Stanford



Martin Brown

Professor of Radiation Oncology, Emeritus

Adult Neurology

NIH Biosketch available Online

Bio

ACADEMIC APPOINTMENTS

- Emeritus Faculty, Acad Council, Adult Neurology
- Member, Bio-X
- Member, Stanford Cancer Institute

ADMINISTRATIVE APPOINTMENTS

- Director, Graduate Program in Cancer Biology, (1990-2002)
- Director, Division of Radiation and Cancer Biology, (1984-2004)

HONORS AND AWARDS

- Bruce Cain Memorial Award, American Association for Cancer Research (1999)
- Gold Medal, Americal Society for Therapeutic Radiology and Oncology (1999)
- Failla Memorial Award, Radiation Research Society (2000)
- Weiss Medal, Association for Radiation Research (2001)
- Henry S. Kaplan Distinguished Scientist Award, International Association for Radiation Research (2007)

PROFESSIONAL EDUCATION

- B.Sc, Birmingham University , Physics (1963)
- M.Sc, London University , Radiation biology and physics (1965)
- Ph.D, Oxford University , Cancer Biology (1968)

Research & Scholarship

CURRENT RESEARCH AND SCHOLARLY INTERESTS

We seek to understand the mechanisms responsible for the resistance of solid tumors to cancer therapies and to develop strategies to overcome these resistances. The main project is

We are investigating the role of bone marrow derived cells in restoring the tumor vasculature after radiotherapy (which destroys local angiogenesis). This process is known as vasculogenesis. In particular we seek to improve tumor cure rates by radiotherapy by inhibiting the repair of the tumor vasculature in GBM by circulating cells following radiation to the tumors by selective inhibition of the chemokine pathway(s) responsive for the mobilization and capture in the tumor of the circulating proangiogenic cells.

CLINICAL TRIALS

- Whole Brain Radiation Therapy With Standard Temozolomide Chemo-Radiotherapy and Plerixafor in Treating Patients With Glioblastoma, Not Recruiting

Teaching

GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Cancer Biology (PhD Program)

Publications

PUBLICATIONS

- **Radiation Damage to Tumor Vasculature Initiates a Program that Promotes Tumor Recurrences.** *International journal of radiation oncology, biology, physics*
  Brown, J. M.
  2020

- **Macrophage exclusion after radiation therapy (MERT): A new and effective way to increase the therapeutic ratio of radiotherapy.** *Radiotherapy and oncology : journal of the European Society for Therapeutic Radiology and Oncology*
  Brown, J. M., Thomas, R., Nagpal, S., Recht, L.
  2019; 144: 159–64

- **Dynamin 2, cell trafficking, and the triple-negative paradox.** *Oncotarget*
  Chernikova, S. B., Game, J. C., Brown, J. M.
  2019; 10 (24): 2336–37

- **Targeting the Post-Irradiation Tumor Microenvironment in Glioblastoma via Inhibition of CXCL12.** *Cancers*
  Giordano, F. A., Link, B., Glas, M., Herrlinger, U., Wenz, F., Umansky, V., Brown, J. M., Herskind, C.
  2019; 11 (3)

- **Macrophage Exclusion after Radiation Therapy (MERT): A First in Human Phase I/II Trial using a CXCR4 Inhibitor in Glioblastoma.** *Clinical cancer research : an official journal of the American Association for Cancer Research*
  Thomas, R. P., Nagpal, S. n., Iv, M. n., Soltys, S. G., Bertrand, S. n., Pelpola, J. S., Ball, R. L., Yang, J. n., Sundaram, V. n., Lavezo, J. L., Born, D. E., Vogel, H. n., Brown, et al
  2019

- **Dynamin impacts homology-directed repair and breast cancer response to chemotherapy.** *The Journal of clinical investigation*
  Chernikova, S. B., Nguyen, R. B., Truong, J. T., Mello, S. S., Stafford, J. H., Hay, M. P., Olson, A. n., Solow-Cordero, D. E., Wood, D. J., Henry, S. n., von Eyben, R. n., Deng, L. n., Gephart, et al
  2018

- **The Promise of Targeting Macrophages in Cancer Therapy** *CLINICAL CANCER RESEARCH*
  Brown, J., Recht, L., Strober, S.
  2017; 23 (13): 3241–50

- **SDF-1 Blockade Enhances Anti-VEGF Therapy of Glioblastoma and Can Be Monitored by MRI** *NEOPLASIA*
  Deng, L., Stafford, J. H., Liu, S., Chernikova, S. B., Merchant, M., Recht, L., Brown, J. M.
  2017; 19 (1): 1-7

- **Colony stimulating factor 1 receptor inhibition delays recurrence of glioblastoma after radiation by altering myeloid cell recruitment and polarization** *NEURO-ONCOLOGY*
  Stafford, J. H., Hirai, T., Deng, L., Chernikova, S. B., Urata, K., West, B. L., Brown, J. M.
  2016; 18 (6): 797-806

- **The Tumor Radiobiology of SRS and SBRT: Are More Than the 5 Rs Involved?** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  Brown, J. M., Carlson, D. J., Brenner, D. J.
  2014; 88 (2): 254-262

- **Blockade of SDF-1 after irradiation inhibits tumor recurrences of autochthonous brain tumors in rats** *NEURO-ONCOLOGY*
  Liu, S., Alomran, R., Chernikova, S. B., Lartey, F., Stafford, J., Jang, T., Merchant, M., Zboralski, D., Zoellner, S., Kruschinski, A., Klussmann, S., Recht, L., Brown, et al
  2014; 16 (1): 21-28

- **Inhibition of Mac-1 (CD11b/CD18) enhances tumor response to radiation by reducing myeloid cell recruitment** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
  Ahn, G., Tseng, D., Liao, C., Dorie, M. J., Czechowicz, A., Brown, J. M.
  2010; 107 (18): 8363-8368

- **Inhibition of vasculogenesis, but not angiogenesis, prevents the recurrence of glioblastoma after irradiation in mice** *JOURNAL OF CLINICAL INVESTIGATION*
  Kioi, M., Vogel, H., Schultz, G., Hoffman, R. M., Harsh, G. R., Brown, J. M.
  2010; 120 (3): 694-705

- **Association of reactive oxygen species levels and radioresistance in cancer stem cells** *NATURE*
  Diehn, M., Cho, R. W., Lobo, N. A., Kalisky, T., Dorie, M. J., Kulp, A. N., Qian, D., Lam, J. S., Ailles, L. E., Wong, M., Joshua, B., Kaplan, M. J., Wapnir, et al
  2009; 458 (7239): 780-U123

- **Matrix metalloproteinase-9 is required for tumor vasculogenesis but not for angiogenesis: Role of bone marrow-derived myelomonocytic cells** *CANCER CELL*
  Ahn, G., Brown, J. M.
  2008; 13 (3): 193-205

- **Reflections of the Senior Editors for Biology.** *International journal of radiation oncology, biology, physics*
  Brown, J. M., Freeman, M. L., Marples, B., Boerma, M.
  2021; 111 (5): 1118-1119

- **In Reply to Song etal, and In Reply to Brown and Carlson.** *International journal of radiation oncology, biology, physics*
  Grimm, J., Mahadevan, A., Brown, J. M., Carlson, D. J., Brenner, D. J., Lo, S. S., Song, C. W., Cho, L. C.
  2021; 110 (1): 253–54

- **Blocking the CXCL12/CXCR4 pathway both radiosensitizes brain metastases in mice and protects against radiation-induced cognitive dysfunction following whole brain irradiation in rats.**
  Brown, M., Shamloo, M., Chernikova, S., Recht, L.
  AMER ASSOC CANCER RESEARCH.2021

- **In Regard to Nam et al.** *International journal of radiation oncology, biology, physics*
  Brown, J. M.
  2021; 109 (4): 1124

- **Cell Killing and Chromosome Aberrations by Ionizing Radiations: Brother, Can You Paradigm?** *International journal of radiation oncology, biology, physics*
  Bedford, J. S., Brown, J. M.
  2021; 109 (1): 73–75

- **In Regard to Song et al.** *International journal of radiation oncology, biology, physics*
  Brown, J. M., Carlson, D. J.
  2020

- **Beware of Clinical Trials of DNA Repair Inhibitors** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  Brown, J.
  2019; 103 (5): 1182-1183

- **Beware of clinical trials of DNA repair inhibitors.** *International journal of radiation oncology, biology, physics*
  Brown, J. M.
  2018

- **Dynamin impacts homology-directed repair and breast cancer response to chemotherapy** *JOURNAL OF CLINICAL INVESTIGATION*

Chernikova, S. B., Nguyen, R. B., Truong, J. T., Mello, S. S., Stafford, J. H., Hay, M. P., Olson, A., Solow-Cordero, D. E., Wood, D. J., Henry, S., von Eyben, R., Deng, L., Gephart, et al
2018; 128 (12): 5307–21

- **F-18-EF5 PET-based Imageable Hypoxia Predicts Local Recurrence in Tumors Treated With Highly Conformal Radiation Therapy** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  Qian, Y., Von Eyben, R., Liu, Y., Chin, F. T., Miao, Z., Apte, S., Carter, J. N., Binkley, M. S., Pollom, E. L., Harris, J. P., Prionas, N. D., Kissel, M., Simmons, et al
  2018; 102 (4): 1183–92

- **Report from the SWOG Radiation Oncology Committee: Research Objectives Workshop 2017** *CLINICAL CANCER RESEARCH*
  Okunieff, P., Casey-Sawicki, K., Lockney, N. A., Hoppe, B. S., Enderling, H., Pinnix, C., Welsh, J., Krishnan, S., Yothers, G., Browns, M., Knox, S., Bristow, R., Spellman, et al
  2018; 24 (15): 3500–3509

- **The Biology of SBRT: LQ or Something New?** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  Brown, J.
  2018; 101 (4): 964

- **18F-EF5 Pet-Based Imageable Hypoxia Predicts for Local Control in Tumors Treated With Conformal Radiotherapy**
  Qian, Y., Liu, Y., Von Eyben, R., Carter, J. N., Pollom, E. L., Harris, J. P., Prionas, N. D., Binkley, M. S., Simmons, A., Diehn, M., Chin, F. T., Shultz, D. B., Brown, et al
  ELSEVIER SCIENCE INC.2018: E17–E18

- **CXCR4 blockade at the end of irradiation to improve local control of glioblastoma (GBM).**
  Thomas, R., Nagpal, S., Iv, M., Soltys, S. G., Bertrand, S., Pelpola, J., Yang, J., Ball, R. L., Brown, M., Recht, L.
  AMER SOC CLINICAL ONCOLOGY.2018

- **Combining precision radiotherapy with molecular targeting and immunomodulatory agents: a guideline by the American Society for Radiation Oncology** *LANCET ONCOLOGY*
  Bristow, R. G., Alexander, B., Baumann, M., Bratman, S. V., Brown, J., Camphausen, K., Choyke, P., Citrin, D., Contessa, J. N., Dicker, A., Kirsch, D. G., Krause, M., Quynh-Thu Le, et al
  2018; 19 (5): E240–E251

- **18F-EF5 PET-based Imageable Hypoxia Predicts Local Recurrence in Tumors Treated With Highly Conformal Radiation Therapy.** *International journal of radiation oncology, biology, physics*
  Qian, Y. n., Von Eyben, R. n., Liu, Y. n., Chin, F. T., Miao, Z. n., Apte, S. n., Carter, J. N., Binkley, M. S., Pollom, E. L., Harris, J. P., Prionas, N. D., Kissel, M. n., Simmons, et al
  2018

- **A phase I study of chemo-radiotherapy with plerixafor for newly diagnosed glioblastoma (GB).**
  Thomas, R., Nagpal, S., Iv, M., Soltys, S. G., Corbin, Z., Xu, L., Recht, C., Bertrand, S., Jain, V., Acevedo, B., Brown, M., Recht, L.
  AMER SOC CLINICAL ONCOLOGY.2016

- **Preclinical Data on Efficacy of 10 Drug-Radiation Combinations: Evaluations, Concerns, and Recommendations** *TRANSLATIONAL ONCOLOGY*
  Stone, H. B., Bernhard, E. J., Coleman, C., Deye, J., Capala, J., Mitchell, J. B., Brown, J.
  2016; 9 (1): 46–56

- **Fractionated Radiation for Newly Diagnosed Supratentorial Glioblastoma Multiforme: In Regard to Brachman et al.** *International journal of radiation oncology, biology, physics*
  Brown, M. n., Bernhard, E. n., Mitchel, J. n., Stone, H. n.
  2016; 94 (1): 210–11

- **Improving the Predictive Value of Preclinical Studies in Support of Radiotherapy Clinical Trials.** *Clinical cancer research : an official journal of the American Association for Cancer Research*
  Coleman, C. N., Higgins, G. S., Brown, J. M., Baumann, M. n., Kirsch, D. G., Willers, H. n., Prasanna, P. G., Dewhirst, M. W., Bernhard, E. J., Ahmed, M. M.
  2016; 22 (13): 3138–47

- **Innovation in Radiation Oncology Reply** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  Brown, J., Adler, J. R.

2015; 93 (4): 935–36

- **Is Equipment Development Stifling Innovation in Radiation Oncology?** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  Brown, J., Adler, J. R.
  2015; 92 (4): 713–14
- **Gastrointestinal Toxicities With Combined Antiangiogenic and Stereotactic Body Radiation Therapy.** *International journal of radiation oncology, biology, physics*
  Pollom, E. L., Deng, L., Pai, R. K., Brown, J. M., Giaccia, A., Loo, B. W., Shultz, D. B., Le, Q. T., Koong, A. C., Chang, D. T.
  2015; 92 (3): 568-576
- **High-dose and fractionation effects in stereotactic radiation therapy: Analysis of tumor control data from 2965 patients** *RADIOTHERAPY AND ONCOLOGY*
  Shuryak, I., Carlson, D. J., Brown, J. M., Brenner, D. J.
  2015; 115 (3): 327-334
- **Cell Death Identification in Anticancer Therapy-Letter.** *Cancer research*
  Brown, J. M., Wouters, B. G., Kirsch, D. G.
  2015; 75 (17): 3681
- **Hypoxia-inducible factor-1 (HIF-1) in myeloid cells promotes angiogenesis by regulating VEGF and S100A8 production**
  Ahn, G., Kim, Y., Hong, B., Bok, S., Lee, C., Kim, H., Kim, I., Seita, J., Weissman, I., Brown, J.
  AMER ASSOC CANCER RESEARCH.2015
- **Inhibiting the CSF-1 receptor on tumor-infiltrating monocytes may enhance the efficacy of radiotherapy for glioblastoma multiforme**
  Stafford, J. H., Chernikova, S., West, B. L., Brown, J.
  AMER ASSOC CANCER RESEARCH.2015
- **Dynamin 2-And Microtubule-Dependent Cell Trafficking Impacts Homologous Recombination And The Response To Chemotherapy Of Triple-Negative Breast Tumors.**
  Chernikova, S. B., Nguyen, R. B., Truong, J. T., Mello, S. S., Stafford, J. H., Hay, M. P., Olson, A., Solow-Cordero, D. E., Game, J. C., Gyorffy, B., Brown, J. M.
  AMER SOC CELL BIOLOGY.2015
- **Circulating mouse Flk1+/c-Kit+/CD45- cells function as endothelial progenitors cells (EPCs) and stimulate the growth of human tumor xenografts** *MOLECULAR CANCER*
  Russell, J. S., Brown, J.
  2014; 13: 177
- **Inhibition of CXCR7 extends survival following irradiation of brain tumours in mice and rats** *BRITISH JOURNAL OF CANCER*
  Walters, M. J., Ebsworth, K., Berahovich, R. D., Penfold, M. E., Liu, S., Al Omran, R., Kioi, M., Chernikova, S. B., Tseng, D., Mulkearns-Hubert, E. E., Sinyuk, M., Ransohoff, R. M., Lathia, et al
  2014; 110 (5): 1179-1188
- **Vasculogenesis: a crucial player in the resistance of solid tumours to radiotherapy** *BRITISH JOURNAL OF RADIOLOGY*
  Brown, J. M.
  2014; 87 (1035)
- **Dose escalation, not "new biology," can account for the efficacy of stereotactic body radiation therapy with non-small cell lung cancer. In reply to Rao et al.** *International journal of radiation oncology, biology, physics*
  Brown, J. M., Carlson, D. J., Brenner, D. J.
  2014; 89 (3): 693–94
- **Lessons Learned from Radiation Oncology Clinical Trials** *CLINICAL CANCER RESEARCH*
  Liu, F., Okunieff, P., Bernhard, E. J., Stone, H. B., Yoo, S., Coleman, C. N., Vikram, B., Brown, M., Buatti, J., Guha, C.
  2013; 19 (22): 6089-6100
- **Targeting SDF-1 (CXCL12) pathway to inhibit the recurrence of breast cancer brain metastases after whole-brain irradiation**
  Chernikova, S., Ahn, G., Liu, S., Stafford, J., Brown, J.
  AMER ASSOC CANCER RESEARCH.2013

- **INHIBITION OF RECURRENCES OF EXPERIMENTAL BRAIN TUMORS AND BRAIN METASTASES AFTER IRRADIATION BY BLOCKING THE ACTIVITY OF SDF-1 USING THE eSPIEGELMER (R) NOX-A12**
  Liu, S., Chernikova, S., Merchant, M., Jang, T., Zoellner, S., Kruschinski, A., Ahn, G., Recht, L., Brown, M.
  OXFORD UNIV PRESS INC.2013: 189

- **Inhibiting Vasculogenesis After Radiation: A New Paradigm to Improve Local Control by Radiotherapy** *SEMINARS IN RADIATION ONCOLOGY*
  Brown, J. M.
  2013; 23 (4): 281-287

- **Understanding the Clinical Results From Contemporary Stereotactic Radiation Therapy**
  Brenner, D. J., Shuryak, I., Carlson, D. J., Brown, J. M.
  ELSEVIER SCIENCE INC.2013: S182

- **The irradiated tumor microenvironment: role of tumor-associated macrophages in vascular recovery.** *Frontiers in physiology*
  Russell, J. S., Brown, J. M.
  2013; 4: 157

- **Dose Escalation, Not "New Biology," Can Account for the Efficacy of Stereotactic Body Radiation Therapy With Non-Small Cell Lung Cancer** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  Brown, J. M., Brenner, D. J., Carlson, D. J.
  2013; 85 (5): 1159-1160

- **The irradiated tumor microenvironment: role of tumor-associated macrophages in vascular recovery** *FRONTIERS IN PHYSIOLOGY*
  Russell, J. S., Brown, J. M.
  2013; 4

- **CXCR7 INHIBITION SIGNIFICANTLY PROLONGS SURVIVAL IN THE ENU RAT MODEL OF GLIOBLASTOMA** *17th Annual Scientific Meeting and Education Day of the Society-for-Neuro-Oncology (SNO)*
  Ebsworth, K., Walters, M. J., Ertl, L. S., Wang, Y., Berahovich, R. D., Zhang, P., Powers, J. P., Liu, S., Al Omran, R., Sullivan, T. J., Jaen, J. C., Brown, M., Schall, et al
  OXFORD UNIV PRESS INC.2012: 26–27

- **TARGETING VASCULOGENESIS: A NEW PARADIGM FOR THE TREATMENT OF BRAIN TUMORS**
  Brown, M.
  OXFORD UNIV PRESS INC.2012: 33-34

- **R-loops and genomic instability in Bre1 (RNF20/40)-deficient cells** *CELL CYCLE*
  Chernikova, S. B., Brown, J. M.
  2012; 11 (16): 2980-2984

- **The effect of the CXCR7 inhibitor CCX662 on survival in the ENU rat model of glioblastoma** *48th Annual Meeting of the American-Society-of-Clinical-Oncology (ASCO)*
  Ebsworth, K., Walters, M. J., Ertl, L. S., Wang, Y., Zhang, P., Powers, J. P., Sullivan, T. J., Jaen, J. C., Brown, M., Schall, T. J.
  AMER SOC CLINICAL ONCOLOGY.2012

- **Deficiency in Mammalian Histone H2B Ubiquitin Ligase Bre1 (Rnf20/Rnf40) Leads to Replication Stress and Chromosomal Instability** *CANCER RESEARCH*
  Chernikova, S. B., Razorenova, O. V., Higgins, J. P., Sishc, B. J., Nicolau, M., Dorth, J. A., Chernikova, D. A., Kwok, S., Brooks, J. D., Bailey, S. M., Game, J. C., Brown, J. M.
  2012; 72 (8): 2111-2119

- **Inhibition of SDF-1 (CXCL12) using the Spiegelmer NOX-A12 markedly delays the recurrence of ENU-induced rat brain tumors following irradiation**
  Liu, S., Alomran, R., Quan, F., Merchant, M., Zollner, S., Kruschinski, A., Recht, L., Brown, M.
  AMER ASSOC CANCER RESEARCH.2012

- **Imaging Tumor Sensitivity to a Bioreductive Prodrug: Two for the Price of One!** *CLINICAL CANCER RESEARCH*
  Brown, J. M.
  2012; 18 (6): 1487-1489

- **Inhibiting homologous recombination for cancer therapy** *CANCER BIOLOGY & THERAPY*
  Chernikova, S. B., Game, J. C., Brown, J. M.
  2012; 13 (2): 61-68

- **RESPONSE TO "STEREOTACTIC ABLATIVE RADIOTHERAPY IN THE FRAMEWORK OF CLASSICAL RADIOBIOLOGY: RESPONSE TO DRS. BROWN, DIEHN, AND LOO." (INT J RADIAT ONCOL BIOL PHYS 2011;79:1599-1600) AND "INFLUENCE OF TUMOR HYPOXIA ON STEREOTACTIC ABLATIVE RADIOTHERAPY (SABR): RESPONSE TO DRS. MAYER AND TIMMERMAN." (INT J RADIATION ONCOL BIOL PHYS 2011;78:1600) REPLY** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  Brown, M., Loo, B. W., Diehn, M., Carlson, D. J.
  2011; 81 (4): 1194

- **Overcoming Hypoxia-Induced Apoptotic Resistance through Combinatorial Inhibition of GSK-3 beta and CDK1** *CANCER RESEARCH*
  Mayes, P. A., Dolloff, N. G., Daniel, C. J., Liu, J. J., Hart, L. S., Kuribayashi, K., Allen, J. E., Jee, D. I., Dorsey, J. F., Liu, Y. Y., Dicker, D. T., Brown, J. M., Furth, et al
  2011; 71 (15): 5265-U264

- **IN REGARD TO BROWN ET AL. (INT J RADIAT ONCOL BIOL PHYS 2010;78:323-327) REPLY** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  Brown, J. M., Loo, B. W., Diehn, M., Carlson, D. J.
  2011; 80 (5): 1605-1605

- **Targeting SDF-1/CXCR4 to inhibit tumour vasculature for treatment of glioblastomas** *BRITISH JOURNAL OF CANCER*
  Tseng, D., Vasquez-Medrano, D. A., Brown, J. M.
  2011; 104 (12): 1805-1809

- **INFLUENCE OF TUMOR HYPOXIA ON STEREOTACTIC ABLATIVE RADIOTHERAPY (SABR): RESPONSE TO DRS. MEYER AND TIMMERMAN** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  Brown, M., Lao, B., Diehn, M., Carlson, D.
  2011; 79 (5): 1600

- **HYPOFRACTIONATION RESULTS IN REDUCED TUMOR CELL KILL COMPARED TO CONVENTIONAL FRACTIONATION FOR TUMORS WITH REGIONS OF HYPOXIA** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  Carlson, D. J., Keall, P. J., Loo, B. W., Chen, Z. J., Brown, J. M.
  2011; 79 (4): 1188-1195

- **Deficiency in Bre1 Impairs Homologous Recombination Repair and Cell Cycle Checkpoint Response to Radiation Damage in Mammalian Cells** *RADIATION RESEARCH*
  Chernikova, S. B., Dorth, J. A., Razorenova, O. V., Game, J. C., Brown, J. M.
  2010; 174 (5): 558-565

- **Pharmacokinetic/Pharmacodynamic Modeling Identifies SN30000 and SN29751 as Tirapazamine Analogues with Improved Tissue Penetration and Hypoxic Cell Killing in Tumors** *CLINICAL CANCER RESEARCH*
  Hicks, K. O., Siim, B. G., Jaiswal, J. K., Pruijn, F. B., Fraser, A. M., Patel, R., Hogg, A., Liyanage, H. D., Dorie, M. J., Brown, J. M., Denny, W. A., Hay, M. P., Wilson, et al
  2010; 16 (20): 4946-4957

- **STEREOTACTIC ABLATIVE RADIOTHERAPY SHOULD BE COMBINED WITH A HYPOXIC CELL RADIOSENSITIZER** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  Brown, J. M., Diehn, M., Loo, B. W.
  2010; 78 (2): 323-327

- **Elusive Identities and Overlapping Phenotypes of Proangiogenic Myeloid Cells in Tumors** *AMERICAN JOURNAL OF PATHOLOGY*
  Coffelt, S. B., Lewis, C. E., Naldini, L., Brown, J. M., Ferrara, N., De Palma, M.
  2010; 176 (4): 1564-1576

- **Henry S. Kaplan Distinguished Scientist Award Lecture 2007. The remarkable yin and yang of tumour hypoxia.** *International journal of radiation biology*
  Brown, M. n.
  2010; 86 (11): 907–17

- **Role of endothelial progenitors and other bone marrow-derived cells in the development of the tumor vasculature** *ANGIOGENESIS*

Ahn, G., Brown, J. M.
2009; 12 (2): 159-164

- **Roles of DNA repair and reductase activity in the cytotoxicity of the hypoxia-activated dinitrobenzamide mustard PR-104A** *MOLECULAR CANCER THERAPEUTICS*
  Gu, Y., Patterson, A. V., Atwell, G. J., Chernikova, S. B., Brown, J. M., Thompson, L. H., Wilson, W. R.
  2009; 8 (6): 1714-1723
- **DNA Cross-Links in Human Tumor Cells Exposed to the Prodrug PR-104A: Relationships to Hypoxia, Bioreductive Metabolism, and Cytotoxicity** *CANCER RESEARCH*
  Singleton, R. S., Guise, C. P., Ferry, D. M., Pullen, S. M., Dorie, M. J., Brown, J. M., Patterson, A. V., Wilson, W. R.
  2009; 69 (9): 3884-3891
- **Roles of DNA repair and reductase activity in the cytotoxicity of the hypoxia-activated dinitrobenzamide mustard PR-104A**
  Gu Yongchuan, Patterson, A., Atwell, G., Chernikova, S., Brown, J., Thompson, L., Wilson, W.
  AMER ASSOC CANCER RESEARCH.2009
- **Influence of bone marrow-derived hematopoietic cells on the tumor response to radiotherapy Experimental models and clinical perspectives** *CELL CYCLE*
  Ahn, G., Brown, J. M.
  2009; 8 (7): 970-976
- **Radiosensitization of Yeast Cells by Inhibition of Histone H4 Acetylation** *RADIATION RESEARCH*
  Song, S., McCann, K. E., Brown, J. M.
  2008; 170 (5): 618-627
- **A role for Lsm1p in response to ultraviolet-radiation damage in Saccharomyces cerevisiae** *RADIATION RESEARCH*
  Spicakova, T., McCann, K., Brown, J. M.
  2008; 170 (4): 411-421
- **Optimized Clostridium-directed enzyme prodrug therapy improves the antitumor activity of the novel DNA cross-linking agent PR-104** *CANCER RESEARCH*
  Liu, S., Ahn, G., Kioi, M., Dorie, M., Patterson, A. V., Brown, J. M.
  2008; 68 (19): 7995-8003
- **In vivo H-1 magnetic resonance spectroscopy of lactate in patients with Stage IV head and neck squamous cell carcinoma** *49th Annual Meeting of the American-Society-for-Therapeutic-Radiology-and-Oncology (ASTRO)*
  Le, Q., Koong, A., Lieskovsky, Y. Y., Narasimhan, B., Graves, E., Pinto, H., Brown, J. M., Spielman, D.
  ELSEVIER SCIENCE INC.2008: 1151–57
- **High-dose single-fraction radiotherapy: Exploiting a new biology?** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  Brown, J. M., Koong, A. C.
  2008; 71 (2): 324-325
- **Homologous recombination is the principal pathway for the repair of DNA damage induced by tirapazamine in mammalian cells** *CANCER RESEARCH*
  Evans, J. W., Chernikova, S. B., Kachnic, L. A., Banath, J. P., Sordet, O., Delahoussaye, Y. M., Treszezamsky, A., Chon, B. H., Feng, Z., Gu, Y., Wilson, W. R., Pommier, Y., Olive, et al
  2008; 68 (1): 257-265
- **What causes the radiation gastrointestinal syndrome?: overview.** *International journal of radiation oncology, biology, physics*
  Brown, M. n.
  2008; 70 (3): 799–800
- **Hypofractionation results in a decrease in tumor cell killing compared to standard fractionation as a result of tumor hypoxia**
  Carlson, D. J., Keall, P. J., Brown, J. M.
  AMER ASSOC PHYSICISTS MEDICINE AMER INST PHYSICS.2007: 2603
- **Targeting tumors with hypoxia-activated cytotoxins** *FRONTIERS IN BIOSCIENCE-LANDMARK*
  Ahn, G., Brown, M.

2007; 12: 3483-3501

- **Tumor hypoxia in cancer therapy** *OXYGEN BIOLOGY AND HYPOXIA*
  Brown, J. M.
  2007; 435: 297-?

- **Hypoxia: Importance in tumor biology, noninvasive measurement by imaging, and value of its measurement in the management of cancer therapy** *INTERNATIONAL JOURNAL OF RADIATION BIOLOGY*
  Tatum, J. L., Kelloff, G. J., Gillies, R. J., Arbeit, J. M., Brown, J. M., Chao, K. S., Chapman, J. D., Eckelman, W. C., Fyles, A. W., Giaccia, A. J., Hill, R. P., Koch, C. J., Krishna, et al
  2006; 82 (10): 699-757

- **Use of three-dimensional tissue cultures to model extravascular transport and predict in vivo activity of hypoxia-targeted anticancer drugs** *JOURNAL OF THE NATIONAL CANCER INSTITUTE*
  Hicks, K. O., Pruijn, F. B., Secomb, T. W., Hay, M. P., Hsu, R., Brown, J. M., Denny, W. A., Dewhirst, M. W., Wilson, W. R.
  2006; 98 (16): 1118-1128

- **The RAD6/BRE1 histone modification pathway in saccharomyces confers radiation resistance through a RAD51-dependent process that is independent of RAD18** *GENETICS*
  Game, J. C., Williamson, M. S., Spicakova, T., Brown, J. M.
  2006; 173 (4): 1951-1968

- **Mature results from a randomized phase II trial of cisplatin plus 5-fluorouracil and radiotherapy with or without tirapazamine in patients with resectable stage IV head and neck squamous cell carcinomas** *CANCER*
  Le, Q. T., Taira, A. I., Budenz, S., Dorie, M. J., Goffinet, D. R., Fee, W. E., Goode, R., Bloch, D., Koong, A., Brown, J. M., Pinto, H. A.
  2006; 106 (9): 1940-1949

- **Prediction of antitumor activity of PR-104, a new hypoxia activated mustard, using measurements of DNA interstrand crosslinks by the comet assay.**
  Dorie, M., Ahn, G., Menke, D., Douglas, R., Siim, B., Patterson, A., Wilson, W., Brown, M.
  AMER ASSOC CANCER RESEARCH.2006

- **DNA double-strand break repair requires histone modification by Bre1 and Dot1.**
  McCann, K. E., Spicakova, T., Game, J. C., Brown, M.
  AMER ASSOC CANCER RESEARCH.2006

- **The role of BRE1 homologs in mammalian histone modification and response to DNA damage.**
  Dorth, J. A., Chernikova, S. B., Brown, J.
  AMER ASSOC CANCER RESEARCH.2006

- **Global analysis of gene function in yeast by quantitative phenotypic profiling** *MOLECULAR SYSTEMS BIOLOGY*
  Brown, J. A., Sherlock, G., Myers, C. L., Burrows, N. M., Deng, C., Wu, H. I., McCann, K. E., Troyanskaya, O. G., Brown, J. M.
  2006; 2

- **Identification of mitogen-activated protein kinase signaling pathways that confer resistance to endoplasmic reticulum stress in Saccharomyces cerevisiae** *MOLECULAR CANCER RESEARCH*
  Chen, Y. J., Feldman, D. E., Deng, C. C., BROWN, J. A., De Giacomo, A. F., Gaw, A. F., Shi, G. Y., Le, Q. T., Brown, J. M., Koong, A. C.
  2005; 3 (12): 669-677

- **A noninvasive approach for assessing tumor hypoxia in xenografts: Developing a urinary marker for hypoxia** *CANCER RESEARCH*
  Nelson, D. W., Cao, H. B., Zhu, Y. H., Sunar-Reeder, B., Choi, C. Y., Faix, J. D., Brown, J. M., Koong, A. C., Giaccia, A. J., Le, Q. T.
  2005; 65 (14): 6151-6158

- **Multiple endonucleases function to repair covalent topoisomerase I complexes in Saccharomyces cerevisiae** *GENETICS*
  Deng, C. C., BROWN, J. A., You, D. Q., Brown, J. M.
  2005; 170 (2): 591-600

- **Opinion - The role of apoptosis in cancer development and treatment response** *NATURE REVIEWS CANCER*
  Brown, J. M., Attardi, L. D.
  2005; 5 (3): 231-237

- **Genome-wide identification of genes conferring resistance to the anticancer agents cisplatin, oxaliplatin, and mitomycin C** *CANCER RESEARCH*
  Wu, H. I., BROWN, J. A., Dorie, M. J., Lazzeroni, L., Brown, J. M.
  2004; 64 (11): 3940-3948

- **Exploiting tumour hypoxia in cancer treatment** *NATURE REVIEWS CANCER*
  Brown, J. M., William, W. R.
  2004; 4 (6): 437-447

- **Selective potentiation of the hypoxic cytotoxicity of tirapazamine by its 1-N-oxide metabolite SR 4317** *CANCER RESEARCH*
  Siim, B. G., Pruijn, F. B., Sturman, J. R., Hogg, A., Hay, M. P., Brown, J. M., Wilson, W. R.
  2004; 64 (2): 736-742

- **DNA-targeted 1,2,4-benzotriazine 1,4-dioxides: Potent analogues of the hypoxia-selective cytotoxin tirapazamine** *JOURNAL OF MEDICINAL CHEMISTRY*
  Hay, M. P., Pruijn, F. B., Gamage, S. A., Liyanage, H. D., Kovacs, M. S., Patterson, A. V., Wilson, W. R., Brown, J. M., Denny, W. A.
  2004; 47 (2): 475-488

- **Integrating phenotypic and expression profiles to map arsenic-response networks** *GENOME BIOLOGY*
  Haugen, A. C., Kelley, R., Collins, J. B., Tucker, C. J., Deng, C. C., Afshari, C. A., Brown, J. M., Ideker, T., Van Houten, B.
  2004; 5 (12)

- **Comment on "Tumor response to radiotherapy regulated by endothelial cell apoptosis" (II)** *SCIENCE*
  Brown, M., Bristow, R., Glazer, P., Hill, R., McBride, W., McKenna, G., Muschel, R.
  2003; 302 (5652)

- **Apoptosis genes and resistance to cancer therapy - What do the experimental and clinical data tell us?** *CANCER BIOLOGY & THERAPY*
  Brown, M., Wilson, G.
  2003; 2 (5): 477-490

- **Evaluation of hypoxia-inducible factor-1 alpha (HIF-1 alpha) as an intrinsic marker of tumor hypoxia in U87 MG human glioblastoma: In vitro and xenograft studies** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  Vordermark, D., Brown, J. M.
  2003; 56 (4): 1184-1193

- **Comparison of the comet assay and the oxygen microelectrode for measuring tumor oxygenation in head-and-neck cancer patients** *Annual Meeting on Radiation Research*
  Le, Q. T., Kovacs, M. S., Dorie, M. J., Koong, A., Terris, D. J., Pinto, H. A., Goffinet, D. R., Nowels, K., Bloch, D., Brown, J. M.
  ELSEVIER SCIENCE INC.2003: 375–83

- **Improved potency of the hypoxic cytotoxin tirapazamine by DNA-targeting** *BIOCHEMICAL PHARMACOLOGY*
  Delahoussaye, Y. M., Hay, M. P., Pruijn, F. B., Denny, W. A., Brown, J. M.
  2003; 65 (11): 1807-1815

- **Similar radiation sensitivities of acutely and chronically hypoxic cells in HT 1080 fibrosarcoma xenografts** *RADIATION RESEARCH*
  Vordermark, D., Menke, D. R., Brown, J. M.
  2003; 159 (1): 94-101

- **Tirapazamine: A hypoxia-activated topoisomerase II poison** *CANCER RESEARCH*
  Peters, K. B., Brown, J. M.
  2002; 62 (18): 5248-5253

- **Tumor microenvironment and the response to anticancer therapy** *CANCER BIOLOGY & THERAPY*
  Brown, J. M.
  2002; 1 (5): 453-458

- **Preferential expression of a mutant allele of the amplified MDR1 (ABCB1) gene in drug-resistant variants of a human sarcoma** *GENES CHROMOSOMES & CANCER*
  Chen, G. K., Lacayo, N. J., Duran, G. E., Wang, Y., Bangs, C. D., Rea, S., Kovacs, M., Cherry, A. M., Brown, J. M., Sikic, B. I.
  2002; 34 (4): 372-383

- **Transcriptional response of Saccharomyces cerevisiae to DNA-damaging agents does not identify the genes that protect against these agents** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
  Birrell, G. W., BROWN, J. A., Wu, H. I., Giaever, G., Chu, A. M., Davis, R. W., Brown, J. M.
  2002; 99 (13): 8778-8783

- **Estimating DNA repair by sequential evaluation of head and neck tumor radiation sensitivity using the comet assay** *5th International Conference on Head and Neck Cancer of the International-Society-of-Head-Neck-Cancer*
  Terris, D. J., Ho, E. Y., Ibrahim, H. Z., Dorie, M. J., Kovacs, M. S., Le, Q. T., Koong, A. C., Pinto, H. A., Brown, J. M.
  AMER MEDICAL ASSOC.2002: 698–702

- **The 93rd Annual Meeting of the American Association for Cancer Research. 6-10 April 2002, San Francisco, California, USA.** *Expert opinion on pharmacotherapy*
  Brown, J. M., Siemann, D. W.
  2002; 3 (5): 629-632

- **Anticancer efficacy of systemically delivered anaerobic bacteria as gene therapy vectors targeting tumor hypoxia/necrosis** *GENE THERAPY*
  Liu, S. C., Minton, N. P., Giaccia, A. J., Brown, J. M.
  2002; 9 (4): 291-296

- **Hypoxia-inducible regulation of a prodrug-activating enzyme for tumor-specific gene therapy** *NEOPLASIA*
  Shibata, T., Giaccia, A. J., Brown, J. M.
  2002; 4 (1): 40-48

- **Metabolism of tirapazamine by multiple reductases in the nucleus** *BIOCHEMICAL PHARMACOLOGY*
  Delahoussaye, Y. M., Evans, J. W., Brown, J. M.
  2001; 62 (9): 1201-1209

- **Green fluorescent protein is a suitable reporter of tumor hypoxia despite an oxygen requirement for chromophore formation** *NEOPLASIA*
  Vordermark, D., Shibata, T., Brown, J. M.
  2001; 3 (6): 527-534

- **A genome-wide screen in Saccharomyces cerevisiae for genes affecting UV radiation sensitivity** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
  Birrell, G. W., Giaever, G., Chu, A. M., Davis, R. W., Brown, J. M.
  2001; 98 (22): 12608-12613

- **Inhibition of DNA replication by tirapazamine** *CANCER RESEARCH*
  Peters, K. B., Wang, H. Y., Brown, J. M., Iliakis, G.
  2001; 61 (14): 5425-5431

- **Apoptosis: mediator or mode of cell killing by anticancer agents?** *DRUG RESISTANCE UPDATES*
  Brown, J. M., Wouters, B. G.
  2001; 4 (2): 135-136

- **Therapeutic targets in radiotherapy** *1st International Conference on Translational Research and Pre-Clinical Strategies in Clinical Radio-Oncology (ICTR 2000)*
  Brown, J. M.
  ELSEVIER SCIENCE INC.2001: 319–26

- **An investigation of the molecular basis for the synergistic interaction of tirapazamine and cisplatin** *41st Annual Meeting of the American-Society-for-Therapeutic-Radiology-and-Oncology (ASTRO 99)*
  Goldberg, Z., Evans, J., Birrell, G., Brown, J. M.
  ELSEVIER SCIENCE INC.2001: 175–82

- **Mitochondrial dysfunction after aerobic exposure to the hypoxic cytotoxin tirapazamine** *CANCER RESEARCH*
  Wouters, B. G., Delahoussaye, Y. M., Evans, J. W., Birrell, G. W., Dorie, M. J., Wang, J. L., MacDermed, D., Chiu, R. K., Brown, J. M.
  2001; 61 (1): 145-152

- **Pancreatic tumors show high levels of hypoxia** *36th Annual Meeting of the American-Society-of-Clinical-Oncology*
  Koong, A. C., Mehta, V. K., Le, Q. T., Fisher, G. A., Terris, D. J., Brown, J. M., Bastidas, A. J., Vierra, M.

ELSEVIER SCIENCE INC.2000: 919–22

- **An early oxygen-dependent step is required for dexamethasone-induced apoptosis of immature mouse thymocytes** *JOURNAL OF IMMUNOLOGY*
  Torres-Roca, J. F., Tung, J. W., Greenwald, D. R., Brown, J. M., Herzenberg, L. A., Herzenberg, L. A., Katsikis, P. D.
  2000; 165 (9): 4822-4830
- **Tumor radiosensitivity: It's the subpopulations that count** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  Brown, J. M.
  2000; 47 (3): 549-550
- **Exploiting the hypoxic cancer cell: mechanisms and therapeutic strategies** *MOLECULAR MEDICINE TODAY*
  Brown, J. M.
  2000; 6 (4): 157-162
- **Development of a hypoxia-responsive vector for tumor-specific gene therapy** *GENE THERAPY*
  Shibata, T., Giaccia, A. J., Brown, J. M.
  2000; 7 (6): 493-498
- **Hypoxic cytotoxic agents: a new approach to cancer chemotherapy.** *Drug resistance updates : reviews and commentaries in antimicrobial and anticancer chemotherapy*
  Brown, J. M.
  2000; 3 (1): 7-13
- **In vivo H-1 MR spectroscopy of human head and neck lymph node metastasis and comparison with oxygen tension measurements** *AMERICAN JOURNAL OF NEURORADIOLOGY*
  Star-Lack, J. M., Adalsteinsson, E., Adam, M. F., Terris, D. J., Pinto, H. A., Brown, J. M., Spielman, D. M.
  2000; 21 (1): 183-193
- **Genetically modified clostridium for gene therapy of tumors.** *Methods in molecular medicine*
  Fox, M. E., LEMMON, M. J., Giaccia, A. J., Minton, N. P., Brown, J. M.
  2000; 35: 413-418
- **The hypoxic cell: A target for selective cancer therapy - Eighteenth Bruce F. Cain Memorial Award lecture** *CANCER RESEARCH*
  Brown, J. M.
  1999; 59 (23): 5863-5870
- **A p53 and apoptotic independent role for p21(waf1) in tumour response to radiation therapy** *ONCOGENE*
  Wouters, B. G., Denko, N. C., Giaccia, A. J., Brown, J. M.
  1999; 18 (47): 6540-6545
- **DNA damage measured by the comet assay in head and neck cancer patients treated with tirapazamine.** *Neoplasia*
  Dorie, M. J., Kovacs, M. S., Gabalski, E. C., Adam, M., Le, Q. T., Bloch, D. A., Pinto, H. A., Terris, D. J., Brown, J. M.
  1999; 1 (5): 461-467
- **Oxygen tension measurements of tumors growing in mice** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  Adam, M. F., Dorie, M. J., Brown, J. M.
  1999; 45 (1): 171-180
- **Managed care, consolidation among health care providers, and health care: evidence from mammography** *RAND JOURNAL OF ECONOMICS*
  Baker, L. C., Brown, M. L.
  1999; 30 (2): 351-U2
- **Cisplatin anti-tumour potentiation by tirapazamine results from a hypoxia-dependent cellular sensitization to cisplatin** *BRITISH JOURNAL OF CANCER*
  Kovacs, M. S., Hocking, D. J., Evans, J. W., Slim, B. G., Wouters, B. G., Brown, J. M.
  1999; 80 (8): 1245-1251
- **Apoptosis, p53, and tumor cell sensitivity to anticancer agents** *CANCER RESEARCH*
  Brown, J. M., Wouters, B. G.

1999; 59 (7): 1391-1399

- **Tissue oxygen distribution in head and neck cancer patients** *HEAD AND NECK-JOURNAL FOR THE SCIENCES AND SPECIALTIES OF THE HEAD AND NECK*
  Adam, M. F., Gabalski, E. C., Bloch, D. A., Oehlert, J. W., Brown, J. M., Elsaid, A. A., Pinto, H. A., Terris, D. J.
  1999; 21 (2): 146-153
- **Comparison of the effectiveness of tirapazamine and carbogen with nicotinamide in enhancing the response of a human tumor xenograft to fractionated irradiation** *RADIATION ONCOLOGY INVESTIGATIONS*
  El-Said, A., Menke, D., Dorie, M. J., Brown, J. M.
  1999; 7 (3): 163-169
- **Tirapazamine: a new drug producing tumor specific enhancement of platinum-based chemotherapy in non-small-cell lung cancer.** *Annals of oncology*
  Wouters, B. G., Wang, L. H., Brown, J. M.
  1999; 10: S29-33
- **Pretreatment and midtreatment measurement of oxygen tension levels in head and neck cancers** *LARYNGOSCOPE*
  Gabalski, E. C., Adam, M., PINTO, H., Brown, J. M., Bloch, D. A., Terris, D. J.
  1998; 108 (12): 1856-1860
- **Tirapazamine: laboratory data relevant to clinical activity** *ANTI-CANCER DRUG DESIGN*
  Brown, J. M., Wang, L. H.
  1998; 13 (6): 529-539
- **Exploiting tumour hypoxia and overcoming mutant p53 with tirapazamine** *Satellite Symposium on Colorectal Cancer, Lung Cancer - Hopes and Reality, at the ECCO 9 Conference*
  Brown, J. M.
  NATURE PUBLISHING GROUP.1998: 12–14
- **Tirapazamine is metabolized to its DNA-damaging radical by intranuclear enzymes** *CANCER RESEARCH*
  Evans, J. W., Yudoh, K., Delahoussaye, Y. M., Brown, J. M.
  1998; 58 (10): 2098-2101
- **The unique physiology of solid tumors: Opportunities (and problems) for cancer therapy** *CANCER RESEARCH*
  Brown, J. M., Giaccia, A. J.
  1998; 58 (7): 1408-1416
- **Loss of p21(Waf1/Cip1) sensitizes tumors to radiation by an apoptosis-independent mechanism** *CANCER RESEARCH*
  Wouters, B. G., Giaccia, A. J., Denko, N. C., Brown, J. M.
  1997; 57 (21): 4703-4706
- **Comments on hyperbaric oxygen and carbogen/nicotinamide with fractionated radiations** *RADIATION RESEARCH*
  Brown, J. M., Wouters, B. G.
  1997; 148 (5): 526-527
- **Anaerobic bacteria as a gene delivery system that is controlled by the tumor microenvironment** *GENE THERAPY*
  LEMMON, M. J., VANZIJL, P., Fox, M. E., MAUCHLINE, M. L., Giaccia, A. J., Minton, N. P., Brown, J. M.
  1997; 4 (8): 791-796
- **Tirapazamine-induced cytotoxicity and DNA damage in transplanted tumors: Relationship to tumor hypoxia** *CANCER RESEARCH*
  Siim, B. G., Menke, D. R., Dorie, M. J., Brown, J. M.
  1997; 57 (14): 2922-2928
- **Adaptation of human tumor cells to tirapazamine under aerobic conditions - Implications of increased antioxidant enzyme activity to mechanism of aerobic cytotoxicity** *BIOCHEMICAL PHARMACOLOGY*
  ELWELL, J. H., Siim, B. G., Evans, J. W., Brown, J. M.
  1997; 54 (2): 249-257
- **Ataxia telangiectasia and cellular responses to DNA damage.** *CANCER RESEARCH*
  Brown, J. M.

1997; 57 (11): 2313

- **Cells at intermediate oxygen levels can be more important than the "hypoxic fraction" in determining tumor response to fractionated radiotherapy** *RADIATION RESEARCH*
  Wouters, B. G., Brown, J. M.
  1997; 147 (5): 541-550

- **Baroreflex dysfunction after nasopharyngectomy and bilateral carotid isolation** *ARCHIVES OF OTOLARYNGOLOGY-HEAD & NECK SURGERY*
  Lee, H. T., Brown, J., Fee, W. E.
  1997; 123 (4): 434-437

- **Stable translocations detected by fluorescence in situ hybridization: A rapid surrogate end point to evaluate the efficacy of a potentiator of tumor response to radiotherapy** *CANCER RESEARCH*
  Kovacs, M. S., Yudoh, K., Evans, J. W., Menke, D., Brown, J. M.
  1997; 57 (4): 672-677

- **Modification of the antitumor activity of chemotherapeutic drugs by the hypoxic cytotoxic agent tirapazamine** *CANCER CHEMOTHERAPY AND PHARMACOLOGY*
  Dorie, M. J., Brown, J. M.
  1997; 39 (4): 361-366

- **NCI's anticancer drug screening program may not be selecting for clinically active compounds** *ONCOLOGY RESEARCH*
  Brown, J. M.
  1997; 9 (5): 213-215

- **The DNA damage response in DNA-dependent protein kinase-deficient SCID mouse cells: Replication protein A hyperphosphorylation and p53 induction** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
  Fried, L. M., Koumenis, C., Peterson, S. R., GREEN, S. L., VANZIJL, P., ALLALUNISTURNER, J., Chen, D. J., Fishel, R., Giaccia, A. J., Brown, J. M., Kirchgessner, C. U.
  1996; 93 (24): 13825-13830

- **Tirapazamine-induced DNA damage measured using the comet assay correlates with cytotoxicity towards hypoxic tumour cells in vitro** *BRITISH JOURNAL OF CANCER*
  Siim, B. G., VANZIJL, P. L., Brown, J. M.
  1996; 73 (8): 952-960

- **Anaerobic bacteria as a delivery system for cancer gene therapy: In vitro activation of 5-fluorocytosine by genetically engineered clostridia** *GENE THERAPY*
  Fox, M. E., LEMMON, M. J., MAUCHLINE, M. L., Davis, T. O., Giaccia, A. J., Minton, N. P., Brown, J. M.
  1996; 3 (2): 173-178

- **Induction and repair of chromosome aberrations in scid cells measured by premature chromosome condensation** *RADIATION RESEARCH*
  Evans, J. W., Liu, X. F., Kirchgessner, C. U., Brown, J. M.
  1996; 145 (1): 39-46

- **Hypoxia-Specific Cytotoxins in Cancer Therapy.** *Seminars in radiation oncology*
  Brown, J. M., Siim, B. G.
  1996; 6 (1): 22-36

- **HYPOXIC CELL RADIOSENSITIZERS - THE END OF AN ERA** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  BROWN, J. M.
  1995; 32 (3): 883-885

- **DNA-DEPENDENT KINASE (P350) AS A CANDIDATE GENE FOR THE MURINE SCID DEFECT** *SCIENCE*
  Kirchgessner, C. U., Patil, C. K., Evans, J. W., Cuomo, C. A., Fried, L. M., Carter, T., Oettinger, M. A., Brown, J. M.
  1995; 267 (5201): 1178-1183

- **PREDICTION OF HUMAN CELL RADIOSENSITIVITY - COMPARISON OF CLONOGENIC-ASSAY WITH CHROMOSOME-ABERRATIONS SCORED USING PREMATURE CHROMOSOME CONDENSATION WITH FLUORESCENCE IN-SITU HYBRIDIZATION** *International Conference of Radiation Oncology*
  Sasai, K., Evans, J. W., Kovacs, M. S., Brown, J. M.

PERGAMON-ELSEVIER SCIENCE LTD.1994: 1127–32

- **DISCREPANCIES BETWEEN MEASURED CHANGES OF RADIOBIOLOGICAL HYPOXIC FRACTION AND OXYGEN-TENSION MONITORING USING 2 ASSAY SYSTEMS** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  Sasai, K., Brown, J. M.
  1994; 30 (2): 355-361

- **QUANTIFICATION OF 2-DIMENSIONAL NOE SPECTRA VIA A COMBINED LINEAR AND NONLINEAR LEAST-SQUARES FIT** *JOURNAL OF BIOMOLECULAR NMR*
  Brown, J. W., Huestis, W. H.
  1994; 4 (5): 645-652

- **REOXYGENATION AND REHYPOXIATION IN THE SCCVII MOUSE-TUMOR** *8th International Conference on Chemical Modifiers of Cancer Treatment*
  Kim, I. H., Brown, J. M.
  ELSEVIER SCIENCE INC.1994: 493–97

- **FLUORESCENCE IN-SITU HYBRIDIZATION IN CANCER AND RADIATION BIOLOGY** *RADIATION RESEARCH*
  Gray, J. W., Pinkel, D., Brown, J. M.
  1994; 137 (3): 275-289

- **INCREASED CYTOTOXICITY OF CHRONIC HYPOXIC CELLS BY MOLECULAR INHIBITION OF GRP78 INDUCTION** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  Koong, A. C., CHEN, E. Y., Lee, A. S., Brown, J. M., Giaccia, A. J.
  1994; 28 (3): 661-666

- **RADIATION-INDUCED DAMAGE, REPAIR AND EXCHANGE FORMATION IN DIFFERENT CHROMOSOMES OF HUMAN FIBROBLASTS DETERMINED BY FLUORESCENCE IN-SITU HYBRIDIZATION** *RADIATION RESEARCH*
  Kovacs, M. S., Evans, J. W., Johnstone, I. M., Brown, J. M.
  1994; 137 (1): 34-43

- **TUMOR HYPOXIA - THE PICTURE HAS CHANGED IN THE 1990S** *Radiation Research 93 - Annual Meeting of the Association-for-Radiation-Research*
  Brown, J. M., Giaccia, A. J.
  TAYLOR & FRANCIS LTD.1994: 95–102

- **COMPARISON OF THE ENHANCEMENT OF TUMOR RESPONSES TO FRACTIONATED-IRRADIATION BY SR-4233 (TIRAPAZAMINE) AND BY NICOTINAMIDE WITH CARBOGEN** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  Dorie, M. J., Menke, D., Brown, J. M.
  1994; 28 (1): 145-150

- **COMPLEMENTATION OF THE RADIOSENSITIVE PHENOTYPE IN SEVERE COMBINED IMMUNODEFICIENT MICE BY HUMAN CHROMOSOME-8** *CANCER RESEARCH*
  Kirchgessner, C. U., TOSTO, L. M., Biedermann, K. A., Kovacs, M., Araujo, D., Stanbridge, E. J., Brown, J. M.
  1993; 53 (24): 6011-6016

- **OXYGEN IN HUMAN TUMORS - CORRELATIONS BETWEEN METHODS OF MEASUREMENT AND RESPONSE TO THERAPY - SUMMARY OF A WORKSHOP HELD NOVEMBER 19-20, 1992, AT THE NATIONAL-CANCER-INSTITUTE, BETHESDA, MARYLAND** *RADIATION RESEARCH*
  STONE, H. B., BROWN, J. M., PHILLIPS, T. L., SUTHERLAND, R. M.
  1993; 136 (3): 422-434

- **TUMOR-SPECIFIC, SCHEDULE-DEPENDENT INTERACTION BETWEEN TIRAPAZAMINE (SR-4233) AND CISPLATIN** *CANCER RESEARCH*
  Dorie, M. J., Brown, J. M.
  1993; 53 (19): 4633-4636

- **VISUALIZATION OF NONRECIPROCAL CHROMOSOME EXCHANGES IN IRRADIATED HUMAN FIBROBLASTS BY FLUORESCENCE IN-SITU HYBRIDIZATION** *RADIATION RESEARCH*
  Brown, J. M., Kovacs, M. S.
  1993; 136 (1): 71-76

- **CHROMOSOMAL RADIOSENSITIVITY AT INTRACHROMOSOMAL TELOMERIC SITES** *GENES CHROMOSOMES & CANCER*
  ALVAREZ, L., Evans, J. W., Wilks, R., Lucas, J. N., Brown, J. M., Giaccia, A. J.

1993; 8 (1): 8-14

- **THE INFLUENCE OF IRRADIATION OF THE TUMOR BED ON TUMOR HYPOXIA - MEASUREMENTS BY RADIATION RESPONSE, OXYGEN ELECTRODES, AND NITROIMIDAZOLE BINDING** *RADIATION RESEARCH*
  Kim, I. H., LEMMON, M. J., Brown, J. M.
  1993; 135 (3): 411-417
- **SR-4233 (TIRAPAZAMINE) - A NEW ANTICANCER DRUG EXPLOITING HYPOXIA IN SOLID TUMORS** *BRITISH JOURNAL OF CANCER*
  Brown, J. M.
  1993; 67 (6): 1163-1170
- **CHARACTERIZATION OF THE DNA DOUBLE STRAND BREAK REPAIR DEFECT IN SCID MICE** *CANCER RESEARCH*
  Chang, C., Biedermann, K. A., Mezzina, M., Brown, J. M.
  1993; 53 (6): 1244-1248
- **LACK OF DIFFERENTIAL RADIOSENSITIZATION OF HYPOXIC CELLS IN A MOUSE-TUMOR AT LOW RADIATION-DOSES PER FRACTION BY CISPLATIN** *RADIATION RESEARCH*
  Sun, J. R., Brown, J. M.
  1993; 133 (2): 252-256
- **METABOLISM OF THE BIOREDUCTIVE CYTOTOXIN SR-4233 BY TUMOR-CELLS - ENZYMATIC STUDIES** *BRITISH JOURNAL OF CANCER*
  Wang, J., Biedermann, K. A., Wolf, C. R., Brown, J. M.
  1993; 67 (2): 321-325
- **TOXICOLOGY OF DAILY ADMINISTRATION TO MICE OF THE RADIATION POTENTIATOR SR-4233 (WIN-59075)** *RADIOTHERAPY AND ONCOLOGY*
  Spiegel, J. F., Spear, M. A., Brown, J. M.
  1993; 26 (1): 79-81
- **MECHANISM OF CHROMOSOME EXCHANGE FORMATION IN HUMAN FIBROBLASTS - INSIGHTS FROM CHROMOSOME PAINTING** *SATELLITE MEETING ON THE MOLECULAR BASIS OF CHROMOSOMAL ABERRATIONS / 6TH INTERNATIONAL CONF OF THE INTERNATIONAL-ENVIRONMENTAL-MUTAGENESIS-SOC*
  Brown, J. M., Evans, J. W., Kovacs, M. S.
  WILEY-LISS.1993: 218–24
- **ENHANCEMENT OF THE CYTOTOXICITY OF SR-4233 TO NORMAL AND MALIGNANT-TISSUES BY HYPOXIC BREATHING** *BRITISH JOURNAL OF CANCER*
  Minchinton, A. I., Brown, J. M.
  1992; 66 (6): 1053-1058
- **DIFFERENTIAL EXPRESSION OF PROTEIN-KINASE-C EPSILON-PROTEIN IN LUNG-CANCER CELL-LINES BY IONIZING-RADIATION** *BRITISH JOURNAL OF CANCER*
  Kim, C. Y., Giaccia, A. J., Strulovici, B., Brown, J. M.
  1992; 66 (5): 844-849
- **REPAIR OF DNA AND CHROMOSOME BREAKS IN CELLS EXPOSED TO SR-4233 UNDER HYPOXIA OR TO IONIZING-RADIATION** *CANCER RESEARCH*
  Wang, J. L., Biedermann, K. A., Brown, J. M.
  1992; 52 (16): 4473-4477
- **THE USE OF ASYMMETRIC-FIELD INVERSION GEL-ELECTROPHORESIS TO PREDICT TUMOR-CELL RADIOSENSITIVITY** *RADIOTHERAPY AND ONCOLOGY*
  Giaccia, A. J., SCHWARTZ, J., Shieh, J., Brown, J. M.
  1992; 24 (4): 231-238
- **CARBOGEN AND NICOTINAMIDE - EXPECTATIONS TOO HIGH** *RADIOTHERAPY AND ONCOLOGY*
  Brown, J. M.
  1992; 24 (2): 75-76
- **PHARMACOLOGICAL MODIFICATION OF TUMOR BLOOD-FLOW - LACK OF CORRELATION BETWEEN ALTERATION OF MEAN ARTERIAL BLOOD-PRESSURE AND CHANGES IN TUMOR PERFUSION** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  Stone, H. B., Minchinton, A. I., Lemmon, M., Menke, D., Brown, J. M.

1992; 22 (1): 79-86

- **THE PREDICTION OF HUMAN TUMOR RADIOSENSITIVITY INSITU - AN APPROACH USING CHROMOSOME-ABERRATIONS DETECTED BY FLUORESCENCE INSITU HYBRIDIZATION** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  Brown, J. M., Evans, J., Kovacs, M. S.
  1992; 24 (2): 279-286
- **Fluorescence in situ hybridization: an improved method of quantitating chromosome damage and repair.** *BJR supplement / BIR*
  Brown, J. M., Evans, J. W.
  1992; 24: 61-64
- **2ND-GENERATION 1,2,4-BENZOTRIAZINE 1,4-DI-N-OXIDE BIOREDUCTIVE ANTITUMOR AGENTS - PHARMACOLOGY AND ACTIVITY INVITRO AND INVIVO** *7TH INTERNATIONAL CONF ON CHEMICAL MODIFIERS OF CANCER TREATMENT*
  Minchinton, A. I., LEMMON, M. J., Tracy, M., Pollart, D. J., Martinez, A. P., TOSTO, L. M., Brown, J. M.
  ELSEVIER SCIENCE INC.1992: 701–5
- **THE FREQUENCY OF TRANSLOCATIONS AFTER TREATMENT FOR HODGKINS-DISEASE** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  Smith, L. M., Evans, J. W., Mori, M., Brown, J. M.
  1992; 24 (4): 737-742
- **CHARACTERIZATION OF A CHO CELL-LINE RESISTANT TO KILLING BY THE HYPOXIC CELL CYTOTOXIN SR-4233** *7TH INTERNATIONAL CONF ON CHEMICAL MODIFIERS OF CANCER TREATMENT*
  Giaccia, A. J., Biedermann, K. A., TOSTO, L. M., Minchinton, A. I., Kovacs, M. S., Brown, J. M.
  ELSEVIER SCIENCE INC.1992: 681–84
- **THE PREDICTION OF HUMAN TUMOR RADIOSENSITIVITY INSITU - AN APPROACH USING CHROMOSOME-ABERRATIONS DETECTED BY FLUORESCENCE INSITU HYBRIDIZATION** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  Brown, J. M., Evans, J., Kovacs, M. S.
  1992; 24 (2): 279-286
- **Fluorescence in situ hybridization: an improved method of quantitating chromosome damage and repair.** *BJR supplement / BIR*
  Brown, J. M., Evans, J. W.
  1992; 24: 61-64
- **2ND-GENERATION 1,2,4-BENZOTRIAZINE 1,4-DI-N-OXIDE BIOREDUCTIVE ANTITUMOR AGENTS - PHARMACOLOGY AND ACTIVITY INVITRO AND INVIVO** *7TH INTERNATIONAL CONF ON CHEMICAL MODIFIERS OF CANCER TREATMENT*
  Minchinton, A. I., LEMMON, M. J., Tracy, M., Pollart, D. J., Martinez, A. P., TOSTO, L. M., Brown, J. M.
  ELSEVIER SCIENCE INC.1992: 701–5
- **THE FREQUENCY OF TRANSLOCATIONS AFTER TREATMENT FOR HODGKINS-DISEASE** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  Smith, L. M., Evans, J. W., Mori, M., Brown, J. M.
  1992; 24 (4): 737-742
- **THE BIODISTRIBUTION OF IN-111 ANTI-BFGF IN A VARIETY OF TUMORS - CORRELATION WITH CELL-BINDING ASSAYS** *ANNALS OF THE NEW YORK ACADEMY OF SCIENCES*
  Knox, S. J., Brown, J. M., McGann, J., Sutherland, W., Goris, M. L., Herblin, W. F., Gross, J. L.
  1991; 638: 497-502
- **HYDRALAZINE DOES NOT INCREASE HYPOXIA IN TUMORS GROWING IN PREIRRADIATED TISSUE** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  LEMMON, M. J., Brown, J. M.
  1991; 21 (6): 1435-1440
- **THE HYPERSENSITIVITY OF THE CHINESE-HAMSTER OVARY VARIANT BL-10 TO BLEOMYCIN KILLING IS DUE TO A LACK OF GLUTATHIONE S-TRANSFERASE-ALPHA ACTIVITY** *CANCER RESEARCH*
  Giaccia, A. J., Lewis, A. D., Denko, N. C., CHOLON, A., Evans, J. W., Waldren, C. A., Stamato, T. D., Brown, J. M.
  1991; 51 (16): 4463-4469
- **TARGETING BIOREDUCTIVE DRUGS TO TUMORS - IS IT NECESSARY TO MANIPULATE BLOOD-FLOW** *16TH L H GRAY CONF ON VASCULATURE AS A TARGET FOR ANTI-CANCER THERAPY*

Brown, J. M.
TAYLOR & FRANCIS LTD.1991: 231–36

- **BIOCHEMICAL-EVIDENCE FOR 2 DIFFERENT MECHANISMS FOR BLEOMYCIN-INDUCED CELL KILLING** *MUTATION RESEARCH*
  Giaccia, A. J., Shieh, J., CHOLON, A., Brown, J. M.
  1991; 263 (2): 69-75

- **A COMPARISON OF RADIOSENSITIZATION BY ETANIDAZOLE AND PIMONIDAZOLE IN MOUSE-TUMORS** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  STONE, H. B., HIRST, V. K., CRIBBS, R., LUU, Y. H., BROWN, J. M.
  1991; 20 (5): 987-995

- **THE USE OF FLUORESCENCE INSITU HYBRIDIZATION COMBINED WITH PREMATURE CHROMOSOME CONDENSATION FOR THE IDENTIFICATION OF CHROMOSOME-DAMAGE** *BRITISH JOURNAL OF CANCER*
  Evans, J. W., Chang, J. A., Giaccia, A. J., Pinkel, D., Brown, J. M.
  1991; 63 (4): 517-521

- **STRUCTURE-ACTIVITY-RELATIONSHIPS FOR TUMOR RADIOSENSITIZATION BY ANALOGS OF NICOTINAMIDE AND BENZAMIDE** *INTERNATIONAL JOURNAL OF RADIATION BIOLOGY*
  Brown, J. M., LEMMON, M. J., Horsman, M. R., Lee, W. W.
  1991; 59 (3): 739-748

- **SR-4233 CYTOTOXICITY AND METABOLISM IN DNA REPAIR-COMPETENT AND REPAIR-DEFICIENT CELL-CULTURES** *BRITISH JOURNAL OF CANCER*
  Biedermann, K. A., Wang, J., Graham, R. P., Brown, J. M.
  1991; 63 (3): 358-362

- **TUMOR HYPOXIA CAN BE EXPLOITED TO PREFERENTIALLY SENSITIZE TUMORS TO FRACTIONATED-IRRADIATION** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  Brown, J. M., LEMMON, M. J.
  1991; 20 (3): 457-461

- **THERAPEUTIC ADVANTAGE OF HYPOXIC CELLS IN TUMORS - A THEORETICAL-STUDY** *JOURNAL OF THE NATIONAL CANCER INSTITUTE*
  Brown, J. M., Koong, A.
  1991; 83 (3): 178-185

- **SCID MUTATION IN MICE CONFERS HYPERSENSITIVITY TO IONIZING-RADIATION AND A DEFICIENCY IN DNA DOUBLE-STRAND BREAK REPAIR** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
  Biedermann, K. A., Sun, J. R., Giaccia, A. J., TOSTO, L. M., Brown, J. M.
  1991; 88 (4): 1394-1397

- **AEROBIC RADIOSENSITIZATION BY SR-4233 IN RODENT AND HUMAN-CELLS - MECHANISTIC AND THERAPEUTIC IMPLICATIONS** *INTERNATIONAL JOURNAL OF RADIATION BIOLOGY*
  Zeman, E. M., Brown, J. M.
  1991; 59 (1): 117-131

- **THE BIODISTRIBUTION OF IN-111 ANTI-BFGF IN A VARIETY OF TUMORS - CORRELATION WITH CELL-BINDING ASSAYS** *CONF ON THE FIBROBLAST GROWTH FACTOR FAMILY*
  Knox, S. J., Brown, J. M., McGann, J., Sutherland, W., Goris, M. L., Herblin, W. F., Gross, J. L.
  NEW YORK ACAD SCIENCES.1991: 497–502

- **SR 4233 - A TUMOR SPECIFIC RADIOSENSITIZER ACTIVE IN FRACTIONATED RADIATION REGIMES** *CONSENSUS MEETING ON TUMOUR HYPOXIA*
  Brown, J. M., LEMMON, M. J.
  ELSEVIER SCI IRELAND LTD.1991: 151–156

- **POTENTIATION BY THE HYPOXIC CYTOTOXIN SR4233 OF CELL KILLING PRODUCED BY FRACTIONATED-IRRADIATION OF MOUSE-TUMORS** *CANCER RESEARCH*
  Brown, J. M., LEMMON, M. J.
  1990; 50 (24): 7745-7749

- **USE OF FLUORESCENT INSITU HYBRIDIZATION TO DETECT CHROMOSOMAL REARRANGEMENTS IN SOMATIC-CELL HYBRIDS** *GENES CHROMOSOMES & CANCER*
  Giaccia, A. J., Evans, J. W., Brown, J. M.
  1990; 2 (3): 248-251
- **THE POTENTIATION OF RADIATION-DAMAGE BY NICOTINAMIDE IN THE SCCVII TUMOR INVIVO** *RADIOTHERAPY AND ONCOLOGY*
  Horsman, M. R., Wood, P. J., Chaplin, D. J., Brown, J. M., Overgaard, J.
  1990; 18 (1): 49-57
- **INDUCTION OF HYPOXIA IN GLASS VERSUS PERMANOX PETRI DISHES** *RADIATION RESEARCH*
  ZEMAN, E. M., PEARSON, C. I., BROWN, J. M.
  1990; 122 (1): 72-76
- **TUMOR HYPOXIA, DRUG-RESISTANCE, AND METASTASES** *JOURNAL OF THE NATIONAL CANCER INSTITUTE*
  Brown, J. M.
  1990; 82 (5): 338-339
- **AEROBIC RADIOSENSITIZATION BY SR-4233 INVITRO AND INVIVO** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  Zeman, E. M., LEMMON, M. J., Brown, J. M.
  1990; 18 (1): 125-132
- **ROLE OF GLUTATHIONE IN THE RADIATION RESPONSE OF MAMMALIAN-CELLS INVITRO AND INVIVO** *PHARMACOLOGY & THERAPEUTICS*
  BUMP, E. A., BROWN, J. M.
  1990; 47 (1): 117-136
- **COMPARISON BETWEEN X-RAYS AND SR-4233 FOR CYTO-TOXICITY AND REPAIR OF POTENTIALLY LETHAL DAMAGE IN HUMAN-CELLS** *INTERNATIONAL JOURNAL OF RADIATION BIOLOGY*
  Biedermann, K. A., Brown, J. M.
  1989; 56 (5): 813-816
- **ENHANCEMENT OF THE ANTITUMOR EFFECT OF FLAVONE ACETIC-ACID BY THE BIOREDUCTIVE CYTO-TOXIC DRUG SR 4233 IN A MURINE CARCINOMA** *CANCER RESEARCH*
  Sun, J. R., Brown, J. M.
  1989; 49 (20): 5664-5670
- **MISONIDAZOLE CHEMOSENSITIZATION OF EMT6 SPHEROIDS TO MELPHALAN** *RADIOTHERAPY AND ONCOLOGY*
  Horsman, M. R., Wood, P. J., Brown, J. M.
  1989; 15 (1): 103-114
- **STRUCTURE-ACTIVITY-RELATIONSHIPS FOR BENZOTRIAZINE DI-N-OXIDES** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  Zeman, E. M., Baker, M. A., LEMMON, M. J., Pearson, C. I., Adams, J. A., Brown, J. M., Lee, W. W., Tracy, M.
  1989; 16 (4): 977-981
- **TUMOR RADIOSENSITIZATION BY NICOTINAMIDE - A RESULT OF IMPROVED PERFUSION AND OXYGENATION** *RADIATION RESEARCH*
  Horsman, M. R., Chaplin, D. J., Brown, J. M.
  1989; 118 (1): 139-150
- **KEYNOTE ADDRESS - HYPOXIC CELL RADIOSENSITIZERS - WHERE NEXT** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  Brown, J. M.
  1989; 16 (4): 987-993
- **PRE-IRRADIATION AND POST-IRRADIATION RADIOSENSITIZATION BY SR-4233** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  Zeman, E. M., Brown, J. M.
  1989; 16 (4): 967-971

- **INVITRO HEPATOTOXICITY OF SR-4233 (3-AMINO-1,2,4-BENZOTRIAZINE-1,4-DIOXIDE), A HYPOXIC CYTO-TOXIN AND POTENTIAL ANTITUMOR AGENT** *CANCER RESEARCH*
  Costa, A. K., Baker, M. A., Brown, J. M., Trudell, J. R.
  1989; 49 (4): 925-929

- **METABOLISM OF SR-4233 BY CHINESE-HAMSTER OVARY CELLS - BASIS OF SELECTIVE HYPOXIC CYTO-TOXICITY** *CANCER RESEARCH*
  Baker, M. A., Zeman, E. M., HIRST, V. K., Brown, J. M.
  1988; 48 (21): 5947-5952

- **MECHANISM OF ACTION OF THE SELECTIVE TUMOR RADIOSENSITIZER NICOTINAMIDE** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  Horsman, M. R., Brown, J. M., HIRST, V. K., LEMMON, M. J., Wood, P. J., Dunphy, E. P., Overgaard, J.
  1988; 15 (3): 685-690

- **ENHANCEMENT OF RADIATION-INDUCED TUMOR-CELL KILLING BY THE HYPOXIC CELL TOXIN SR-4233** *RADIOTHERAPY AND ONCOLOGY*
  Zeman, E. M., HIRST, V. K., LEMMON, M. J., Brown, J. M.
  1988; 12 (3): 209-218

- **CHEMICAL MODIFICATION OF RADIATION AND CHEMOTHERAPY** *AMERICAN JOURNAL OF CLINICAL ONCOLOGY-CANCER CLINICAL TRIALS*
  Brown, J. M., Hall, E. J., Hirst, D. G., Kinsella, T. J., Kligerman, M. M., Mitchell, J. B., TRAVIS, E. J., Valeriote, F.
  1988; 11 (3): 288-303

- **RADIOSENSITIZATION, THIOL OXIDATION, AND INHIBITION OF DNA-REPAIR BY SR-4077** *RADIATION RESEARCH*
  Baker, M. A., TAYLOR, Y. C., Brown, J. M.
  1988; 113 (2): 346-355

- **ELEVATION OF INTRACELLULAR GLUTATHIONE LEVELS FOLLOWING DEPLETION AND ITS RELATIONSHIP TO PROTECTION AGAINST RADIATION AND ALKYLATING-AGENTS** *PHARMACOLOGY & THERAPEUTICS*
  TAYLOR, Y. C., Brown, J. M.
  1988; 39 (1-3): 293-299

- **CHEMOSENSITIZATION BY MISONIDAZOLE IN EMT6 SPHEROIDS - ADDITIONAL EVIDENCE FOR THE ROLE OF HYPOXIA INVIVO**
  HORSMAN, M. R., WOOD, P. J., BROWN, J. M.
  STOCKTON PRESS.1987: 699

- **RADIOSENSITIZATION IN MULTIFRACTION SCHEDULES .1. EVIDENCE FOR AN EXTREMELY LOW OXYGEN ENHANCEMENT RATIO** *RADIATION RESEARCH*
  TAYLOR, Y. C., Brown, J. M.
  1987; 112 (1): 124-133

- **RADIOSENSITIZATION IN MULTIFRACTION SCHEDULES .2. GREATER SENSITIZATION BY 2-NITROIMIDAZOLES THAN BY OXYGEN** *RADIATION RESEARCH*
  TAYLOR, Y. C., Brown, J. M.
  1987; 112 (1): 134-145

- **RADIOSENSITIZATION BY NICOTINAMIDE INVIVO - A GREATER ENHANCEMENT OF TUMOR DAMAGE COMPARED TO THAT OF NORMAL-TISSUES** *RADIATION RESEARCH*
  Horsman, M. R., Chaplin, D. J., Brown, J. M.
  1987; 109 (3): 479-489

- **RADIOSENSITIZATION BY HYPOXIC PRETREATMENT WITH MISONIDAZOLE - AN INTERACTION OF DAMAGE AT THE DNA LEVEL** *RADIATION RESEARCH*
  TAYLOR, Y. C., EVANS, J. W., BROWN, J. M.
  1987; 109 (3): 364-373

- **SELECTIVE ANTITUMOR THERAPY WITH A NEW CLASS OF BIOREDUCTIVE AGENTS**
  BROWN, J. M., ZEMAN, E. M., LEMMON, M., HIRST, K. V.
  AMER ASSOC CANCER RESEARCH.1987: 310

- **RADIOSENSITIZATION BY DIAMIDE ANALOGS AND ARSENICALS** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  BUMP, E. A., JACOBS, G. P., LEE, W. W., BROWN, J. M.
  1986; 12 (8): 1533-1535
- **PREFERENTIAL TUMOR RADIOSENSITIZATION BY ANALOGS OF NICOTINAMIDE AND BENZAMIDE** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  HORSMAN, M. R., BROWN, D. M., LEMMON, M. J., BROWN, J. M., LEE, W. W.
  1986; 12 (8): 1307-1310
- **SR-4233 - A NEW BIOREDUCTIVE AGENT WITH HIGH SELECTIVE TOXICITY FOR HYPOXIC MAMMALIAN-CELLS** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  ZEMAN, E. M., BROWN, J. M., LEMMON, M. J., HIRST, V. K., LEE, W. W.
  1986; 12 (7): 1239-1242
- **INVITRO AND INVIVO RADIATION SENSITIZATION BY THE HALOGENATED PYRIMIDINE 5-CHLORO-2'-DEOXYCYTIDINE** *CANCER RESEARCH*
  RUSSELL, K. J., RICE, G. C., BROWN, J. M.
  1986; 46 (6): 2883-2887
- **THE EFFECTS OF PURINE NUCLEOSIDE ANALOGS ON THE RESPONSE OF THE RIF-1 TUMOR TO MELPHALAN INVIVO** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  HORSMAN, M. R., BROWN, D. M., HIRST, D. G., BROWN, J. M.
  1986; 12 (5): 801-806
- **SR-4233 - A NEW BIOREDUCTIVE CYTOTOXIC AGENT WITH HIGH SELECTIVE TOXICITY FOR HYPOXIC MAMMALIAN-CELLS**
  BROWN, J. M., ZEMAN, E. M., BAKER, M. A., TAYLOR, Y. C., LEMMON, M. J., HIRST, V. K., LEE, W. W.
  AMER ASSOC CANCER RESEARCH.1986: 285
- **SENSITIZATION OF CHO CELLS TO X-RAYS BY PERTURBATION OF INTRACELLULAR THIOLS**
  BUMP, E. A., BROWN, J. M., LEE, W. W.
  FEDERATION AMER SOC EXP BIOL.1985: 853
- **THE EFFECT OF TREATMENT IN FRACTIONATED SCHEDULES WITH THE COMBINATION OF X-IRRADIATION AND 6 CYTO-TOXIC DRUGS ON THE RIF-1 TUMOR AND NORMAL MOUSE SKIN** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  LELIEVELD, P., SCOLES, M. A., BROWN, J. M., KALLMAN, R. F.
  1985; 11 (1): 111-121
- **THE USE OF RODENT TUMORS IN EXPERIMENTAL CANCER-THERAPY - CONCLUSIONS AND RECOMMENDATIONS FROM AN INTERNATIONAL WORKSHOP** *CANCER RESEARCH*
  KALLMAN, R. F., BROWN, J. M., DENEKAMP, J., HILL, R. P., KUMMERMEHR, J., TROTT, K. R.
  1985; 45 (12): 6541-6545
- **GLUTATHIONE DEPLETION AND MISONIDAZOLE EFFICIENCY** *BRITISH JOURNAL OF RADIOLOGY*
  BROWN, J. M., BUMP, E. A.
  1985; 58 (688): 386-388
- **SENSITIZERS AND PROTECTORS IN RADIOTHERAPY** *CANCER*
  BROWN, J. M.
  1985; 55 (9): 2222-2228
- **CHANGES IN MISONIDAZOLE BINDING WITH HYPOXIC FRACTION IN MOUSE-TUMORS** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  HIRST, D. G., HAZLEHURST, J. L., BROWN, J. M.
  1985; 11 (7): 1349-1355
- **THE INFLUENCE OF INHIBITORS OF POLY (ADP-RIBOSE) POLYMERASE ON X-RAY-INDUCED POTENTIALLY LETHAL DAMAGE REPAIR** *BRITISH JOURNAL OF CANCER*
  Brown, D. M., Evans, J. W., Brown, J. M.
  1984; 49: 27-31

- **DEPLETION OF GLUTATHIONE INVIVO AS A METHOD OF IMPROVING THE THERAPEUTIC RATIO OF MISONIDAZOLE AND SR-2508** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  YU, N. Y., BROWN, J. M.
  1984; 10 (8): 1265-1269

- **THE EFFECT OF ALTERATIONS IN HEMATOCRIT ON TUMOR SENSITIVITY TO X-RAYS** *INTERNATIONAL JOURNAL OF RADIATION BIOLOGY*
  HIRST, D. G., HAZLEHURST, J. L., BROWN, J. M.
  1984; 46 (4): 345-354

- **INHIBITION OF X-RAY-INDUCED POTENTIALLY LETHAL DAMAGE (PLD) REPAIR IN AEROBIC PLATEAU-PHASE CHINESE-HAMSTER CELLS BY MISONIDAZOLE** *RADIATION RESEARCH*
  BROWN, D. M., DIONET, C., BROWN, J. M.
  1984; 97 (1): 162-170

- **THE EFFECT OF TIMING ON CHEMOSENSITIZATION BY CLINICAL-LEVELS OF SR-2508** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  HIRST, D. G., HORSMAN, M. R., BROWN, J. M., HAZLEHURST, J. L.
  1984; 10 (9): 1641-1645

- **ENHANCEMENT OF MELPHALAN CYTO-TOXICITY INVIVO AND INVITRO BY INHIBITORS OF POLY (ADP-RIBOSE) POLYMERASE** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  BROWN, D. M., HORSMAN, M. R., HIRST, D. G., BROWN, J. M.
  1984; 10 (9): 1665-1668

- **MODIFICATION OF ALKYLATING AGENT CYTO-TOXICITY BY CISPLATIN** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  HORSMAN, M. R., HIRST, D. G., BROWN, D. M., BROWN, J. M.
  1984; 10 (9): 1669-1673

- **THE ROLE OF GLUTATHIONE AND DNA STRAND BREAK REPAIR IN DETERMINING THE SHOULDER OF THE RADIATION SURVIVAL-CURVE** *BRITISH JOURNAL OF CANCER*
  Evans, J. W., TAYLOR, Y. C., Brown, J. M.
  1984; 49: 49-53

- **ROLE OF THE ADENYLATE ENERGY-CHARGE IN THE RESPONSE OF CHINESE-HAMSTER OVARY CELLS TO RADIATION** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  BUMP, E. A., CALDERWOOD, S. K., SAWYER, J. M., BROWN, J. M.
  1984; 10 (8): 1411-1414

- **MECHANISM OF MELPHALAN CROSSLINK ENHANCEMENT BY MISONIDAZOLE PRETREATMENT** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  TAYLOR, Y. C., SAWYER, J. M., HSU, B., BROWN, J. M.
  1984; 10 (9): 1603-1607

- **CLINICAL-TRIALS OF RADIOSENSITIZERS - WHAT SHOULD WE EXPECT** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  BROWN, J. M.
  1984; 10 (3): 425-429

- **PHARMACOKINETICS AND TOXICOLOGY OF CONTINUOUSLY INFUSED NITROIMIDAZOLES** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  EIFEL, P. J., BROWN, J. M.
  1984; 10 (8): 1311-1314

- **ENHANCEMENT OF MELPHALAN-INDUCED TUMOR-CELL KILLING BY MISONIDAZOLE - AN INTERACTION OF COMPETING MECHANISMS** *BRITISH JOURNAL OF CANCER*
  HORSMAN, M. R., EVANS, J. W., BROWN, J. M.
  1984; 50 (3): 305-316

- **SENSITIZATION OF NORMAL AND MALIGNANT-TISSUES TO CYCLOPHOSPHAMIDE BY NITROIMIDAZOLES WITH DIFFERENT PARTITION-COEFFICIENTS** *BRITISH JOURNAL OF CANCER*

HIRST, D. G., HAZLEHURST, J. L., BROWN, J. M.
1984; 49 (1): 33-42

- **RADIOSENSITIZATION OF HYPOXIC CELLS INVIVO BY SR-2508 AT LOW RADIATION-DOSES - A PRELIMINARY-REPORT** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  BROWN, J. M., YU, N. Y.
  1984; 10 (8): 1207-1212
- **THE EFFECT OF INHIBITORS OF POLY(ADP-RIBOSE) POLYMERASE ON X-RAY-INDUCED PLD REPAIR**
  Brown, D. M., Brown, J. M.
  RADIATION RESEARCH SOC.1983: 628–28
- **MECHANISM OF SENSITIZATION OF CHINESE-HAMSTER OVARY CELLS TO MELPHALAN BY HYPOXIC TREATMENT WITH MISONIDAZOLE** *CANCER RESEARCH*
  TAYLOR, Y. C., Evans, J. W., Brown, J. M.
  1983; 43 (7): 3175-3181
- **MISONIDAZOLE NEUROTOXICITY IN MICE DECREASED BY ADMINISTRATION WITH PYRIDOXINE** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  EIFEL, P. J., BROWN, D. M., LEE, W. W., BROWN, J. M.
  1983; 9 (10): 1513-1519
- **EFFECT OF PARTITION-COEFFICIENT ON THE ABILITY OF NITROIMIDAZOLES TO ENHANCE THE CYTO-TOXICITY OF 1-(2-CHLOROETHYL)-3-CYCLOHEXYL-1-NITROSOUREA** *CANCER RESEARCH*
  HIRST, D. G., BROWN, J. M., HAZLEHURST, J. L.
  1983; 43 (5): 1961-1965
- **INFLUENCE OF HEAT ON THE INTRACELLULAR UPTAKE AND RADIOSENSITIZATION OF 2-NITROIMIDAZOLE HYPOXIC CELL SENSITIZERS INVITRO** *CANCER RESEARCH*
  BROWN, D. M., COHEN, M. S., SAGERMAN, R. H., GONZALEZMENDEZ, R., HAHN, G. M., BROWN, J. M.
  1983; 43 (7): 3138-3142
- **ROLE OF GLUTATHIONE IN THE HYPOXIC CELL CYTO-TOXICITY OF MISONIDAZOLE** *CANCER RESEARCH*
  BUMP, E. A., TAYLOR, Y. C., BROWN, J. M.
  1983; 43 (3): 997-1002
- **FACTORS INFLUENCING INTRACELLULAR UPTAKE AND RADIOSENSITIZATION BY 2-NITROIMIDAZOLES INVITRO** *RADIATION RESEARCH*
  BROWN, D. M., GONZALEZMENDEZ, R., BROWN, J. M.
  1983; 93 (3): 492-505
- **STRUCTURE ACTIVITY RELATIONSHIPS OF 1-SUBSTITUTED 2-NITROIMIDAZOLES - EFFECT OF PARTITION-COEFFICIENT AND SIDE-CHAIN HYDROXYL-GROUPS ON RADIOSENSITIZATION INVITRO** *RADIATION RESEARCH*
  Brown, D. M., Parker, E., Brown, J. M.
  1982; 90 (1): 98-108
- **STUDIES ON THE MECHANISM OF CHEMOSENSITIZATION BY MISONIDAZOLE INVITRO** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  TAYLOR, Y. C., BUMP, E. A., BROWN, J. M.
  1982; 8 (3-4): 705-708
- **THE MECHANISMS OF CYTO-TOXICITY AND CHEMOSENSITIZATION BY MISONIDAZOLE AND OTHER NITROIMIDAZOLES** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  BROWN, J. M.
  1982; 8 (3-4): 675-682
- **EFFECT OF CLINICAL-LEVELS OF MISONIDAZOLE ON THE RESPONSE OF TUMOR NORMAL-TISSUES IN THE MOUSE TO ALKYLATING-AGENTS** *BRITISH JOURNAL OF CANCER*
  BROWN, J. M., HIRST, D. G.
  1982; 45 (5): 700-708

- **THE DEVELOPMENT OF AN ORAL PRODRUG, SR-2545, OF THE 2-NITROIMIDAZOLE RADIOSENSITIZER SR-2508** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  COLEMAN, C. N., LEE, W. W., CONSTINE, L. S., BROWN, J. M.
  1982; 8 (3-4): 431-434
- **THE EFFECT OF MISONIDAZOLE ON THE CYTO-TOXICITY AND REPAIR OF POTENTIALLY LETHAL DAMAGE FROM ALKYLATING-AGENTS INVITRO** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  HORSMAN, M. R., BROWN, J. M., SCHELLEY, S. L.
  1982; 8 (3-4): 761-765
- **MECHANISM OF SENSITIZATION BY HYPOXIC PRETREATMENT WITH MISONIDAZOLE**
  TAYLOR, Y. C., EVANS, J. W., BROWN, J. M.
  RADIATION RESEARCH SOC.1982: 379
- **DOES THE PRE-INCUBATION EFFECT SEEN FOR DRUGS AND RADIATION INVITRO ALSO OCCUR INVIVO**
  EIFEL, P., GOFFINET, D. R., BROWN, J. M.
  PERGAMON-ELSEVIER SCIENCE LTD.1982: 813
- **INVITRO AND INVIVO RADIOSENSITIZATION BY 2-NITROIMIDAZOLES MORE ELECTRON-AFFINIC THAN MISONIDAZOLE** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  BROWN, D. M., YU, N. Y., BROWN, J. M., LEE, W. W.
  1982; 8 (3-4): 435-438
- **THE THERAPEUTIC POTENTIAL OF MISONIDAZOLE ENHANCEMENT OF ALKYLATING AGENT CYTO-TOXICITY** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  HIRST, D. G., BROWN, J. M.
  1982; 8 (3-4): 639-642
- **STEADY-STATE ALTERATION OF THE INTRACELLULAR GLUTATHIONE REDOX STATE IN CHO CELLS BY SR-2620, A DIAMIDE ANALOG - IMPLICATIONS FOR RADIOSENSITIZATION OF HYPOXIC CELLS**
  BUMP, E. A., LEE, W. W., BROWN, J. M.
  RADIATION RESEARCH SOC.1982: 378
- **INVITRO STUDIES ON THE MODIFICATION OF MELPHALAN CYTO-TOXICITY BY MISONIDAZOLE**
  HORSMAN, M. R., EVANS, J. W., BROWN, J. M.
  RADIATION RESEARCH SOC.1982: 380
- **SULFHYDRYLS, RADIOSENSITIVITY AND STRAND-BREAK REPAIR**
  BROWN, J. M., BUMP, E. A., TAYLOR, Y. C.
  RADIATION RESEARCH SOC.1982: 391-392
- **ENHANCEMENT OF CCNU CYTO-TOXICITY BY MISONIDAZOLE - POSSIBLE THERAPEUTIC GAIN** *BRITISH JOURNAL OF CANCER*
  HIRST, D. G., BROWN, J. M., HAZLEHURST, J. L.
  1982; 46 (1): 109-116
- **THE USE OF DRUGS WHICH DEPLETE INTRACELLULAR GLUTATHIONE IN HYPOXIC CELL RADIOSENSITIZATION** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  BUMP, E. A., YU, N. Y., BROWN, J. M.
  1982; 8 (3-4): 439-442
- **CLINICAL PERSPECTIVES FOR THE USE OF NEW HYPOXIC CELL SENSITIZERS** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  BROWN, J. M.
  1982; 8 (9): 1491-1497
- **RADIOSENSITIZATION OF HYPOXIC TUMOR-CELLS BY DEPLETION OF INTRACELLULAR GLUTATHIONE** *SCIENCE*
  BUMP, E. A., YU, N. Y., BROWN, J. M.
  1982; 217 (4559): 544-545
- **SR-2508 - A 2-NITROIMIDAZOLE AMIDE WHICH SHOULD BE SUPERIOR TO MISONIDAZOLE AS A RADIOSENSITIZER FOR CLINICAL USE** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*

Brown, J. M., Yu, N. Y., Brown, D. M., Lee, W. W.
1981; 7 (6): 695-703

- **THE EFFECT OF MISONIDAZOLE ON CELLULAR-RECOVERY FROM ALKYLATING AGENT-INDUCED POTENTIALLY LETHAL DAMAGE**
  HORSMAN, M. R., BROWN, J. M.
  RADIATION RESEARCH SOC.1981: 464
- **RADIOSENSITIZERS - RATIONALE AND POTENTIAL** *CANCER TREATMENT REPORTS*
  BROWN, J. M.
  1981; 65: 95-102
- **DEVELOPMENT OF NEW HYPOXIC-CELL RADIOSENSITIZERS**
  BROWN, J. M.
  BRITISH INST RADIOLOGY.1981: 169
- **A DIFFERENTIAL EFFECT OF MISONIDAZOLE ON THE CYTO-TOXICITY OF CYCLOPHOSPHAMIDE IN TUMOR AND NORMAL-TISSUES**
  LAW, M. P., HIRST, D. G., BROWN, J. M.
  BRITISH INST RADIOLOGY.1981: 712
- **RADIOSENSITIZATION AND ENHANCEMENT OF MISONIDAZOLE RADIOSENSITIZATION BY GLUTATHIONE DEPLETION WITH DIETHYLMALEATE**
  BUMP, E. A., BROWN, J. M.
  RADIATION RESEARCH SOC.1981: 463
- **ROLE OF GLUTATHIONE DEPLETION IN THE PRE-INCUBATION EFFECT OF MISONIDAZOLE**
  TAYLOR, Y. C., BUMP, E. A., BROWN, J. M.
  RADIATION RESEARCH SOC.1981: 462-463
- **MODIFICATION OF THE CYTO-TOXICITY OF ALKYLATING-AGENTS BY MISONIDAZOLE IN TUMORS AND NORMAL-TISSUES**
  HIRST, D. G., BROWN, J. M.
  RADIATION RESEARCH SOC.1981: 464
- **THE EFFECT OF MISONIDAZOLE ON CELLULAR-RECOVERY FROM ALKYLATING AGENT-INDUCED POTENTIALLY LETHAL DAMAGE**
  HORSMAN, M. R., BROWN, J. M.
  RADIATION RESEARCH SOC.1981: 464
- **INVITRO RADIOSENSITIZATION AND CYTO-TOXICITY OF 2-NITROIMIDAZOLES WITH DIFFERENT LIPOPHILICITIES**
  Brown, D. M., Parker, E. T., Brown, J. M.
  RADIATION RESEARCH SOC.1980: 397–98
- **NEW MOUSE-TUMOR MODEL SYSTEM (RIF-1) FOR COMPARISON OF ENDPOINT STUDIES** *JNCI-JOURNAL OF THE NATIONAL CANCER INSTITUTE*
  TWENTYMAN, P. R., BROWN, J. M., GRAY, J. W., FRANKO, A. J., SCOLES, M. A., KALLMAN, R. F.
  1980; 64 (3): 595-604
- **THE EFFECTS OF MISONIDAZOLE DURING CONTINUOUS LOW-DOSE RATE IRRADIATION** *CANCER CLINICAL TRIALS*
  FU, K. K., HURST, S., BEGG, A. C., BROWN, J. M.
  1980; 3 (3): 257-265
- **RESPONSE OF THE RIF-1 TUMOR INVITRO AND IN C3H-KM MICE TO X-RADIATION (CELL-SURVIVAL, REGROWTH DELAY, AND TUMOR-CONTROL), CHEMOTHERAPEUTIC-AGENTS, AND ACTIVATED MACROPHAGES** *JOURNAL OF THE NATIONAL CANCER INSTITUTE*
  BROWN, J. M., TWENTYMAN, P. R., ZAMVIL, S. S.
  1980; 64 (3): 605–11
- **A STUDY OF THE MECHANISM BY WHICH LOCALIZED PRE-INOCULATION IRRADIATION ENHANCES THE RATE OF LYMPHATIC SPREAD** *RADIATION RESEARCH*
  RAPPAPORT, D. S., BROWN, J. M.
  1980; 83 (3): 566-578
- **THE EFFECT OF MISONIDAZOLE ON THE INVIVO CYTO-TOXICITY OF CYCLOPHOSPHAMIDE**
  LAW, M. P., BROWN, J. M.

RADIATION RESEARCH SOC.1980: 398-399

- **PARTITION-COEFFICIENT AS A GUIDE TO THE DEVELOPMENT OF RADIOSENSITIZERS WHICH ARE LESS TOXIC THAN MISONIDAZOLE** *RADIATION RESEARCH*
  BROWN, J. M., WORKMAN, P.
  1980; 82 (1): 171-190
- **THE OPTIMUM TIME FOR IRRADIATION RELATIVE TO TUMOR CONCENTRATION OF HYPOXIC CELL SENSITIZERS** *BRITISH JOURNAL OF RADIOLOGY*
  BROWN, J. M., YU, N. Y.
  1980; 53 (633): 915-916
- **EVIDENCE FOR ACUTELY HYPOXIC CELLS IN MOUSE-TUMORS, AND A POSSIBLE MECHANISM OF RE-OXYGENATION** *BRITISH JOURNAL OF RADIOLOGY*
  BROWN, J. M.
  1979; 52 (620): 650-656
- **CYTOTOXICITY OF MISONIDAZOLE INVIVO UNDER CONDITIONS OF PROLONGED CONTACT OF DRUG WITH THE TUMOR-CELLS** *BRITISH JOURNAL OF RADIOLOGY*
  BROWN, J. M., YU, N. Y.
  1979; 52 (623): 893-896
- **INFLUENCE OF LOCALIZED PRE-INOCULATION IRRADIATION OF THE FOOT ON LYMPHATIC METASTASIS FROM A PRIMARY TUMOR GROWING IN THE FOOT** *RADIATION RESEARCH*
  RAPPAPORT, D. S., BROWN, J. M.
  1979; 78 (1): 108-121
- **EFFECT OF TIME BETWEEN X-IRRADIATION AND CHEMOTHERAPY ON THE GROWTH OF 3 SOLID MOUSE-TUMORS .1. ADRIAMYCIN** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  TWENTYMAN, P. R., KALLMAN, R. F., BROWN, J. M.
  1979; 5 (8): 1255-1260
- **HOST TREATMENTS AFFECTING ARTIFICIAL PULMONARY METASTASES - INTERPRETATION OF LOSS OF RADIOACTIVELY LABELED CELLS FROM LUNGS** *BRITISH JOURNAL OF CANCER*
  BROWN, J. M., PARKER, E. T.
  1979; 40 (5): 677-688
- **EFFECT OF TIME BETWEEN X-IRRADIATION AND CHEMOTHERAPY ON THE GROWTH OF 3 SOLID MOUSE-TUMORS .2. CYCLOPHOSPHAMIDE** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  TWENTYMAN, P. R., KALLMAN, R. F., BROWN, J. M.
  1979; 5 (9): 1425-1427
- **DRUG OR RADIATION CHANGES TO THE HOST WHICH COULD AFFECT THE OUTCOME OF COMBINED MODALITY THERAPY** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  BROWN, J. M.
  1979; 5 (8): 1151-1163
- **EARLY AND LATE RESPONSE OF THE MOUSE LIMB TO MULTI-FRACTIONATED X-IRRADIATION** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  HOWES, A. E., BROWN, J. M.
  1979; 5 (1): 13-21
- **EFFECT OF TIME BETWEEN X-IRRADIATION AND CHEMOTHERAPY ON THE GROWTH OF 3 SOLID MOUSE-TUMORS .5. BLEOMYCIN** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  TWENTYMAN, P. R., KALLMAN, R. F., BROWN, J. M.
  1979; 5 (9): 1499-1501
- **EFFECT OF BCNU ON MOUSE SKIN AND SPINAL-CORD IN SINGLE DRUG AND RADIATION EXPOSURES** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  LELIEVELD, P., Brown, J. M., Goffinet, D. R., SCHOEPPEL, S. L., SCOLES, M.
  1979; 5 (9): 1565-1568

- **PHARMACOKINETIC CONSIDERATIONS IN TESTING HYPOXIC CELL RADIOSENSITIZERS IN MOUSE-TUMORS** *BRITISH JOURNAL OF CANCER*
  BROWN, J. M., YU, N. Y., WORKMAN, P.
  1979; 39 (3): 310-320
- **EFFECT OF TIME BETWEEN X-IRRADIATION AND CHEMOTHERAPY ON THE GROWTH OF 3 SOLID MOUSE-TUMORS .4. ACTINOMYCIN-D** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  TWENTYMAN, P. R., KALLMAN, R. F., BROWN, J. M.
  1979; 5 (9): 1601-1603
- **RELATIVE EFFICACY OF HIGH-PRESSURE OXYGEN AND MISONIDAZOLE TO REDUCE TCD50 OF A MOUSE MAMMARY-CARCINOMA** *BRITISH JOURNAL OF RADIOLOGY*
  SUIT, H. D., BROWN, J. M.
  1979; 52 (614): 159-160
- **EFFECT OF TIME BETWEEN X-IRRADIATION AND CHEMOTHERAPY (ADM, CTX, CIS-DDP, ACT-D, BLM, OR BCNU) ON THE GROWTH OF 3 SOLID MURINE TUMORS**
  TWENTYMAN, P. R., KALLMAN, R. F., BROWN, J. M.
  CHURCHILL LIVINGSTONE.1979: 305
- **CYTOTOXICITY OF MISONIDAZOLE INVIVO UNDER CONDITIONS OF PROLONGED CONTACT OF DRUG WITH THE TUMOR-CELLS**
  BROWN, J. M., YU, N. Y.
  CHURCHILL LIVINGSTONE.1979: 305
- **EFFECT OF TIME BETWEEN X-IRRADIATION AND CHEMOTHERAPY ON THE GROWTH OF 3 SOLID MOUSE-TUMORS .3. CIS-DIAMMINEDICHLOROPLATINUM** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  TWENTYMAN, P. R., KALLMAN, R. F., BROWN, J. M.
  1979; 5 (8): 1365-1367
- **EFFECT OF TIME BETWEEN X-IRRADIATION AND CHEMOTHERAPY ON THE GROWTH OF 3 SOLID MOUSE-TUMORS .6. BCNU** *INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS*
  LELIEVELD, P., TWENTYMAN, P. R., KALLMAN, R. F., BROWN, J. M.
  1979; 5 (9): 1549-1552
- **INVIVO EVALUATION OF RADIOSENSITIZING AND CYTOTOXIC PROPERTIES OF NEWLY SYNTHESIZED ELECTRON-AFFINIC DRUGS** *BRITISH JOURNAL OF CANCER*
  BROWN, J. M., YU, N. Y., CORY, M. J., BICKNELL, R. B., TAYLOR, D. L.
  1978; 37: 206-211
- **CAN ANIMAL AND INVITRO STUDIES GIVE NEW, RELEVANT ANSWERS TO QUESTIONS CONCERNING MAMMOGRAPHIC SCREENING FOR HUMAN BREAST-CANCER** *JNCI-JOURNAL OF THE NATIONAL CANCER INSTITUTE*
  DETHLEFSEN, L. A., BROWN, J. M., CARRANO, A. V., NANDI, S.
  1978; 61 (6): 1537-1545
- **EFFECT OF DOSE FRACTIONATION ON ENHANCEMENT BY RADIATION OR CYCLOPHOSPHAMIDE OF ARTIFICIAL PULMONARY METASTASES** *BRITISH JOURNAL OF CANCER*
  BROWN, J. M., MARSA, G. W.
  1978; 37 (6): 1020-1025
- **CYTOTOXICITY OF ELECTRON-AFFINIC RADIOSENSITIZERS TO TUMORS INVIVO, AND ATTEMPTS TO ENHANCE CELL KILLING**
  BROWN, J. M., YU, N. Y., TAYLOR, D. L.
  RADIATION RESEARCH SOC.1978: 473-474
- **EFFECTS OF RADIATION AND CHEMOTHERAPEUTIC-AGENTS ON LYMPHATIC METASTASIS**
  RAPPAPORT, D. S., BROWN, J. M.
  RADIATION RESEARCH SOC.1978: 579-580
- **COMPARISON OF INTRAVENOUS AND INTRA-ARTERIAL PYRIMIDINE INFUSION AS A MEANS OF RADIOSENSITIZING TUMORS INVIVO** *RADIOLOGY*
  Goffinet, D. R., Brown, J. M.
  1977; 124 (3): 819-822

- **CYTOTOXIC EFFECTS OF HYPOXIC CELL RADIOSENSITIZER RO 7-0582 TO TUMOR-CELLS INVIVO** *RADIATION RESEARCH*
  BROWN, J. M.
  1977; 72 (3): 469-486
- **INVESTIGATION INTO MECHANISM BY WHICH RADIATION OR CYCLOPHOSPHAMIDE INCREASES BLOOD-BORNE METASTASES IN MICE**
  BROWN, J. M.
  RADIATION RESEARCH SOC.1977: 689-690
- **EFFECT OF CYCLOPHOSPHAMIDE AND OTHER DRUGS ON INCIDENCE OF PULMONARY METASTASES IN MICE** *CANCER RESEARCH*
  CARMEL, R. J., BROWN, J. M.
  1977; 37 (1): 145-151
- **SHAPE OF DOSE - RESPONSE CURVE FOR RADIATION CARCINOGENESIS EXTRAPOLATION TO LOW-DOSES** *RADIATION RESEARCH*
  BROWN, J. M.
  1977; 71 (1): 34-50
- **LINEARITY VS NONLINEARITY OF DOSE-RESPONSE FOR RADIATION CARCINOGENESIS** *HEALTH PHYSICS*
  BROWN, J. M.
  1976; 31 (3): 231-245
- **EFFECTS OF SINGLE AND MULTIFRACTION RADIATION COURSES ON MOUSE SPINAL-CORD** *RADIOLOGY*
  Goffinet, D. R., MARSA, G. W., Brown, J. M.
  1976; 119 (3): 709-713
- **EFFECT OF CYCLOPHOSPHAMIDE AND OTHER DRUGS ON INCIDENCE OF PULMONARY METASTASES IN MICE**
  CARMEL, R. J., BROWN, J. M.
  RADIATION RESEARCH SOC.1976: 642
- **SHAPE OF DOSE-RESPONSE CURVE FOR RADIATION CARCINOGENESIS AND EXTRAPOLATION TO LOW RADIATION-DOSES**
  BROWN, J. M.
  RADIATION RESEARCH SOC.1976: 553
- **EARLY AND LATE RADIATION CHANGES FOLLOWING A SECOND COURSE OF IRRADIATION** *RADIOLOGY*
  BROWN, J. M., PROBERT, J. C.
  1975; 115 (3): 711-716
- **SELECTIVE RADIOSENSITIZATION OF HYPOXIC CELLS OF MOUSE TUMORS WITH NITROIMIDAZOLES METRONIDAZOLE AND RO 7-0582** *RADIATION RESEARCH*
  BROWN, J. M.
  1975; 64 (3): 633-647
- **EARLY AND LATE RESPONSE OF MOUSE LIMB TO MULTI-FRACTIONATED X-IRRADIATION**
  HOWES, A. E., BROWN, J. M.
  RADIATION RESEARCH SOC.1975: 608
- **SPINAL-CORD INJURY OF MOUSE TO SINGLE AND MULTIPLE FRACTIONS OF X-IRRADIATION**
  GOFFINET, D. R., MARSA, G. W., BROWN, J. M.
  RADIATION RESEARCH SOC.1975: 608
- **SELECTIVE RADIOSENSITIZATION OF HYPOXIC CELLS OF MOUSE TUMORS WITH NITROIMIDAZOLES METRONIDAZOLE AND RO 7-0582** *RADIATION RESEARCH*
  BROWN, J. M.
  1975; 64 (3): 633-647
- **EARLY AND LATE RESPONSE OF MOUSE LIMB TO MULTI-FRACTIONATED X-IRRADIATION**
  HOWES, A. E., BROWN, J. M.
  RADIATION RESEARCH SOC.1975: 608
- **SPINAL-CORD INJURY OF MOUSE TO SINGLE AND MULTIPLE FRACTIONS OF X-IRRADIATION**
  GOFFINET, D. R., MARSA, G. W., BROWN, J. M.

RADIATION RESEARCH SOC.1975: 608

- **RESPONSE OF MOUSE SKIN TO SHORT-INTERVAL, MULTI-FRACTION IRRADIATION**
  HOWES, A. E., BROWN, J. M.
  RADIATION RESEARCH SOC.1974: 250
- **COMPARISON OF TUMOR-GROWTH DELAY WITH CELL SURVIVAL** *BRITISH JOURNAL OF RADIOLOGY*
  BROWN, J. M., HOWES, A. E.
  1974; 47 (560): 509-510
- **ACUTE AND CHRONIC EFFECTS OF X-IRRADIATION ON BLOOD-FLOW IN MOUSE LIMB** *RADIOLOGY*
  HORN, N. L., Thompson, M., HOWES, A. E., Brown, J. M., KALLMAN, R. F., PROBERT, J. C.
  1974; 113 (3): 713-722
- **RADIOSENSITIZATION OF PULMONARY METASTASES WITH INTRAVENOUS-INFUSION OF PYRIMIDINE ANALOGS**
  BROWN, J. M.
  RADIATION RESEARCH SOC.1974: 68
- **COMPARISON OF 3 AND 5 TIMES WEEKLY FRACTIONATION ON RESPONSE OF NORMAL AND MALIGNANT TISSUES OF C3H MOUSE** *BRITISH JOURNAL OF RADIOLOGY*
  PROBERT, J. C., BROWN, J. M.
  1974; 47 (563): 775-780
- **EFFECT OF IRRADIATION ON NORMAL AND HYPEREMIC BLOOD-FLOW IN MOUSE LIMBS**
  HORN, N. L., THOMPSON, M., HOWES, A. E., BROWN, J. M., KALLMAN, R. F., PROBERT, J. C.
  RADIATION RESEARCH SOC.1974: 41
- **STUDY OF MECHANISM BY WHICH ANTICOAGULATION WITH WARFARIN INHIBITS BLOOD-BORNE METASTASES** *CANCER RESEARCH*
  BROWN, J. M.
  1973; 33 (6): 1217-1224
- **LONG-TERM RECOVERY OF CONNECTIVE-TISSUE AFTER IRRADIATION** *RADIOLOGY*
  BROWN, J. M., PROBERT, J. C.
  1973; 108 (1): 205-206
- **EFFECT OF LUNG IRRADIATION ON INCIDENCE OF PULMONARY METASTASES IN MICE** *BRITISH JOURNAL OF RADIOLOGY*
  BROWN, J. M.
  1973; 46 (548): 613-618