Publication/Presentation List – Past and Present CaRTT Awardees

Awardee's Name: Arulsundaram, Vishnuka

Meng X, Arulsundaram V, Yousef A, Webb P, Baxter J, Mymryk J and Walfish P (2006) Corepressor/coactivator paradox: potential constitutive coactivation by corepressor splice variants. *Nucl Recept Signal* **4:**e022.

Awardee's Name: Babic, Steven

Babic, S, Battista J and Jordan K. Radiochromic leuco dye micelle hdrogels: II. Low diffusion rate leuco crystal violet gel. ***Physics in Medicine and Biology.*** (In press)

Babic, S, Battista J and Jordan K. Three-dimensional dosimetry of small megavoltage radiation fields using radiochromic gels and optical CT scanning 2009 Phys. Med. Biol. **54** 2463-81

Babic S, Battista J and Jordan K. An apparent threshold dose response in ferrous xylenol-orange gel dosimeters when scanned with a yellow light source. Phys. Med. Biol. 53 (2008) 1637-50

Babic S, Battista J and Jordan K. Three-dimensional dose verification for intensity-modulated radiation therapy in the Radiological Physics Centre head-and-neck phantom using optical computed tomography scans of ferrous xylenol-orange gel dosimeters. Int. J. Radiation Oncology Biol. Phys. Vol.70, No.4, 1281-91 **TOP 5 PUBLICATION**

Babic, S, and L.J. Schreiner (2006). An NMR relaxometry and gravimetric study of gelatin-free aqueous polyacrylamide dosimeters. ***Physics in Medicine and Biology*** 51:4171-4187 **TOP 5 PUBLICATION**

S Babic, K Jordan, J Battista. An intercomparison of RPC verified IMRT plans with ferrous xylenol orange gels and optical CT scanners. 49th annual meeting of the American Association of Physicists in Medicine (AAPM), Minneapolis, Minnesota (July 2007). ***Medical Physics*** 32:2136.

S Babic. Intensity-modulated radiation therapy treatment verification using three-dimensional ferrous xylenol-orange gel dosimeters and optical CT. Western Graduate Forum. The University of Western Ontario, London, ON (May 2007). Placed 1st in the oral competition.

Awardee's Name: Bateman, Katherine

Bateman KS. Structure/function analysis of the peptidyl-prolyl isomerase Pin1. Oncology Research and Education Day, University of Western Ontario, May, 2005.

Behrsin CD, Bateman KS, Hamilton KS, Wahl LM, Brandl CJ, Shilton SH, Litchfield DW. Functionally important residues in the peptidyl-prolyl isomerase Pin1 revealed by unigenic evolution. ***Molecular and Cellular Biology*** (in revision). **TOP 5 PUBLICATION**

Awardee's Name: Beausoleil, Michel

Wiebe, J.P., Beausoleil, M., Zhang, G., Cialacu, V. (2009). Opposing actions of the progesterone metabolites, 5α-dihydroprogesterone (5αP) and 3 α –dihydroprogesterone (3αHP) on mitosis, apoptosis, and expression of Bcl-2, Bax and p21 in human breast cell lines. *The Journal of Steroid Biochemistry and Molecular Biology.* Submitted.

Beausoleil, M.S., and Allan, A.L. (2009) Osteopontin Signaling in Cancer Progression & Metastasis. In: El-Tanani, M. ed. *Cancer*. Research Signpost. Published.
Primary author.

Zhang, G., Beausoleil, M. and Wiebe, J.P. (2007). Opposing Effects of the Progesterone Metabolites, 5α-Dihydroprogesterone (5αP) and 3α-Dihydroprogesterone (3αHP) on Bcl2/Bax Expression Ratio and Apoptosis in MCF-7 Breast Cancer Cells [Abstract]. *ENDO 2007, Toronto.*

Wiebe, J.P., Zhang, G., Beausoleil, M.S. (2008). Breast Cancer Regulation by Progesterone Metabolites: the Opposing Actions of 5α-Dihydroprogesterone (5αP) and 3α-Dihydroprogesterone (3αHP) on Mitosis and Apoptosis [Abstract] *CBCRA Reasons for Hope 2008, Vancouver*.

Book Chapter - Beausoleil, M.S., and Allan, A.L. Osteopontin Signaling in Cancer Progression & Metastasis. In: El-Tanani, M. ed. *Cancer*. Research Signpost. In press

Awardee's Name: Chang, Wing Yean

Hotta A.H., Cheung A.Y.L., Farra N., Garcha K., Chang W.Y., Pasceri P., Stanford W.L., and Ellis J. (2009). EOS Lentiviral Vector System for Human Induced Pluripotent Stem Cells. *Nature Protocols (in Press)*

Walker E., Chang W.Y., Hunkapiller J., Cagney G., Garcha K., Torchia J., Krogan N., Reiter J., and Stanford W.L. (2008). The PRC2 Associated Protein Pcl2 is Required for Mouse Embyronic Stem Cell Commitment. *(Submitted to Cell Stem Cell).*

Chang W.Y. and Stanford W.L. (2008). Translational Control: A New Dimension In Embryonic Stem Cell Transcriptional Network Analysis. *Cell Stem Cell (Preview Article)* **2(5)**:410-412.

Ho E., Chang W.Y., and Dagnino L. (2008). Expression and Analysis of Exogenous Proteins in Epidermal Cells. *Methods in Molecular Biology (in Press)*

Chang WY, Andrews J, Carter DE, Dagnino L. Differentiation and injury-repair signals modulate the interaction of E2F and pRB proteins with novel target genes in keratinocytes. *Cell Cycle.* 2006 Aug; 5(16):1872-9. Epub 2006 Aug 15 **TOP 5 PUBLICATION**

Chang WY and Dagnino L. Role of E2F Factors During Epidermal Morphogenesis. Department of Genetics, UCLA, Los Angeles, CA, May 2006.

Chang WY and Dagnino L. Role of E2F Factors During Epidermal Morphogenesis. Department of Biomedical and Biomaterials Engineering Department, University of Toronto, Toronto, Canada, August 2006.

Voskas D, Jones N, Van Slyke P, Sturk C, Chang W, Haninec A, Babichev YO, Tran J, Master Z, Chen S, Ward N, Cruz M, Jones J, Kerbel RS, Jothy S, Dagnino L, Arbiser J, Klement G, Dumont DJ. A cyclosporine-sensitive psoriasis-like disease produced in Tie2 transgenic mice. *American Journal of Pathology*. 2005 Mar;166(3):843-55. **TOP 5 PUBLICATION**

Chang WY, Dagnino L. Analysis of E2F factors during epidermal differentiation. *Methods in Molecular Biology.* 2005;289:147-56.

Chang WY, Bryce DM, D'Souza SJ, Dagnino L. The DP-1 transcription factor is required for keratinocyte growth and epidermal stratification. *Journal of Biological Chemistry* 2004 Dec 3;279(49):51343-53. Epub 2004 Sep 24. **TOP 5 PUBLICATION**

Awardee's Name: Cook, Amy

Cook AC, Chambers AF, Turley EA, Tuck AB. Osteopontin induction of hyaluronan synthase 2 expression promotes breast cancer malignancy. J Biol Chem. 2006 Aug 25;281(34):24381-9. Epub 2006 Jun 28. **TOP 5 PUBLICATION**

Khan SA*, Cook AC*, Kappil M, Gunthert U, Chambers AF, Tuck AB, Denhardt DT. Enhanced cell surface CD44 variant (v6, v9) expression by osteopontin in breast cancer epithelial cells facilitates tumor cell migration: novel post-transcriptional, post-translational regulation. Clin Exp Metastasis. 2005;22(8):663-73. Epub 2006 May 12.

Awardee's Name: Courtis, Patrick

Patrick Courtis, Abbas Samani: Detecting Mechanical Abnormalities in Prostate Tissue Using FE-Based Image registration. MICCAI(2) 2007: 244-251

P. R. Courtis and A. Samani: Prostate Ultrasound Elastrography Using Finite-Element Image Registration: at the Imaging Network Ontario (INO) 6th Annual Imaging Symposium, Toronto, Ontario, Canada, March 28-29, P. 31, 2007

P. R. Courtis and A. Samani: Prostate Ultrasound Elastrography Using Finite-Element Image Registration: 26th Annual Canadian Biomaterials Society Meeting, University of Western Ontario, London, ON, May 25 -2 7, 2007

P. R. Courtis and A. Samani: Prostate Ultrasound Elastrography Using Finite-Element Image Registration: Imaging Network of Ontario (INO), 5th Annual Imaging Symposium, Toronto, ON, April 3 – 6, 2006

P. R. Courtis and A. Samani: Biomechanical Registration of Prostate Images Using Statistical Shape Models: Medical Imaging SPIE, 6143 – 37, 2006

Awardee's Name: Cowan, Kyle

Canadian Pediatric Thyroid Nodule (CaPTN) Study Group (Stevens C, Al-Mahmeed H, Blair G, Prasil P, Haider F, Sweeney B, Cowan K, Butter A, deBuys Roessingh A, Bouchard S, Weinsheimer R, Yanchar N, Jones S, Alfadhli W, Fitzgerald P, Ryckman J, Puligandla P). The Canadian Pediatric Thyroid Nodule Study: an evaluation of current management practices. J Pediatr Surg. 2008 May;43(5):826-30.

Penuela S, Bhalla R, Gong XQ, Cowan KN, Celetti SJ, Cowan BJ, Bai D, Shao Q, Laird DW. Pannexin 1 and pannexin 3 are glycoproteins that exhibit many distinct characteristics from the connexin family of gap junction proteins. J Cell Sci. 2007 Nov 1;120(Pt 21):3772-83. Epub 2007 Oct 9.

Awardee's Name: Croker, Alysha

Croker AK, Goodale D, Chu J, Postenka C, Hedley BD, Hess DA, and Allan AL. High aldehyde dehydrogenase and expression of cancer stem cell markers selects for breast cancer cells with enhanced malignant and metastatic ability. Journal of Cellular and Molecular Medicine, 2008. Epub ahead of print. PMID: 18681906

Croker AK and Allan AL. Cancer stem cells: implications for the progression and treatment of metastatic disease. Journal of Cellular and Molecular Medicine 2008; 12(2):374-90.

Croker AK, Townsend J, Allan AL, Chambers AF. (2008). Chapter 21: Tumor dormancy, metastasis, and cancer stem cells. Book title: Cancer and Stem Cells. Editors: Rebecca G. Bagley, Beverly A. Teicher

Awardee's Name: Daoud, Mohammad

S. Yi-Ting, **M.I. Daoud,** and J.C. Lacefield, "Computational models of distributed aberration in ultrasound breast imaging," IEEE Trans. Ultrason. Ferroelect. Freq. Contr., submitted Nov. 2006 (Manuscript no. TUFFC-02908-2008).

M.I. Daoud and J.C. Lacefield, "Stochastic modeling of murine liver microanatomy for high-frequency ultrasound imaging simulations," Sixth International Conference on Ultrasonic Biomedical Microscanning, Malibu, CA, Sept. 23-26, 2008.

M.I. Daoud and J.C. Lacefield, "Parallel three-dimensional simulation of ultrasound imaging," 22nd International Conference on High-Performance Computing Systems and Applications, High Perform. Comp. Sys. Appl., pp. 146-152, 2008.

M.I. Daoud and J.C. Lacefield, "Efficient three-dimensional simulation of ultrasound imaging using a parallel *k*-space method," 31st Canadian Biomedical Engineering Conference, Montreal, QC, June 11-12, 2008.

Daoud, M.I., and Lacefield, J. C. "Distributed Three-Dimensional Simulation of Ultrasound Imaging Using a First-Order *k*-space method." To be submitted to IEEE transactions on Ultrasonics, Ferroelectrics, and Frequency Control (submitted)

Daoud, M. I., Shen, Y. T., and Lacefield, J.C. "A scalable parallel implementation of a *k*-space method for large-scale ultrasound imaging simulations," Proc. 2006 IEEE International Ultrasonics Symposium, pp 2194-2197, October 2006.

Daoud, M.I., Shen, Y.T., and Lacefield, J.C. "A scalable parallel implementation of a *k*-space method for large-scale ultrasound imaging simulations" 2006 IEEE International Ultrasonics Symposium, Vancouver, Canada, October 2006. Poster Presentation.

Daoud MI, Shen YT, Lacefied JC. A scalable parallel implementation of a *k*-space method for large-scale ultrasound imaging simulations. Western Engineering's 6th Annual Research Day, UWO, January 2007.

Daoud MI, Lacefield JC. A scalable parallel implementation of a *k*-space method for large-scale ultrasound imaging simulations. Second Annual Canadian Student Conference on Biomedical Computing, London, ON March 2007

Daoud MI, Lacefield JC. Three-dimensional computational modeling of preclinical ultrasound cancer imaging. London Imaging Discovery, London, Ontario June 2007

Daoud MI, Lacefield JC. Three-dimensional computational modeling of preclinical ultrasound cancer imaging. Oncology Research & Education Day, London ON, June 2007

Daoud M. A scalable parallel implementation of a *k*-space method for large-scale ultrasound imaging simulations. Graduate Symposium, Department of Electrical and Computer Engineering, UWO, July 2007

Awardee's Name: DeJean, Paul

De Jean, P., L. Beaulieu, A. Fenster (2009), "3-Dimensional Ultrasound System for Guided Breast Brachytherapy," (Accepted to Medical Physics)

De Jean, P., M. Brackstone, A. Fenster (2009), "An intra-operative 3D-ultrasound system for tumour margin determination in breast cancer surgery," (Accepted to Medical Physics)

Poster Presentation: London Imaging Discovery, London, Ontario, June 16th, 2007

Awardee's Name: Disher, Brandon

Disher B, Kempe J, Gaede S, Hajdok G and Battista J J. Pixel-based analysis of registered CT images from IGRT systems, Physics in Medicine and Biology, Submitted 2009

Awardee's Name: Duncan, Kelly (Rigby)

Duncan, K.E., Killip, L., Adams, J., Bailey, M.L., Parker, E., Shilton, B.H., Shaw, G.S., Brandl, C.J. and Litchfield, D.W. (2008) Non-phosphorylated, cyclic peptides identified as novel inhibitors of the peptidyl prolyl isomerase, Pin1. *In Preparation.*

Rigby Duncan, K.E., Gullons, M. and Stillman, M.J. (2008) Two structural motifs identified for the metal-free alpha domain of human metallothionein 1a – a kinetic study. *In Preparation.*

Rigby Duncan, K.E., Kirby, C.W. and Stillman, M.J. (2008) Metal exchange in metallothioneins – a novel structurally significant Cd_5 species in the alpha domain of human metallothionein 1a. FEBS J. 279. 2227-2239. **TOP 5 PUBLICATION**

Rigby Duncan, K.E. and Stillman, M.J. (2007) Evidence for non-cooperative metal binding to the alpha domain of human metallothionein. FEBS J. 274. 2253-2261. **TOP 5 PUBLICATION**

Rigby Duncan, K.E. and Stillman, M.J. (2006) Metal-dependent protein folding: Metallation mechanisms and structural aspects of metallothionein. J. Inorg. Biochem. 100. 2101-2107.

Rigby Duncan, K.E., Ngu, T.T., Chan, J., Salgado, M.T., Merrifield, M.E. and Stillman, M.J. (2006) Peptide Folding, Metal-Binding Mechanisms, and Binding Site Structures in Metallothioneins. Exp. Biol. Med. 231, 1488-1499.

Rigby Duncan, K.E. and Stillman, M.J. (2006) Kinetic and molecular dynamic studies on the metal-dependent folding of metallothionein. Experimental Biology meeting abstracts [url not currently available]. FASEB J. 20, Abstract #340.4.

Rigby, K.E., Chan, J., Mackie, J. and Stillman, M.J. (2006) Molecular dynamics study on the folding and metallation of the individual domains of metallothionein. Proteins 62, 159-172.

Rigby, K.E. and Stillman, M.J. (2004) Structural studies of metal-free metallothionein. Biochem. Biophys. Res. Commun. 325, 1271-1278.

Awardee's Name: Duncan, James

Kerman K, Song H, Duncan JS, Litchfield DW, Kraatz HB. Peptide Biosensors for the Electrochemical Measurement of Protein Kinase Activity.
Anal Chem. 2008 Nov 7. [Epub ahead of print] PMID: 18989981 [PubMed - as supplied by publisher]

Vilk G, Weber JE, Turowec JP, Duncan JS, Wu C, Derksen DR, Zien P, Sarno S, Donella-Deana A, Lajoie G, Pinna LA, Li SS, Litchfield DW. Protein kinase CK2 catalyzes tyrosine phosphorylation in mammalian cells. Cell Signal. 2008 Nov;20(11):1942-51. Epub 2008 Jul 6. PMID: 18662771 [PubMed - in process]

Duncan JS, Gyenis L, Lenehan J, Bretner M, Graves LM, Haystead TA, Litchfield DW. An unbiased evaluation of CK2 inhibitors by chemoproteomics: characterization of inhibitor effects on CK2 and identification of novel inhibitor targets. Mol Cell Proteomics. 2008 Jun;7(6):1077-88. Epub 2008 Feb 7. PMID: 18258654 [PubMed - indexed for MEDLINE]

Duncan, JS., and Litchfield, DW. (2007) Too much of a good thing: The role of CK2 in tumorigenesis and prospects for therapeutic intervention of CK2. Bichimica et Biophysica Acta – Proteins and Proteomics, doi: 10.1016/j.bbapap.2007.08.017.

Zien P, Duncan JS, Skierski J, Bretner M, Litchfield DW, Shugar D. (2005). Tetrabromobenzotriazole (TBBt) and tetrabromobenzimidizole (TBBz) as selective inhibitors of protein kinase CK2: Evaluation of their effects on cells and different molecular forms of human CK2. *Biochimica and Biophysica Acta*, 1754:271-280.

Duncan JS, Litchfield DW. (2006) Identification of CK2 dependent inhibitors: evidence for a rold of CK2 in cell survival. FASEB Journal, Volume 20 No 4, Part 1, march 6, 2006, abstracts 7.1-485.10.

Duncan JS, and Litchfield DW (2007). Characterizing CK2 Inhibitors Using Functional Proteomics. 5th International Conference, Inhibitors of Protein Kinases. Warsaw, Poland, June 23-28, 2007.

Duncan JS, and Litchfied DW (2007). Working Towards Knowledge Based Cancer Therapeutics. Daffodil Month Kick-off Breakfast, Canadian Cancer Society, Sarnia, March 22, 2007.

Dundan, JS, and Litchfield DW (2007). Working Towards Knowledged Based Cancer Therapeutics. Trillium Cancer Camp Teen Conference, Simcoe, Canada, March 17, 2007.

Duncan JS, Litchfield DW. (2006) Investigating the efficacy of CK2 inhibitors using functional proteomics. UWO Oncology Research and Education Day, June 2006.

Duncan JS, Litchfield DW. (2006). Identification of CK2 dependent inhibitors: evidence for a role of CK2 in cell survival. ASBMB Annual Meeting and Centennial Celebration, San Francisco, CA, April 1-5, 2006.

Zien P, Duncan JS, Litchfield DW, Skierski J, Bretner M, Shugar D (2005). Inhibitors of protein kinase CK2 and their influence on activities of different forms of human CK2, and the cell cycle. 4th International Conference of Inhibitors of Protein Kinase and workshop on Modeling of Specific Molecular Recognition Processes. Warsaw, Poland, June 2005.

Duncan JS, Litchfield DW. (2005). Investigating the role of CK2 in cell curvival. UWO Oncology Research and Education Day, May 2005.

Awardee's Name: Fard, Shireen

Fard, SF, Hamilton SR, Tolg C, Paiwand F, Bissell M, Koropatnick J, Turley EA. CDD44 and RHAMM act coordinately through ERK to regulate cell motility. ***Journal of Biological Chemistry*** 282(22):16667-16680. **TOP 5 PUBLICATION**

Berg RW, Jason TLH, Fard SF, Wong TS, Pandyra A, Flynn J, Vincent MD, Ferguson PJ, Koropatnick J. (2006). Manipulating thymidylate synthase expression using antisense technologies to improve the antitumour efficacy of antifolates. Proc. 13th Int. Symp. On Chem. And Biol. Of Pteridines and Folates, Kluwer Academic Publishers (in press).

Fard SF, Yang Y, Shu XZ, Prestwich GP, Winnik FW, Turley EA and Koropatnick DJ. The use of hyaluronan to target antisense oligonucleotides. *The 96th Annual Meeting of the American Association of Cancer Research.* Anaheim, California, USA, April 16-20, 2005.

Fard SF, Yang Y, Shu XZ, Prestwich GP, Winnik FW, Turley EA and Koropatnick DJ. The use of hyaluronan to target antisense oligonucleotides. *Cancer Research Across the Spectrum: National Meeting for Trainees, CIHR Strategic Training in Cancer Research and Technology Transfer.*Mont Tremblant, Quebec, Canada, May 9-11, 2005.

Fard SF, Yang Y, Shu XZ, Prestwich GP, Winnik FW, Turley EA and Koropatnick DJ. The use of hyaluronan to target antisense oligonucleotides. *The 96th Annual Meeting of the American Association of Cancer Research.* Anaheim, California, USA, April 16-20, 2005.

Awardee's Name: Francis, Sarah

Francis SM, Bergsied J, Isaac CE, Coschi CH, Martens AL, Hojilla CV, Chakrabarti S, DiMattia GE, Khoka R, Wang JY, Dick FA. A functional connection between prB and transforming growth factor beta in growth inhibition and mammary gland development. Molecular Cell Biology 29(16):4455-66. 2009.

Sarah M. Francis, Jacqueline Bergsied, Courtney H. Coschi, Christian E. Isaac, Alison L. Martens, Carlo V. Hojilla, Subrata Chakrabarti, Gabriel E. DiMattia, Rama Khoka, Jean Y. J. Wang, Frederick A. Dick A unique connection between pRB and TGFβ in mammary gland development (In preparation)

Srikanth Talluri, Christian E. Isaac, Mohammad Ahmad, Shauna A. Lee, **Sarah M. Francis**, Alison L. Martens, Rod Bremner, and Frederick A. Dick. A Senescence Specific Checkpoint Mediated by the Retinoblastoma Protein (in preparation)

Francis, S, Coschi, C, Isaac, C, Hojilla, C, Bergsied, J, Chakrabarti, S, DiMattia, G , Khoka, R, Wang, J, Dick, F A unique connection between pRB and TGFβ in mammary gland development. *Mechanisms & Models of Cancer*, Cold Spring Harbour, New York, August 2008

Francis, S, Coschi, C, Isaac, C, Hojilla, C, Bergsied, J, Chakrabarti, S, DiMattia, G, Khoka, R, Wang, J, Dick, F. **A unique connection between pRB and TGFβ in mammary gland development.** The University of Western Ontario, Department of Oncology, *5th Annual Research and Education Day*, London, Ontario, June 2008

Sarah Francis, Courtney Coschi, Christian Isaac, Carlo Hojilla, Jacqueline Bergsied, Subrata Chakrabarti, Gabe DiMattia, Rama Khoka, Jean Wang, and Fred Dick A unique connection between pRB and TGFβ in mammary gland development. *Paediatric Research Day*, London Health Sciences Centre, University of Western Ontario, May 21, 2008 (abstract selected for oral presentation)

Francis, S.M., Martens, A.L., Isaac, C.E., and Dick, F.A. Loss of pRB chromatin regulation leads to defective mammary gland development and tumorigenesis. *Making Connections: A Canadian Cancer Research Conference Celebrating NCIC's 60th Anniversary*, Toronto, Ontario, November 15-17, 2007 (selected as student representative for the LRCP)

Isaac, C.E., **Francis, S.M.**, Talluri, S. and Dick, F.A. pRB uses LXCXE interactions to establish a senescent cell cycle arrest as part of its tumor suppressive function. *Molecular Biology of Small DNA Tumour Viruses*, Trieste, Italy, July 2007. (Abstract selected for oral presentation)

Francis, S.M., Martens A., Isaac C.E., Talluri S., and Dick F.A. pRB chromatin regulation is necessary for mammary gland development and tumour suppression. The University of Western Ontario, Department of Oncology, *4th Annual Research and Education Day*, London, Ontario, June 22, 2007. (Abstract selected for oral presentation; awarded honourable mention)

Truesdell, P., **Francis, S**., and Greer, P. (2004) The Fps/Fes Protein Tyrosine Kinase is a Component of the Adherens Junction in the Murine Mammary Gland during Lactation. *44th Annual Meeting of the American Society for Cell Biology*, Washington DC, December 2004.

Awardee's Name: Gagliardi, Anthony

Gagliardi AD, Kuo EY, Raulic S, Wagner GF, DiMattia GE. Human stanniocalcin-2 exhibits potent growth-suppressive properties in transgenic mice independently of growth hormone and IGFs. American journal of physiology. Endocrinology and metabolism 2005 Jan;288(1):E92-105. Epub 2004 Sep 14.

Awardee's Name: Gladwish, Adam

Gladwish, A., Oliver, M., Craig, J., Chen, JZ., Bauman, G., Fisher, B., and Wong, E., Segmentation and leaf sequencing for intensity modulated arc therapy. Med Phys., 34(5), 2007. **TOP 5 PUBLICATION**

Craig, J., Gladwish, A., Oliver, M., Mulligan, M., Chen, JZ., and Wong, E. Commissioning fast Monte Carlo for treatment planning. J. App. Clin. Med. Phys. In press 2007.

Gladwish, A., McNiven, A., Picot, P., Holdsworth, D., Lee, T-Y., and Wong, E. A feasibility study on the use of CT scanners for small animal irradiation. American Association of Medical Physics Conference, Minneapolis 2007, Oral Presentation.

Gladwish, A., Oliver, M., Craig, J., Gaede, S., Chen, J., Wong, E. Dose delivery uncertainties with intra-fraction motion: comparison of tomotherapy, IMAT, and IMRT. International conference of computers in radiotherapy, Toronto 2007, Oral Presentation.

Awardee's Name: Goulet, Brigitte

B. Goulet and A. Nepveu, "CSTL1/Cathepsin L (9q22.1)" Atlas of Genetics and Cytogenetics in Oncology and Haematology. (Invited review accepted in January 2009)
URL: **http://AtlasGeneticsOncology.org/Genes/CTSL1ID40208ch9q21.html**

Awardee's Name: Graham, Kevin

R.J. Ward, L. Lee, **K.C. Graham**, T. Satkunendran, K. Yoshikawa, E. Ling, L. Harper, R. Austin, E. Nieuwenhuis, I. D. Clarke, C.C. Hui, and P. B. Dirks. Cancer Stem Cells Propagate Patched-1 Deficient Mouse Medulloblastomas. Submitted.

J. M. Kirstein, **K.C. Graham**, L.T. MacKenzie, D.E. Johnston, L.J. Martin, A.B. Tuck, I.C. MacDonald, and A. F. Chambers. Effect of anti-fibrinolytic therapy on experimental melanoma metastasis. **Accepted**, **in press.** Clinical Experimental Metastasis.

K. C. Graham, S.A. Detombe, L.T. MacKenzie, A.C. Groom, D. W. Holdsworth, I. C. MacDonald, A. F. Chambers, and M. Drangova. Contrast-enhanced microcomputed tomography using intraperitoneal contrast injection for the rapid assessment of tumor burden in preclinical liver metastasis models. Inv. Rad. 43: 488-495, 2008.

M. M. Stanford, M. Shaban, J.W. Barrett, S.J. Werden, P.A. Gilbert, J. Bondy-Denomy, L.T. MacKenzie, **K. C. Graham**, A.F. Chambers and G. McFadden. Myxoma virus oncolysis of primary and metastatic B16F10 mouse tumors in vivo. Mol Ther. 16: 52-59, 2008.

K.C. Graham, N.L. Ford, L.T. MacKenzie, C.O. Postenka, A.C. Groom, I.C. MacDonald, D.W. Holdsworth, M. Drangova, and A.F. Chambers. Noninvasive quantification of tumor volume in preclinical liver metastasis models using contrast-enhanced x-ray computed tomography. Invest. Rad. 43: 92-99, 2008.

Graham, KC., Detombe, SA., MacKenzie, LT., Groom, AC., Holdsworth, DW., MacDonald, IC., Chambers, AF., Drangova, M. Contrast-enhanced microcomputed tomography using

intraperitoneal contrast injection for the rapid assessment of tumour burden in preclinical liver metastasis models. Submitted.

Stanford, MM., Shaban, M., Barrett, JW., Werden, SJ., Gilbert, PA., Bondy-Denomy, J., MacKenzie, LT., Graham, KC., Chambers, AF., and McFadden, G. Myxoma virus oncolysis of primary and metastatic B16F10 mouse tumours in vivo. Molecular Therapy. In press.

Graham, KC., Ford, NL., MacKenzie, LT., Postenka, CO., Groom, AC., MacDonald, IC., Holdsworth, DW., Drangova, M., Chambers, AF. Noninvasive quantification of tumor volume in preclinical liver metastasis models using contrast-enhanced x-ray computed tomography. Investigative Radiology. In Press.

Ford NL, Graham KC, Groom AC, MacDonald IC, Chambers AF, Holdsworth DW. Time-course characterization of the computed tomography contrast enhancement of an iodinated blood-pool contrast agent in mice using a volumetric flat-panel equipped computed tomography scanner. Investigative Radiology. 41(41) 384-390, 2006.

Graham KC, Wirtzfeld LA, Lacefield JC, Chambers AF. Three-dimensional high-frequency ultrasound for imaging of preclinical liver metastases. In: Cancer Imaging, Hayat MA (ed). Elsevier Academic Press (in press)

Awardee's Name: Hajdok, George

Hajdok, G., Battista, JJ., Cunningham, IA. Fundamental x-ray interaction limits in diagnostic imaging detectors: spatial resolution. Submitted to Medical Physics (2007)

Hajdok, G., Battista, JJ., Cunningham, IA. Fundamental x-ray interaction limits in diagnostic imaging detectors: frequency-dependent swank factor. Submitted to Medical Physics (2007)

Hajdok G, Yao J, Battista JJ, Cunningham IA. Signal and noise transfer of correlated projection data in CT reconstruction. Submitted to Medical Physics (2007)

Hajdok G, Yao J, Battista JJ, Cunningham IA. Signal and noise transfer properties of photo-electric interactions in diagnostic x-ray imaging detectors. *Med. Phys*. 33, 3601-3620 (2006) **TOP 5 PUBLICATION**

Hajdok G, Cunningham IA, Battista JJ. The role of secondary photons from thick x-ray converters in megavoltage x-ray detectors: effects on zero-frequency DQE and spatial resolution. *Med. Phys.* (tentatively accepted – revisions) **TOP 5 PUBLICATION**

Allison M, Hajdok G, Battista JJ. An independent method for quality assurance of "isocentricity" in radiotherapy devices using focal spot CT measurements. 5th Annual Imaging Networks of Ontario (INO) Symposium, Toronto, ON (2006) (Poster)

Awardee's Name: Hickey, Jennifer

Hickey, JL., Luyt, LG. April 2007. An Integrated design for technetium-99m radiopharmaceuticals using pyridyl (NNS) chelation core. The 17th International symposium on radiopharmaceutical Sciences. Aachen, Germany. J. Labelled Compd. Rad. 2007: 50: S238.

Hickey, JL., Luyt, LG. November 2006. Integrated radiopharmaceutical design: the synthesis of metal chelates as turn mimetics. The 17th annual Quebec Ontario minisymposium in synthetic and bioorganic chemistry, London, Ontario (poster presentation).

Hickey, JL., Luyt, LG. February 2007. Turn mimetics for use as integrated radiopharmaceuticals. The 4th La Jolla Workshop on Receptor-Binding Radiopharmaceuticals. La Jolla, California (Oral presentation).

Awardee's Name: Hornblower, Victoria

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Role of Cx43 in Mammary Gland Development and Function: Potential Implications in Breast Cancer. Anatomy and Cell Biology Department Seminars, University of Western Ontario, February 1 2008, London, Ontario

Decreased Levels of Cx43 in Gja1$^{Jrt/+}$ mice results in Delayed Mammary Gland Development and Milk Ejection Defects. Gap Junction Research Day, January 11 2008, London, Ontario

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