



## Martin Brown

Professor of Radiation Oncology, Emeritus

 NIH Biosketch available Online

### Bio

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#### ACADEMIC APPOINTMENTS

- Emeritus Faculty, Acad Council, Radiation Oncology
- 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, American 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

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#### 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

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## GRADUATE AND FELLOWSHIP PROGRAM AFFILIATIONS

- Cancer Biology (Phd Program)

## Publications

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## 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 et al, 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., Gyorfyy, 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**

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- 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.  
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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., Puijn, 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.  
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- **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.  
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- **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.  
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