

CURRICULUM VITA

LINDA S. YASUI, Associate Professor of Biological Sciences

DATE: Feb 1, 2016

EDUCATION:

A.B., University of California, Berkeley, 1977

M.A., Florida State University, 1979

Ph.D., Florida State University, 1984

PROFESSIONAL EXPERIENCE:

Research Assistant, Psychobiology Department, Florida State University, Tallahassee, FL, 1981-82

Postdoctoral Fellow, Section of Experimental Oncology, Department of Radiology, University of Utah Health Sciences Center, 1983-85

Research Instructor, Section of Experimental Oncology, Department of Radiology, University of Utah Health Sciences Center, 1986-88

Research Assistant Professor, Section of Experimental Oncology, Department of Radiology, University of Utah Health Sciences Center, 1988

Assistant Professor, Department of Biological Sciences, Northern Illinois University, 1988-1993

Associate Professor, Department of Biological Sciences, Northern Illinois University, 1993-present

Visiting Scientist, Fermi National Accelerator Laboratory, 2004-present

Member, NIH/NCI Radiation Therapeutics and Biology SBIR study section for the Center for Scientific Review (CSR). July 2005, Oct. 2005, April, 2006, July 2006, July 2007, Oct 2008

Member, NIH/Division of Molecular and Cellular Mechanisms, Genes, Genomes and Genetics AREA grant study section for the CSR. Oct 2006.

MEMBERSHIPS IN PROFESSIONAL ORGANIZATIONS:

Radiation Research

American Society for Cell Biology (ASCB)

Sigma Xi

American Society for Therapeutic Radiation Oncologists (ASTRO)

American Association for the Advancement of Science (AAAS)

FASEB

Microscopy Society of America (MSA)

PATENT APPLICATIONS:

Rathindra N Bose, Linda Yasui, Robert John Mishur, Shefalika Gupta and Leila Maurmann. Monomeric phosphoplatins as anticancer drugs. Provisional patent filed 8/29/08.

PUBLICATIONS:

Yasui, L.S. 1984. Radiation lethality and the cellular genome. Ph.D. dissertation, Florida State University.

- Yasui, L.S., K.G. Hofer and R.L. Warters. 1985. Inhomogeneity of the nucleus to ^{125}I UdR cytotoxicity. *Radiat. Res.* 102:106-118.
- Yasui, L.S. and K.G. Hofer. 1986. Role of mitochondrial DNA in ^{125}I decay induced cell death. *Int. J. Radiat. Biol.* 49:601-610.
- Yasui, L.S. and L.A. Dethlefsen. 1987. Morphometric changes as a function of the proliferative status of murine mammary cells. *Scanning Microscopy* 1:791-797.
- Yasui, L.S., R. Higashikubo and R.L. Warters. 1987. The effect of chromatin decondensation on DNA damage and repair. *Radiat. Res.* 112:318-330.
- Yasui, L.S., A.S. Paschoa, R.L. Warters and K.G. Hofer. 1988. Cytotoxicity of ^{125}I decay produced lesions in chromatin. In *DNA Damage by Auger Emitters*, Baverstock, K. and Charlton, D.E. (eds), Taylor and Francis, Ltd, London, England.
- Yasui, L.S. 1988. Charge potential of the ^{125}Te daughter nuclide from ^{125}I decay. *Int. J. Radiat. Biol.* 54:495-496.
- Fink, T.J. and L.S. Yasui. 1988. Ultrastructure and external morphology of the sperm of *Dolania americana* (Insecta, Ephemeroptera, Behniigiidae). *Int. J. of Morphology and Embryology* 17:447-454.
- Flick, M.B., R.L. Warters, L.S. Yasui and R.E. Krisch. 1989. Measurement of radiation induced DNA damage using gel electrophoresis or neutral filter elution results in an increased measure of DNA strand breaks at pH 9.6. *Radiat. Res.* 119:452-465.
- Yasui, L.S. and T.J. Fink. 1990. Thermal sensitivity of CHO cells with different shapes. *Int. J. Hyperthermia* 6:57-65.
- Yasui, L.S., L. Ling-Indeck, B. Johnson-Wint, T.J. Fink and D. Molsen. 1991. Nuclear structure changes in the radiation sensitive CHO mutant cell, xrs-5. *Radiat. Res.* 127:269-277.
- Francis, Carol C., L.S. Yasui and T.J. Fink. 1991. Morphometric analysis of the nuclear membrane separation of the K1 and xrs-5 cells. *Midwest Microscopy* 20:4. (published abstract and micrographs)
- Yasui, L.S. 1992. Nuclear lesions produced by ^{125}I decay. In *Biophysical Aspects of Auger Processes*, AAPM symposium series No. 8 (1992) 210-226. Eds. R.W. Howell, V.R. Narra, K.S.R. Sastry, D.V. Rao.
- Schwartz, J.L., E. Moan, R. Mustafi, L. Fink, L.S. Yasui. 1992. Faster rates of DNA unwinding under alkaline conditions in xrs-5 cells may reflect chromatin structure alterations. *Mutation Res.* 282:13-17.
- Yasui, L.S. 1992. Cytotoxicity of ^{125}I decay in the DNA DSB repair deficient mutant cell line, xrs-5. *Int. Jour. Radiat. Biol.* 62:613-618.
- Korte, C.C. and L.S. Yasui. 1993. Morphological characterization of the radiation sensitive cell line, xrs-5. *Scanning Microscopy* 7:943-951.
- Yasui, L.S., T.J. Fink and A.M. Enrique. 1994. Nuclear scaffold organization in the X-ray sensitive Chinese hamster mutant cell line, xrs-5. *Int. J. Radiat. Biol.* 65:185-192.
- Yasui, L.S. and R.F. Martin. 1995. Molecular advances with Auger emitters. *Proceedings of the 10th*

International Congress of Radiation Research, Wurzburg, Germany. Volume 2, 73-77.

- Yasui, L.S., A. Hughes and E.R. DeSombre. 1996. DNA damage induction by ^{125}I -estrogen. *Acta Oncologica* 35:841-847.
- Yasui, L.S., D.P. Lotshaw, S. Tumuluri and J.L. Schwartz. 1999. Detection of Ku p70 and p80 in CHO K1 and xrs-5 cells. *Scanning* 21:110-111.
- Yasui, L.S., A. Hughes, E.R. DeSombre. 2000. Production of clustered DNA damage by ^{125}I decay. *Acta Oncologica* 39:739-740.
- Yasui, L.S., A. Hughes, E.R. DeSombre 2001. Relative biological effectiveness of accumulated ^{125}I UdR and ^{125}I estrogen decays in estrogen receptor expressing human breast cancer cells. *Radiation Research* 155: 328-334.
- Yasui, L.S., A. Hughes, E.R. DeSombre. 2001. Cytotoxicity of ^{125}I -estrogen decay in non-oestrogen receptor expressing human breast cancer cells, MDA-231 and oestrogen receptor expressing MCF-7 cells. *International Journal of Radiation Biology*. 77, 955-962.
- Yasui, L.S. 2004. γH2AX foci induced by γ rays and ^{125}I U decay. *International Journal of Radiation Biology*. 80, 1-9.
- Caldwell, J., Jones, T.P., Guse, D., Lennox, A., Yasui, L.S. 2004. Radiotherapy of Glioblastoma multiforme. In, Emerging Discoveries in Nanoscience. pg. 11. Abstract published as part of the Joint meeting of the 15th Annual Argonne Symposium for Undergraduates in Science, Engineering and Mathematics and The Central States Universities, Inc. (CSUI).
- Mork, K., Jones, T.P., Yasui, L.S. 2005. DNA double strand break detection. In, Updates in Science and Technology. Abstract published as part of the Joint meeting of the 16th Annual Argonne Symposium for Undergraduates in Science, Engineering and Mathematics and The Central States Universities, Inc. (CSUI).
- Yasui, L.S. Imaging radiation-induced γH2AX foci. 2006. *Microscopy and Microanalysis*. 12, suppl. 2, 248CD. P. Kotula, M. Marko, J.-H. Scott, R. Garvin, D. Baniac, C. Lukas, S. McKernan, J. Shields, eds. Cambridge University Press.
- Yasui, L.S., Chen, K., Jones, T.P., Caldwell, J., Guse, D., Kassis, A.I. 2007. Using Hoeschst 33342 to target radioactivity to the cell nucleus. *Radiation Research* 167, 167-175.
- LS Yasui, T Kroc, C Andorf, L Schneider, A Lennox, KR Saroja. 2008. Gadolinium neutron capture in glioblastoma multiforme cells. *International Journal of Radiation Biology* 84, 1130-1139.
- RW Howell, RF Martin, H Nikjoo, E Pomplun, M Terrissol, R Watanabe, L Yasui, A Kassis, SJ Adelstein. 2008. Meeting overview. *International Journal of Radiation Biology* 84, 957-958.
- RN Bose, L Maurmann, RJ Mishur, LS Yasui, S Gupta, WS Grayburn, H Hofstetter. 2008 Novel activities of non-DNA binding platinum(II)- and platinum(IV)-phosphato complexes towards human ovarian cells. *Proceedings of the National Academy of Sciences USA* 1-5, 18314-18319.
- LS Yasui, S Gladden, C Andorf, T Kroc, A Lennox. 2011. Fast neutron induced autophagy leading to necrosis in glioblastoma multiforme. *Applications of Accelerators in Research and Industry*. AIP Conference

Proceedings. 1336, 372-382.

LS Yasui, T Kroc, S Gladden, C Andorf, S Bux, N Hosmane. 2012. Boron neutron capture in prostate cancer cells. *Applied Radiation and Isotopes*. 70, 6-12.

LS Yasui. 2012. Molecular and cellular effects of Auger emitters: 2008-2011. *International Journal of Radiation Biology* 88, 864-870.

LS Yasui, K Owens. 2012. Necrosis induction by gadolinium neutron capture in glioblastoma multiforme cells. *International Journal of Radiation Biology* 88, 980-990.

LS Yasui, A Schuck, K Allen, A Recendiz. 2012. Extreme autophagy after high dose gamma irradiation or mixed modality irradiation due to a shift in autophagic flux. *Molecular Biology of the Cell* 23, 4663.

LS Yasui. 2013. Imaging cytometry of radiation-induced translocation of nuclear HMGB1 across the cell. *Microscopy and Microanalysis* 19 (suppl 2), 264-265.

LS Yasui, M Johnson, H Savage, C Burns, A Baker, E Baker. 2015. Measurement of radiation-induced autophagic flux in glioblastoma multiforme cells. *Microscopy and Microanalysis* 21 (Suppl 3) 196-196 (paper no. 0098)

P Vodnala, N Karunaratne, S Bera, L Lurio, GM Thurston, N Karonis, J Winans, A Sandy, S Narayanan, LS Yasui, E Gaillard, K Karumanchi. 2015. Radiation Damage Limits to XPCS Studies of Protein Dynamics. 12th International Synchrotron Radiation Instrumentation Conference Proceedings to be published in the American Institute of Physics (AIP) conference proceedings.

Xiao Lin, Nahid Mivechi, Martin Schneiderman, Nanette van Loon, Raymond Warters, Linda Yasui. 2015. In Memoriam. Kurt Hofer (1939-2015). *International Journal of Radiation Biology* 92, 57. DOI:10.3109/09553002.2015.1135267 Published online 22 Dec 2015. Print 29 Dec 2015

Joe Dynlacht, Martin Schneiderman, Raymond Warters, Linda Yasui. 2016. In Memoriam. Kurt Hofer (1939-2015). *Radiation Research* (Submitted for February issue of RR)

D Klionsky et al., 2016. Guidelines for the use and interpretation of assays for monitoring autophagy. *Autophagy* (In prep).

LS Yasui, M Duran, C Andorf, T Kroc, K Owens, A Schuck, K Allen, R Becker. 2016. Autophagic flux in glioblastoma cells. *International Journal of Radiation Biology*. Accepted.

Abstracts:

Yasui, L.S. and G. Schatten. Arrest of cytokinesis by trypsin inhibitors and the secretion of a trypsin-like enzyme at cytokinesis. American Cancer Society, Tampa, FL, Feb. 1979.

Yasui, L.S. and G. Schatten. Cyclic secretion of protease during cytokinesis: Trypsin inhibitors prevent the completion of cytokinesis. American Society for Cell Biology, Toronto, Ontario, Canada, Nov. 1979.

Yasui, L.S. Differential cell death from ¹²⁵I incorporated into subfractions of DNA. *Radiation Research*

- Society Meeting, San Antonio, TX, Mar. 1983.
- Yasui, L.S. and K.G. Hofer. ^{125}I toxicity as a function of intranuclear radionuclide distribution. Radiation Research Society Meeting, Orlando, FL, Mar. 1984.
- Yasui, L.S. and R.L. Warters. A change in nuclear condensation state in ile⁻ cells. American Society for Cell Biology, Kansas City, MO, Nov. 1984.
- Yasui, L.S. and R.L. Warters. DNA damage, repair and cytotoxicity in CHO cells having decondensed chromatin. International Symposium on DNA Damage in Cells. Gaithersburg, MD, June 1985.
- Yasui, L.S. and R.L. Warters. Chromatin superstructure in CHO cells. American Society for Cell Biology, Atlanta, GA, Nov. 1985.
- Yasui, L.S., R.L. Warters and R. Higashikubo. The effect of higher order chromatin structure on DNA damage and repair. Radiation Research Society Meeting, Los Angeles, CA, May 1985.
- Yasui, L.S. and R.L. Warters. Cellular toxicity: non-uniform radiosensitivity in the nucleus. Radiation Research Society Meeting, Los Angeles, CA, May 1985.
- Paschoa, A.S., L.S. Yasui and M.E. Wrenn. Subcellular dose from ^{125}I Auger electrons. Radiation Research Society Meeting, Los Angeles, May 1985.
- Warters, R.L. and L.S. Yasui. Cell toxicity resulting from internal electron irradiation. Radiation Research Society Meeting, Los Angeles, CA, May 1985.
- Paschoa, A.S., M.E. Wrenn and L.S. Yasui. Local dosimetry of internally deposited Auger emitters. Radiation Research Society Meeting, Los Angeles, May 1985.
- Yasui, L.S., B.N. Lyons, and R.L. Warters. ^{125}I decay-induced DNA damage and repair in mouse L929 cells. Radiation Research Society Meeting, Las Vegas, NV, April 1986.
- Yasui, L.S., and L.A. Dethlefsen. Morphometric changes as a function of the proliferative status of murine mammary carcinoma cells. SEM Meeting, New Orleans, LA, May 1986.
- Yasui, L.S. and K.L. Kaysen. Modification of cellular thermal sensitivity by cell shape. Radiation Research Meeting, Atlanta, GA, Feb. 1987.
- Fink, T.J. and Yasui, L.S. Ultrastructure and external morphology of the sperm of *Dolania americana* (Insecta, Ephemeroptera, Behningiidae). American Society for Cell Biology, St. Louis, Nov. 1987.
- Yasui, L.S. Nuclear lesions produced by ^{125}I decay do not include DNA protein crosslinks. Argonne National Laboratory Symposium on Radiation-Induced DNA Damage and Repair. April 15, 1988.
- Yasui, L.S. Nuclear lesions produced by ^{125}I decay do not include DNA protein crosslinks. Radiation Research Society Meeting, Philadelphia, PA, April 1988.
- Flick, M.B., R.L. Warters, L.S. Yasui and R.E. Krisch. Measurement of radiation induced DNA damage using gel electrophoresis or neutral filter elution results in an increase measure of DNA strand breaks at pH 9.6. Radiation Research Society Meeting, Philadelphia, PA, April 1988.

- Yasui, L.S. DNA damage induction by ^{125}I decay in decondensed chromatin. Radiation Research Meeting, Seattle, WA, March 1989.
- Yasui, L.S., Schwartz, J.L., Ling-Indeck, L., Johnson-Wint, B., Fink, T.J., Molsen, D. Morphological reorganization in the nuclear periphery/nuclear matrix in the radiation sensitive CHO cell, xrs-5. 5th Annual Midwest Regional Radiat. Res. Mtg., Washington Univ., St. Louis, MO, November 1989. Also Radiat. Res. Meeting, New Orleans, LA, April 1990. Also Regional Cell Biol. Meeting, Chicago, IL, March 1990.
- Schwartz, J. Vaughan, A.T.M., Yasui, L. Chromosome structure differences between the radiosensitive CHO mutant xrs-5 and its resistant parent CHO K1. 5th Annual Midwest Radiation Res. Mtg., Washington Univ., St. Louis, MO, November 1989. Also Radiat. Res. Meeting. New Orleans, LA, April 1990.
- Schwartz, J.L., Shadley, J.D., Cowan, J.M., Vaughan, A.T.M., Yasui, L.S. Defective DNA double strand break rejoining in xrs-5 cells is associated with an alteration in chromosome organization. ICN-UCLA symposium on molecular and cellular biology. Jan. 16-21, 1990. Ionizing radiation damage: molecular approaches. Lake Tahoe, CA.
- C.C. Francis, L.S. Yasui and T.J. Fink. Morphometric analysis of the nuclear membrane separation of k1 and xrs-5 cells. Midwest Society of Electron Microscopists at Wheaton College, IL. January 18, 1991.
- Yasui, L.S., Fink, T.J., Francis, C., Luna, J., Hernandez, L. Nuclear organization in the radiation sensitive cell line xrs-5. 9th International Congress of Radiation Research at Toronto, Ontario, Canada. July 7-11, 1991.
- Yasui, L.S. Nuclear lesions produced by ^{125}I decay. Second International Symposium on Biophysical Aspects of Auger Processes. Univ. of Mass., Amherst, MA. July 5-6, 1991.
- C.C. Korte and L.S. Yasui. Morphometric analysis of nuclear organization in the radiation sensitive cell line, xrs-5. Midwest Radiation Research meeting in St. Louis, MO. Nov. 16-17, 1991.
- L.S. Yasui and L. Fink. DNA damage produced by ^{125}I decay. Midwest Radiat. Res. meeting in St. Louis, MO. Nov. 16-17, 1991.
- L.S. Yasui and L. Fink. DNA damage produced by ^{125}I decay. Radiation Research Meeting. Salt Lake City, UT. Mar. 14-18, 1992.
- L.S. Yasui and L. Fink. xrs-5 cells degrade DNA damaged by ^{125}I decay. Midwest Radiation Research Meeting. St. Louis, MO. Nov. 21-22, 1992.
- L.S. Yasui, L. Fink and M. Lin. xrs-5 cells degrade DNA damaged by ^{125}I decay. Radiation Research Meeting. Dallas, TX. Mar. 18-26, 1993.
- L.S. Yasui. DNA fragmentation produced by ^{125}I . Midwest Radiation Research Meeting. St. Louis, MO. Nov. 12-14, 1993.
- L.S. Yasui. DNA fragmentation produced by ^{125}I decay. Radiation Research Meeting. Nashville, TN. April 29-May 4, 1994.
- L.S. Yasui, C. Korte, T. Fink and A.M. Enrique. Nuclear organization in the radiation sensitive xrs-5 cell line.

- Radiation Research Meeting. Nashville, TN. April 29-May 4, 1994.
- L.S. Yasui and R.F. Martin. Molecular advances with Auger emitters. Presented by Roger Martin at the 10th International Congress of Radiation Research. Wurzburg, Germany. August 27-Sept. 1, 1995.
- L.S. Yasui, A. Hughes and E.R. DeSombre. DNA damage induction by ^{125}I -estrogen. presented by Eugene DeSombre at the Third International Symposium on Biophysical Aspects of Auger Processes. University of Lund, Lund, Sweden. Aug. 24-25, 1995.
- L.S. Yasui, L. Fink, M. Lin and A.M. Enrique. Repair of ^{125}I decay induced DNA damage in CHO K1 and xrs-5 cells. Poster at the Third International Symposium on Biophysical Aspects of Auger Processes. University of Lund, Lund, Sweden. Aug. 24-25, 1995.
- L.S. Yasui, D. Ferns, B. Dabbah, a. Hughes, E. DeSombre. ^{125}I decay sensitivity in estrogen receptor expressing CHOER cells. Radiation Research meeting. Chicago, IL. Apr. 14-17, 1996.
- L.S. Yasui and J.L. Schwartz. Detection of Ku p70 and p80 in CHO K1 and xrs-5 cells. Radiation Research meeting. Providence, RI. May 3-7, 1997.
- L.S. Yasui, A. Hughes, E.R. DeSombre. Radiotoxicity of ^{125}I decay in MCF 7 cells. Radiation Research meeting. Louisville, KY. Apr. 25-29, 1998.
- L.S. Yasui, A. Hughes, E.R. DeSombre. RBE of ^{125}I decay in MCF7 cells. 11th International Congress of Radiation Research. Dublin, Ireland. July 18-23, 1999.
- L.S. Yasui, L. Miller, D. Ellison, A. Hughes, E.R. Desombre. Production of short DNA fragments by accumulation of ^{125}I -estrogen decay in MCF7 cells. Radiation Research Meeting. Albuquerque, NM. Apr. 29-May 3, 2000.
- L.S. Yasui, A. Hughes, E.R. DeSombre. Estrogen receptor (ER) in ^{125}I -estrogen decay mediated cell killing: comparison of non-ER expressing human breast cancer cells, MDS-231 and ER-expressing MCF-7 cells. Radiation Research Meeting, San Juan, P.R. April 21-25, 2001.
- L.S. Yasui, K. Anderson, A. Hughes, E.R. DeSombre. DNA damage induction by ^{123}I decay. Radiation Research Meeting, Reno, NV. April 20-24, 2002.
- L.S. Yasui. ^{125}I IdU decay and γH2AX . 5th Auger Symposium in Melbourne, Australia as part of the 13th International Congress of Radiation Research, Aug. 13-15, 2003.
- T.P. Jones, J. Caldwell, L. Soltys, L. Yasui. Radiotherapy of Glioblastoma multiforme. Phi Sigma Poster presentation. April 17, 2004.
- L.S. Yasui, A. Hughes, E.R. DeSombre. "Dosing effect" from ^{125}I -estrogen in human breast cancer cells, MCF-7". Radiation Research Meeting, St. Louis, MO. April 24-27, 2004.
- J. Caldwell, T.P. Jones, D. Guse, A. Lennox, L. Yasui. Radiotherapy of Glioblastoma multiforme. Argonne National Laboratory Undergraduate Symposium (CSUI). Nov. 5-6, 2004.
- S. Gutting, A. Lennox, L. Yasui. DNA damage response in Glioblastoma multiforme. Phi Sigma Poster presentation. April 9, 2005.

- T.P. Jones, K. Mork and L. Yasui. DNA double strand break detection. Phi Sigma Poster Presentation. April 9, 2005.
- L.S. Yasui, K. Chen, T.P. Jones, J. Caldwell, D. Guse, A.I. Kassis. Using Hoechst 33342 to target radioactivity to the cell nucleus. Joint Radiation Research Society and ASTRO meeting. Denver, CO. Oct 16-19, 2005.
- K. Mork, T.P. Jones, L.S. Yasui. Detecting DNA double strands breaks. Argonne National Lab Undergraduate Symposium and CSUI. Nov. 4-5, 2005.
- S Gutting, K Mork, LS Yasui. Irradiation-induced autophagy in glioblastoma multiforme. Phi Sigma Poster show. April 2006.
- K Mork, S Gutting, LS Yasui. DNA double strand break detection in Glioblastoma multiforme. Phi Sigma poster show. April 2006.
- L.S. Yasui. Imaging radiation induced γ H2AX foci. Microscopy and microanalysis meeting. Navy Pier, Chicago, IL July 30 – Aug.3, 2006.
- L.S. Yasui. Imaging γ H2AX foci. Presentation as part of the gH2AX – what does it mean? workshop. 53rd Annual Meeting of the Radiation Research Society with ASTRO. Philadelphia, PA Nov 5-8, 2006
- L.S. Yasui, S. Gutting, C. Andorf, A. Lennox. Presentation as part of the Particle Radiation Effects minisymposium. The DNA damage response induced by fast neutrons. 53rd Annual Meeting of the Radiation Research Society with ASTRO. Philadelphia, PA Nov 5-8, 2006.
- A. Lennox, E Blazek. LS Yasui. 2007. Results of in vitro Radiobiology experiments at NIU Institute for neutron Therapy at Fermilab. International Radiotherapy Congress, Toulouse, France.
- L.S. Yasui, T. Kroc, C. Andorf, L. Schneider, A. Lennox and KR Saroja. Gadolinium neutron capture in glioblastoma multiforme cells. 6th International Auger Symposium. Boston, MA July 5-7, 2007.
- R.N. Bose, L. Maurmann, L. Yasui. Multiple pathways for cisplatin mediated apoptosis in human ovarian cells. 13th International Conference on Biological Inorganic Chemistry. Vienna, Austria. July 15-20, 2007.
- D.P Lotshaw, WS Grayburn, LS Yasui, KW Gasser. Expression of the two-pore domain potassium channel, TASK-2, in rat pancreatic acinar cell zymogen granule membrane. FASEB J 22, 938. Experimental Biology meeting in San Diego, CA. April 5-9, 2008. Selected for oral presentation.
- LS Yasui, WS Grayburn, T Kroc, C Andorf, A Lennox. Fast neutron irradiation induces autophagy in glioblastoma multiforme cells. 54th Annual Radiation Research Society Meeting in conjunction with ASTRO. Boston, MA Sept. 21-24, 2008.
- LS Yasui, T Kroc, C Andorf, A Lennox. Fast neutron induction of gH2AX foci and autophagy in glioblastoma multiforme cells. 55th Annual Radiation Research Society Meeting, Savannah, GA. Oct. 4-7, 2009.
- LS Yasui, S Gladden, C Andorf, T Kroc. “Fast Neutron Induced Autophagy Leads to Necrosis in Glioblastoma Multiforme Cells”. Aug 8-13, 2010. 21st International Conference on the Application of Accelerators in Research and Industry (CAARI). Invited by Eleanor Blakely (UC Berkeley) to speak in Medical Applications session. Ft. Worth, TX

- LS Yasui, S Gladden, C Andorf, T Kroc, S Bux, N Hosmane. 2010. Boron neutron capture in prostate cancer cells. 56th Annual Radiation Research Society meeting in Maui, Hawaii. Sept. 25-29, 2010. Abstract published in the Radiation Research abstract book but I did not attend meeting.
- LS Yasui. Invited opening address for the 7th International Symposium on Physical, Molecular, Cellular and Medical Aspects of Auger Processes 2011. Julich, Germany. August 24-26, 2011. Title of talk: Progress in Understanding the Biological Effects of Auger Emitters.
- LS Yasui, K Owens, Y Her, T Kroc, C Andorf. Necrosis induction by gadolinium neutron capture in glioblastoma multiforme cells. Orally presented at the 7th International Symposium on Physical, Molecular, Cellular and Medical Aspects of Auger Processes 2011. Julich, Germany. August 24-26, 2011
- K Owens, Y Her, C Andorf, T Kroc, L Yasui. Development of necrosis in fast neutron irradiated glioblastoma multiforme tumor cells compared to normal human astrocytes. Particle Therapy Co-Operative Group 50 (PTCOG 50). Philadelphia, PA. May 2011
- LS Yasui, K Owens, A Schuck. Extreme autophagy after high dose or mixed modality irradiation due to a shift in autophagic flux. Annual meeting of the American Society for Cell Biology, San Francisco, CA. December 2012.
- M Foster, LS Yasui. Pro-apoptotic strategy for killing GBM cells. Brain Behavior and Immunity meeting, Brain Behavior and Immunity, Loyola University. Dec. 1, 2012.
- A Schuck, K Allen, A Recendiz, K Owens, LS Yasui. Acridine orange staining: Development and analysis of autophagosomes. CUSI symposium at Argonne National Lab, CUSI, Argonne National Lab. October 26, 2012.
- LS Yasui, M Foster, R Meyers, K Owens. A pro-apoptotic strategy to kill glioblastoma multiforme cells: combination of cisplatin and gamma irradiation. Annual meeting for the Radiation Research Society. San Juan, Puerto Rico. Sept. 30–Oct. 3, 2012.
- M Foster, K Owens, LS Yasui. A pro-apoptotic cell killing strategy for GBM treatment. UIC Rockford Research Day, UIC Rockford Medical School. April 11, 2012.
- Invitation to give a seminar at the Joint Symposium 2012 on Carbon Ion Radiotherapy – Fostering International Collaboration between Japan and the United States. Sponsored by Mayo Clinic Department of Radiation Oncology and Japan National Institute of Radiological Sciences and Fermi National Accelerator Laboratory/Northern Illinois University. May 2-3, 2013
- Invitation to speak at the 16th International Symposium on Microdosimetry (MICROS 2013) to be held in Treviso, Italy. Oct 20-25, 2013. Talk entitled, “Current status of Auger Emitter Research” to be given in the Auger
- LS Yasui. Imaging cytometry of radiation-induced translocation of HMGB1. Paper selected for platform presentation in the Pharmacology session at Microscopy and Microanalysis meeting in Indianapolis, In. Aug 6-8, 2013.
- LS Yasui, K Owens, A Schuck, K Allen, A Recendiz, T Kroc, C Andorf. Comparison of autophagy in glioblastoma multiforme cells irradiated with gamma rays, fast neutrons, a mixed beam containing thermal neutrons or gadolinium neutron capture. Poster presented at the 59th Annual meeting of the

Radiation Research Society in New Orleans, LA. Sept. 14-18, 2013

LS Yasui, K Owens, M Foster, W Miter. Radiation-induced necrosis in glioblastoma multiforme compared to normal human astrocytes. 60th Annual Radiation Research Society meeting. Las Vegas, NV. Sept. 21-24, 2014.

Maria Duran, Alejandro Velazquez, Hannah Savage, Elle Baker, Abraham Baker, Linda Yasui. Measurement of Autophagic Flux in γ Irradiated GBM Cells. Phi Sigma Poster Show. April 11, 2015.

Linda S Yasui, Alejandro Velazquez, Megan Johnson, McKenzie McCart, Scott Grayburn, Rich Becker Engineering GBM cells to stably express a tandem autophagy marker protein: LC3b-eGFP-mCherry. Phi Sigma Poster Show. April 11, 2015

Hannah Savage, Abe Baker, Elle Baker, Maria Duran, Linda S. Yasui. Enhancing radiation sensitivity in human brain cancer cells through metformin-induced autophagy. Phi Sigma Poster Show. April 11, 2015

Hannah Savage, Abe Baker, Elle Baker, Maria Duran, Linda S. Yasui. Enhancing radiation sensitivity in human brain cancer cells through metformin-induced autophagy. University Research and Artistry Day poster show. April 16, 2015. **HONORABLE MENTION STEM AWARD**

Maria Duran, Alejandro Velazquez, Hannah Savage, Elle Baker, Abraham Baker, Linda Yasui. Measurement of Autophagic Flux in γ Irradiated GBM Cells. University Research and Artistry Day poster show. April 16, 2015. **3rd place STEM AWARD**

Roxana Moraga and Linda S Yasui. Radiation-induced necrosis in human brain cancer cells. University Research and Artistry Day poster show. April 16, 2015.

LS Yasui, M Johnson, H Savage, A Baker, E Baker, C Burns. Measurement of radiation-induced autophagic flux in human brain cancer cells Microscopy and Microanalysis meeting, Portland, OR Aug 2-6, 2015.

LS Yasui, M Duran, C Andorf, T Kroc, K Owens, K Allen-Durdan, A Schuck, WS Grayburn, R Becker. Autophagic flux in glioblastoma cells. 8th International Meeting on Physical, Molecular and Cellular Aspects of Auger Processes. Kyoto, Japan. May 20-22, 2015.

LS Yasui. Closing statements for the 8th International Meeting on Physical, Molecular and Cellular Aspects of Auger Processes. Kyoto, Japan. May 20-22, 2015.

OTHER PROFESSIONAL INFORMATION:

Seminars:

"DNA Damage Repair and Cytotoxicity in CHO Cells Having Decondensed Chromatin," 1985. Invited presentation at the International Symposium on DNA Damage in Cells, Gaithersburg, MD.

"Cytotoxicity of ¹²⁵I decay," 1986. Invited seminar at the British Columbia Cancer Research Center, Vancouver, British Columbia, Canada.

"Cytotoxicity of ¹²⁵I decay Produced Lesions in Chromatin," 1987. Invited talk at the International Workshop on DNA Damage by Auger Emitters, Oxford, England.

- "Cytotoxicity of ^{125}I decay in Chromatin," 1988. Invited seminar at University of Kentucky, Dept. of Radiation Medicine, Lexington, Kentucky.
- "DNA Damage by ^{125}I -iodine Decay." Invited talk for the Great Lakes Radiobiology Club. NIU, DeKalb, IL. June 12, 1989.
- "Localization of ^{125}I Decays in the Nucleus," Invited seminar at Florida State University, Dept. Biological Sciences, Tallahassee, Florida. Feb. 27, 1992.
- "DNA Damage Produced by ^{125}I Decay." Biochemistry seminar series at NIU. Mar. 11, 1994.
- "Molecular Advances with Auger Emitters." Invited talk at 10th International Congress of Radiation Research, Wurzburg, Germany. Aug. 27, 1995.
- "Nuclear Matrix in xrs-5 Cells." Invited talk as part of Nuclear Matrix Workshop at Radiation Research meeting. Chicago, IL. Apr. 14-17, 1996.
- "Detection of Ku p70 and p80 in CHO K1 and xrs-5 Cells." Invited talk at Scanning Meetings. Chicago, IL. April 13, 1999.
- "Production of Clustered DNA Damage by ^{125}I -estrogen in MCF7 Cells." Invited talk at 4th International Symposium on Biophysical Aspects of Auger Emitters. Lund, Sweden. July 15-16, 1999.
- " ^{125}I U Decay and γH2AX Foci." Invited talk at 5th Auger Symposium in Melbourne, Australia as part of the 13th International Congress of Radiation Research. Aug. 13-15, 2003.
- "Genetic Instability in Cancer." Invited talk for a high school science teachers program called New Ideas in Science NIU, March 8, 2004.
- "Genetic Instability in Human Tumors". NIU Sigma Xi Brown Bag lunch talk, Sept. 23, 2004.
- "Imaging radiation induced γH2AX foci." Invited talk in Cell biology session held in the Microscopy and microanalysis meeting. Navy Pier, Chicago, IL July 30 – Aug.3, 2006.
- "Imaging γH2AX foci." Invited talk - part of the *γH2AX – what does it mean? workshop*. 53rd Annual Meeting of the Radiation Research Society with ASTRO. Philadelphia, PA Nov 5-8, 2006
- "The DNA damage response induced by fast neutrons." Invited presentation as part of the *Particle Radiation Effects minisymposium*. 53rd Annual Meeting of the Radiation Research Society with ASTRO. Philadelphia, PA Nov 5-8, 2006.
- Podcast for Radiation Research on my research (with Amin Kasis). April 2007.
- "Gadolinium neutron capture in glioblastoma multiforme" talk as part of the Medical Physics topics in NIU Physics department. Oct. 5, 2007.
- LS Yasui. Invited opening address for the 7th International Symposium on Physical, Molecular, Cellular and Medical Aspects of Auger Processes 2011. Julich, Germany. August 24-26, 2011. Title of talk: Progress in Understanding the Biological Effects of Auger Emitters.

Research Awards:

Graduate Opportunities Program Fellowship Trainee, 1980-83.

"Radiosensitivity of DNA Subfractions," 1983, Sigma Xi, Grants-in-aid of Research.

Radiation Research Travel Award, 1983.

Radiation Biology and Experimental Oncology Training, 1983-85, NCI Training Grant, Professional Staff.

"¹²⁵I-Induced Cytotoxicity of Specific Genomic Sequences," 1986, American Cancer Society Seed Grant, Principal Investigator.

"Preclinical and Clinical Cancer Research: Hyperthermia," 1985-87, NCI Program Project Grant, Project Director.

"Cytotoxicity of ¹²⁵I Decay Produced Lesions in Chromatin," 1987-92, NCI Grant, \$350,000, Principal Investigator.

"Electron Microscopic Studies of Plant Growth," 5/90-5/92, to date \$24,000, funding from private company: L & F Enterprises, Inc., Co-investigator with Dr. L. Hanzely

"Role of Chromatin Structure in Radiation-induced Cell Killing." \$6,030, Summer 1994. Faculty Research Participation, Division of Educational Programs, Argonne National Lab with Jeff Schwartz.

"DNA damage in estrogen receptor expressing cells by ¹²⁵I. 7/1/97-6/30/01, NCI AREA grant, \$105,750.

"Acquisition and Initial Characterization of Glioblastoma multiforme" NIU, Dept. Biological Sciences Productivity Award. \$2000. Nov. 2003

"Targeted Radiotherapy of Human Brain Cancer". URAP Spring 2004. \$500 for Diana Guse (undergrad) and \$150 for lab commodities.

"Fractionated Irradiation of Human Brain Glioblastoma multiforme (GBM) Cells". Submitted to NIU Foundation Venture Grant. Funded by LA&S for \$8,000. Feb. 12, 2004.

"Targeted Radiotherapy of Glioblastoma multiforme". Dec. 2004. NIU, Dept. Biological Science Productivity award. \$2,500.

"Targeted Radiotherapy of Glioblastoma multiforme. Nov, 2005. NIU, Dept. Biological Science Productivity Award. \$2,500.

"The DNA damage response in neutron irradiated human brain glioblastoma multiforme (GBM) cells". Linda Yasui and Arlene Lennox. April 28, 2006 – April 27, 2007. NIU Foundation Venture Grant for \$21,000.

"Persistent γ H2AX foci: a biomarker for fast neutron radiosensitivity in glioblastoma multiforme." Letter of Intent submitted to The Brain Tumor Society for \$96,000. 1/16/07 Not asked to submit full proposal.

"Enhancing radiation induced cell death using Gadolinium neutron capture augmented fast neutron irradiation of glioblastoma multiforme cells". Letter of Intent submitted to The Brain Tumor Society for \$100,000. 1/16/08. Not asked to submit full proposal.

Sabbatical request submitted to Biology department Aug 8, 2008. Approved Nov. 26, 2008.

Research Incentive commodities (\$2,600) approved by Biology department on Nov. 13, 2008.

DOD neutron research. Gadolinium neutron capture in glioblastoma multiforme. \$492,131. Sept 1, 2010-Aug 30, 2014.

Departmental Incentive funds. Fall 2014. \$751.00

Referee:

Radiation Research

Science

Journal of Cellular Physiology

International Journal of Radiation Biology

DNA Damage by Auger Emitters, K.F. Baverstock, D.E. Charlton, eds.

Scanning Microscopy

Biophysical Aspects of Auger Processes. R.W. Howell, V.R. Narra, K.S.R. Sastry, D.V. Rao

Mutation Research

Journal of Nuclear Medicine Technology

Journal of Functional Biomaterials

Current Cancer Drug Targets

PLOS

International Journal of Nanomedicine

Radiation and Environmental Biophysics

Anti-Cancer Agents in Medicinal Chemistry

Other:

Visiting Scientist Fermilab 6/28/04-present.

Lab Safety Training certificate and Radiation Safety Training certificate for Fermi National Lab. July, 2004.

Certified Radiation user certificate for Fermi National Lab, July 2006.

Scientific advisor for The 6th International Symposium on the Physical, Molecular, Cellular and Medical Aspects of Auger Processes, Boston, MA July 5-7, 2007.

Cellular effects session chair for The 6th International Symposium on the Physical, Molecular, Cellular and Medical Aspects of Auger Processes, Boston, MA July 5-7, 2007.

Renewal of Certification as a Radiation User at Fermi National lab, July 2008.

Member of the organizing committee for the 7th International Symposium on Physical, Molecular, Cellular and Medical Aspects of Auger Processes. In Julich, Germany. 2011.

Cellular effects session chair for The 6th International Symposium on the Physical, Molecular, Cellular and Medical Aspects of Auger Processes. In Julich, Germany. 2011.

Member of the organizing committee for the 8th International Symposium on Physical, Molecular, Cellular and Medical Aspects of Auger Processes. In Kyoto, Japan. May 20-22, 2015.

Cellular effects session chair for The 6th International Symposium on the Physical, Molecular, Cellular and Medical Aspects of Auger Processes. In Kyoto, Japan. May 20-22, 2015.