25th Scientific Meeting & Exhibition, Honolulu, HI, April 22-27,2017. Proc. Intl. Mag. Reson. Med. 25:2990.*
21. Guilarte TR, McGlothlan JL, Perez J, Zhou Y, [Yeh CL²](#), Wong DF, **Dydak U**, JS Schneider. In Vivo Dopamine Release PET and T1-Weighted MRI Relaxation Time in the Frontal Cortex of Mn-Exposed NonHuman Primates: Are the Effects Reversible? . *Society of Toxicology 56th Annual Meeting, Baltimore, MD, March 12-16, 2017. Toxicol Sci suppl. 156, 1:1397*
22. [Abel M](#), **Nie LH*** (2017). Development of a Novel In Vivo Associated Particle Neutron Elemental Imaging (APNEI) System for Noninvasive Medical Diagnosis. Abstract published for the 2017 AAPM Annual Meeting. Jul.30-Aug.3, 2017, Nashville, TN
23. [Coyne M](#), Lobene A, [Joo M](#), [Neumann C](#), Lachcik P, Weaver C, **Nie LH*** (2017). Determination of Bone Sodium (Na) and Na Exchange in Pig Leg Using *In Vivo* Neutron Activation Analysis (IVNAA). Abstract published for the AAPM Annual Meeting. Jul.30-Aug.3, 2017, Nashville, TN (NRC travel subsidy to Coyne)
24. [Abel M](#), **Nie LH*** (2017). Development of a Novel In Vivo Associated Particle Neutron Elemental Imaging (APNEI) System for Noninvasive Medical Diagnosis. Abstract published for the 2017 annual Health Physics Society (HPS) meeting, Jul.9-13, 2017; Raleigh, NC (NRC travel subsidy to Abel)

25. Coyne M, Lobene A, Joo M, Neumann C, Lachcik P, Weaver C, **Nie LH*** (2017). Determination of Bone Sodium (Na) and Na Exchange in Pig Leg Using In Vivo Neutron Activation Analysis (IVNAA). Abstract published for the 2017 annual HPS meeting, Jul.9-13, 2017; Raleigh, NC (HPS travel award to Coyne)
26. Zhang X, Specht AJ, Weisskopf M, Weuve J, **Nie LH*** (2017). Feasibility of Quantifying the Manganese and Mercury in Toenail In Vivo with Portable X-ray Fluorescence Technology. Abstract published for the 2017 Annual HPS meeting, Jul.9-13, 2017; Raleigh, NC (HPS travel award to Zhang)
27. **Nie LH***, Liu Y, Byrne P, Mostafaei F, Rolle D, Hsieh M, Zheng W, Wells E. Customized Compact Neutron Activation Analysis System to Quantify Manganese (Mn) and Aluminum (Al) in Bone *In Vivo*. Abstract published for the 2017 Annual SOT meeting, Mar.12-16, 2017