


**UNIVERSITY OF ARKANSAS FOR MEDICAL SCIENCES
GRADUATE FACULTY APPLICATION**

1. Name: Fen Xia
2. UAMS Graduate Program Sponsor: GPIBS and CTS Major field: Radiation Oncology
3. Present UAMS academic title or administrative position: Professor and Chairman-Dept. of Radiation Oncology
- Date appointed this rank/position: July 2016 Employed by: UAMS

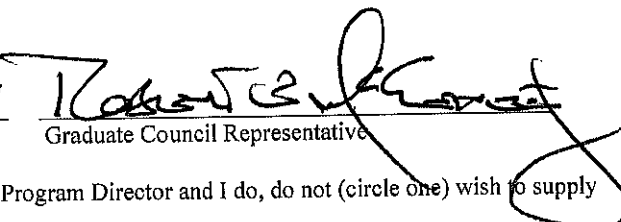
4. Comments of Department Chair/Head or Program Director including: evidence of scholarly development, effectiveness as a teacher, quality of publications and reallocation of duties if this application is approved.

Dr. Xia has recently been recruited to UAMS as the chair of the department of radiation oncology. She is also an MD/PhD, and true physician scientist and I am very excited she is interested in getting engaged with the graduate school. She has quite a bit of experience with graduate education, having served on advisory committees and as a major advisor (both PhD and MS). As demonstrated in her cv, she has been involved in mentoring throughout her career, whether graduate student, postdocs, medical students and residents/fellows/junior faculty. She has over 50 publications and has been very well funded with extramural awards throughout her career.


Robert E. McGehee, Jr.
 Department Chair/Head or Program Director

April 13, 2017

Date

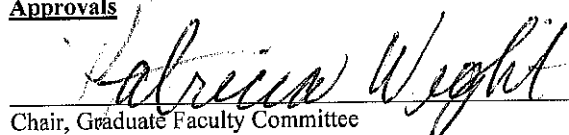

 Graduate Council Representative

I have read the comments of my Department Chair/Head or Program Director and I do, do not (circle one) wish to supply additional information in support of my application.

Fen Xia
 Applicant's Signature

4-12-17
 Date

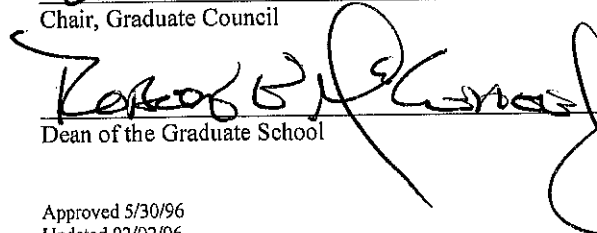
Approvals


 Chair, Graduate Faculty Committee

4/20/2017
 Date


 Chair, Graduate Council

4/20/2017
 Date


 Dean of the Graduate School

4/20/2017
 Date

5. **List your planned involvement in graduate education (courses, theses, dissertations):**

I have talked at length with Dr. Xia, and she is very excited to start having students rotate in her laboratory. I think she is a perfect match in a number of tracks but especially our CTS program and the GPIBS-Pathobiology track. I have started to introduce her to a few folks and would like her to get on some committees soon so she can get familiar with our system.

I dont have a plan directly at this time for formal teaching, but she really wants to participate. I want her to meet a few folks and find a good match, but I am thinking Pathobiology, Radiation Biology, Cancer. She could cover a very nice breadth of topics.

6. **Briefly summarize your experience in graduate-level classroom teaching:**

please see cv.

7. **Briefly summarize your experience in research and student research mentoring:**

noted in cv

8. **Attach Curriculum Vita** showing educational background (including institutions attended, degrees awarded and dates), honors or awards received, scholarly or professional organization affiliations, teaching experience (give school, dates and advanced and graduate subjects taught), including student theses and/or dissertations supervised. Cite publications and research in progress.

INSTRUCTIONS FOR COMPLETION OF THE COMPUTERIZED FORM FOR APPLICATION TO THE UAMS GRADUATE FACULTY

1. Please read the form carefully and answer all questions. The form begins on the next page.
2. The form has been designed with fields for your responses, and these are indicated in blue and gray shading. Use the "tab" key to move between fields. The form will automatically expand to accommodate your entries. IF YOU NEED HELP IN ANY OF THE FIELDS, PRESS THE F1 KEY AND A HELP WINDOW WILL OPEN.
3. When you have completed the form, save it as a document on your own disk for future reference.
4. Print the document, and then obtain the appropriate signatures before submitting the form to the Graduate Office.

CURRICULUM VITAE

Fen Xia, M.D., Ph.D.

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Department of Radiation Oncology
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Winthrop P. Rockefeller Cancer Institute
Radiation Oncology Center Clinic
4130 Shuffield Drive
Little Rock, AR 72205

Citizenship: P. R. China (USA permanent resident)
Language(s): Chinese, English

Academic History

Colleges and universities attended:

9/1992 – 3/1996 PhD, Cancer Biology, Harvard School of Public Health,
Boston, Massachusetts
7/1986 MS, Radiation Toxicology, Suzhou Medical College, Suzhou, China
9/1978 – 8/1983 MD, Suzhou Medical College, Suzhou, China

Fellowship, residency, and internship:

2015 Leadership for Physician Executives, Harvard Medical School
7/2002-6/2006 Resident, Department of Radiation Oncology, Vanderbilt University
Medical Center, Nashville, Tennessee
7/2001-6/2002 Intern, Department of Surgery, New England Medical Center, Boston,
Massachusetts

Scholarships and academic honors:

2015 The Ohio State College of Medicine Faculty Achievement Award for 2015
2013 Gamma Knife Radiosurgery Course Department of Neurosurgery, University of
Pittsburg School of Medicine
2009-2010 Cancer Center Support Grant from Vanderbilt-Ingram Cancer Center in
recognition of outstanding research program
1996-1997 NRSA Individual Postdoctoral Fellowship
1993-1994 Travel Award for Radiation Research Society Annual Meeting

Postdoctoral training:

7/1/2000 – 6/30/2001 Research Fellow in Radiation Oncology, Radiation Oncology,
Massachusetts General Hospital
9/1/1996 – 3/8/1998 Research Fellow in Medicine, Beth Israel Deaconess Medical
Center, Boston, MA
12/1/1995 – 8/31/1996 Research Fellow, Harvard School of Public Health, Boston,
Massachusetts
4/15/1991 - 4/14/1993 Visiting Research Fellow, School of Public Health, Harvard
University, Boston, MA

Board certification:

6/2/2008 Radiation Oncology

Medical licensure:

4/25/2006 – 9/30/2016 Tennessee
8/10/2011 – 10/01/2017 Ohio

Experience

07/01/2016 - Professor and Chairman, University of Arkansas for Medical Sciences
College of Medicine Department of Radiation Oncology, Little Rock, AR

07/2014-present Director of Translational Research in Radiation Oncology, Ohio State
University, College of Medicine, Columbus, OH

06/2014-present *Professor (tenured)*, Department of Radiation Oncology, Ohio State
University, College of Medicine, Columbus, OH

10/2011-05/2014 *Associate Professor (tenured)*, Department of Radiation Oncology, Ohio
State University, College of Medicine, Columbus, OH

07/2010-10/2011 Director of Central Nerve System Clinic, Department of Cancer Biology,
Vanderbilt University School of Medicine, Nashville, TN

07/2004-10/2011 *Assistant Professor*, Department of Cancer Biology, Vanderbilt University
School of Medicine, Nashville, TN

07/2002-09/2004 *Instructor*, Department of Radiation Oncology, Vanderbilt University
School of Medicine, Nashville, TN

3/9/1998 – 1/1/2002 *Instructor* in Radiation Oncology, Dept of Radiation Oncology,
Massachusetts General Hospital, Boston, MA

04/1990-04/1991 *Visiting Scientist*, Institute of Nuclear Science and Medicine, Nuclear
Medicine Research Center Juelich GMBH, Germany

07/1986-04/1990 *Lecturer*, Department of Radiation Oncology, Suzhou Medical School,
China

Grant Support

Current:

R01 CA188500 (PI) NIH/NCI The Novel Functions of Pyruvate Kinase M2 in DNA Double-Strand Break Repair	09/2014-08/2019 \$401,992.00 annual
R01 CA163838 (PI) NIH/NCI GSK3b Mediates Radiation-Induced Cytotoxicity in Hippocampal Neurons	07/2012-06/2017 \$382,440.00 annual
S10 OD020006 (Co-I) NIH SARRP 200 Small animal radiation research platform	03/2015-03/2016 \$59,718.00 annual
NSFC grant award (Consultant) National Natural Science Foundation of China Ionizing Radiation Sensitizes Breast Cancer to Poly (ADP-Ribose) Polymerase (PARP) Inhibitor by Inducing BRCA1 Nuclear Export	01/2013-12/2016
RTOG-1205 (Co-investigator) NIH/NCI Randomized Phase II Trial of Concurrent Bevacizumab and Re-Irradiation Versus Bevacizumab Alone as Treatment for Recurrent Glioblastoma	06/2014-present
PLX108-08 (Co-investigator) Plexxikon Inc. An Open Label Phase 1b/2 Study of Orally Administered PLX3397 in Combination with Radiation Therapy and Temozolomide in Patients with Newly Diagnosed Glioblastoma	01/2013-present
VICCRAD1060-A (Co-investigator) Clinical Research Grant, Bayer/Onyx Phase I/II Trial of Sorafenib and Stereotactic Radiosurgery for Patients with 1-4 Brain Metastases	01/2011-present
OSU 08142: (Co-investigator) NCCN/Teva Pharmaceuticals Phase I Study of Bendamustine and Fractionated Stereotactic Radiotherapy of Patients with 1- 4 Brain Metastases from Solid Malignancies	11/2010-present
NCI Protocol 9458: (Co-investigator) A Phase I Study of Trametinib in Combination with Radiation Therapy for Brain Metastasis from KRAS-, BRAF-, NRAS-, or HRAS mutant malignancies	11/2014-present
NRG-BN002: (Co-investigator)	03/2016-present

Phase I Study of Ipilimumab, Nivoluman, and the Combination in Patient with Newly Diagnosed Glioblastoma.

Completed:

UL1 TR000445-06 (Co-investigator)	07/2010-06/2013
The National Center for Advancing Translational Sciences Host Gene Factors Contributing to the Development of Cancer Metastasis	
R01 CA118158-01 (PI)	09/2006-09/2012
NIH/NCI The Role of BRCA1 in Non-homologous Repair of Chromosomal Double Strand Break	
DOD 81XWH-08-1-0571 (PI)	09/2008-08/2010
Department of Defense Rendering DNA Repair Defective by Targeting Wild-type BRCA1 Nuclear Shuttling in Sporadic Breast Cancer as a Therapeutic Strategy	
BCTR0201704 (PI)	05/2003-04/2006
Susan G. Komen Breast Cancer Research Award DNA Damage-Induced BRCA1 Nuclear Export-a Potential Marker for Tumor Response to Cytotoxic Therapy	
Pilot Project from Breast SPORE (PI)	2004
Vanderbilt-Ingram Cancer Center Regulation of BRCA1 Function in response to DNA Damage	
Avon Breast Cancer Research Award (PI)	2000-2002
Insert funding source DNA damaged induced BRCA1 Nuclear Export	
Breast Cancer Program Award (PI)	1999-2000
Massachusetts Department of Health The Role of BRCA2 in Homologous Recombination-Mediated Chromosomal Break Repair	
ACS-IRG (PI)	1999-2000
American Cancer Society The Effect of p53 on Radiation-Induced Mutagenesis	
Postdoctoral Fellowship Award, National Research Service	1996, 1997

Mentored grants:

CCTS KL2 Scholar Award to Terry Williams, MD, PhD	7/2014-6/2016
Unraveling KRAS Mechanisms of Radioresistance and Developing Novel Radiosensitizers for KRAS Mutant Carcinomas by Targeting Downstream Pathways	
PC094457 Physician Research Training Award to Eddy Yang, MD, PhD	6/2010-5/2013

- Targeting Homology-Directed Recombinational Repair (HDR) of Chromosomal Breaks to Sensitize Prostate Cancer Cells to Poly (ADP-Ribose) Polymerase (PARP) Inhibition
- Vanderbilt Travel Award to Natalie Ausborn, MD Candidate 10/2012
BRCA Expression: A Biomarker in Resectable Pancreatic Cancer
- 2012 MDSR Scholarship to Bradley Schnedl, MD Candidate 7/2012-9/2012
Crosstalk between Replication and Cholesterol Metabolism Determines/Governs Proliferation versus Death of Cancer Cells
- 2012 MDSR Scholarship to Wil Santivasi, MD Candidate 7/2012-9/2012
Genetic Variations in TCF7L2 Associated with Increased Likelihood of Developing Metastasis to the Brain
- RSNA (Holman Seed grant) to Eddy Yang, MD, PhD 7/2008-6/2009
Neuroprotection via Enhanced Repair of Radiation-Induced DNA Damage by GSK3 Beta Inhibitors
- ASTRO Seed grant to Eddy Yang, MD, PhD 7/2008-6/2009
Targeting Homology-Directed Recombinational Repair as a Sensitizer for PARP-Inhibitors
- UL1RR024975 CTSA microgrant to Eddy Yang, MD, PhD 9/2008-3/2009
GSK3 inhibition and DNA repair
- UL1RR024975 CTSA microgrant to Eddy Yang, MD, PhD 3/2008-11/2008
Targeting BRCA1 Location to Enhance Prostate Cancer Sensitivity to Poly-ADP Ribose Polymerase (PARP) Inhibitors
- UL1RR024975 CTSA microgrant to Eddy Yang, MD, PhD 3/2008-11/2008
BRCA1 Subcellular Localization and Lung Cancer Response to Tareeva
- UL1RR024975 CTSA microgrant to Guochun Jiang, PhD 6/2008-12/2008
BRCA1 Regulates Ku80-Dependent Precise Nonhomologous End-Joining of Chromosomal Repair
- UL1RR024975 CTSA microgrant to Guochun Jiang, PhD 9/2008-3/2009
HDAC3 is involved in Chromosomal Break Repair
- UL1RR024975 CTSA microgrant to Guochun Jiang, PhD 7/2008-1/2009
The Function of Mre11 on Non-Homologous End-Joining of Chromosomal Break Repair

Public and Professional Service

Committees:

- 2015 2015 American Association for Cancer Research Scientific Program Committee, member
- 2014 Program committee for Radiation Research Society 2014, member
- 2012-present The Ohio State University Comprehensive Cancer Center (OSUCCC) Intramural Research Program (IRP), reviewer
- 2012-present American Board of Radiology, Radiation Biology

- 2012-present The Ohio State University Comprehensive Cancer Center (OSUCCC) Intramural Research Program (IRP) Oncology Biology Committee, member
- 2012-present Vanderbilt University Radiation Oncology, Mock Board Examiner
- 2011-present Research Evaluation Committee of Science Council of ASTRO, member
- 2011-present ASTRO Research Direction Committee, member
- 2011 Ohio State University, James Cancer Center Research Symposium, judge of poster presentations
- 2011-present OSUMC Radiation Oncology Academic Mentoring Committee for Junior Faculty, mentor
- 2007-2011 The Vanderbilt Breast Cancer SPORE's Steering Committee, member
- 2007 American Association for Cancer Research Annual Meeting Program Committee, member
- 2006 Symposium of Radiation and Chromosomal Breakage Repair at American Association for Cancer Research (AACR) annual meeting, Washington, D.C., chairperson

Editorial boards:

- 2015-present *Journal Molecular and Medicinal Oncology*, Editor
- 2014-present *Journal of Biochemistry and Molecular Biology Research*, editorial board member
- 2013-present *Radiation Research*, associate editor
- 2013-present *Frontiers in Neuro-Oncology*, editorial board member

Ad hoc journal reviewer (2000-present):

Journal National Cancer Institute, Molecular and Cellular Biology, Oncogene, Cancer Research, DNA Repair, Radiation Research, Mutation Research, BMC Cancer, BBA Molecular Cell Research, Annals of Oncology, Current Drug Targets, PLOS One, Nucleic Acids Research, Free Radical Biology & Medicine, Nature Communications, Proceedings of the National Academy of Science

Grant review sections:

- 2014-2018 Radiation Therapeutics and Biology Study Section, CSR, NIH, charter member
- 2014-2015 Cancer Research UK programme grant, reviewer
- 2013-2015 Breast Cancer Study Section, Department of the Defense, member

- 2013 The Swiss National Science Foundation (SNSF) and the South African National Research Foundation (NRF), member
- 2012-2013 NIH/NCI RTB Study Section, ad hoc reviewer
- 2010 United States Army CDMRP Prostate Cancer Section, member
- 2007-2009 Breast Cancer Study Section, Department of the Defense, member

Project reviewer:

- 2014 Centre De Recherche Public-Sante, Luxembourg

Professional Membership

- 2006-present Society of Neuro-Oncology
- 2002-present American Society for Therapeutic Radiology and Oncology
- 1996-present American Association for Cancer Research
- 1992-present Radiation Research Society

Clinical Protocols (active)

- VICCRAD1060 (Co-investigator) 01/2011-present
Phase I Trial of Sorafenib and Stereotactic Radiosurgery for Patients with 1-4 Brain Metastases.
- OSU-12130 (PI) 07/2012-present
Genetic Variations in TCF7L2 & IL6 Associate with Increased Likelihood of Breast Cancer Metastasis to the Brain.
- OSU-08142 (Co-investigator) 07-2012-present
Phase I study of Bendamustine and fractionated stereotactic radiotherapy of patients with 1-4 brain metastases from solid malignancies.

Teaching Activities

Thesis committee member for Ph.D. candidates:

- 2015 Megan Schrock, MVIMG, Ohio State University
- 2013 Catherine Waters, MVIMG, Ohio State University
- 2010 Shenika Poindexter, Cancer Biology, Vanderbilt University
- 2009 Loren Matis, Cancer Biology, Vanderbilt University

Lecture series:

- 2011-present Clinical Radiation Oncology teaching and lectures, Ohio State University Medical Center
- 2008-2011 Cancer Biology for graduate student, Vanderbilt University
- 2006-2011 Clinical Radiation Oncology lectures, Vanderbilt Radiation Oncology

Mentor for medical students:

- 7/2012-present Natalie L. Ausborn, MD Candidate, Vanderbilt University School of Medicine, 2013
- 4/2012-present Bradley Schnedl, MD Candidate, Ohio State University College of Medicine, 2015
- 4/2012-present Wil Santivasi, MD Candidate, Ohio State University College of Medicine, 2015

Mentor for Holman resident in radiation oncology:

- 2006-2010 Eddy Yang, MD, PhD; Associate Professor (2010) and Professor (2012) of Radiation Oncology, University of Alabama Medical School

Mentor for resident in Master for Clinical Investigation in radiation oncology:

- 2009-2012 Joshua Mondschein, MD; Assistant Professor of Radiation Oncology, University of Pennsylvania School of Medicine; Awardee, Vanderbilt Clinical Oncology Research Career Development Program (PI Kenneth Hande, K12 CA90625-04)

Mentor for postdoctoral fellows:

- 2016- Present Shengkai Jing, PhD; Postdoctoral Research Fellow, Ohio State University
- 2015-present Wuying Du, PhD; Postdoctoral Research Fellow, Ohio State University
- 2015 Jenny Nie, PhD; Postdoctoral Research Fellow, Ohio State University
- 2014-2016 Hao Yu, PhD; Postdoctoral Research Fellow, Ohio State University
- 2012-2015 Parmeet Manchanda, PhD; Postdoctoral Research Fellow, Ohio State University
- 2012-2016 Ju Hwan Cho, PhD; Postdoctoral Research Fellow, Ohio State University
- 2008-2011 Juhong Jiang, MD, PhD; Assistant Professor, Guangzhou Medical College, China
- 2008-2011 Tong Wang, MD, PhD; Senior Research Associate, Vanderbilt University
- 2007-2012 Gunchun Jiang, PhD; Assistant Professor, University of South California
- 2006-2008 Liping Li, MD, PhD; Associate Professor, Guangdong Medical College, China
- 2004-2007 Hong Wang, MD, PhD; Associate Professor, Lung Cancer Oncology, 307 Hospital, China
- 2002-2006 Jing Zhuang, MD, PhD; Professor, Zhongshan University School of Medicine, China

- 2001-2002 Zihui Feng, MD, PhD; Associate Professor, Beijing Medical School, China
- 2000-2002 Junran Zhang, MD, PhD; Assistant Professor, Radiation Oncology, Case Western Reserve University School of Medicine

Mentor for doctoral Candidate:

- 2006-2008 Edward Nam, BS, Vanderbilt University School of Medicine

Mentor for undergraduate student:

- 2013 Miss Yanzhen Lu, Class of 2016, Amherst College, Amherst, Massachusetts

Publications

1. Xia, F., Zhu, S.-P. The metabolic process of Cs-134 and its inhibition effects on DNA synthesis in lymphocytes, thymocytes and bone marrow cells in mice. *Radiat Protec* 9:81-89, 1987.
2. Schneeweiss, F.H.A., Xia, F., Sharan, R.N., and Feinendegen, L.E. A strong static magnetic field inhibits the poly-ADP-ribosylation of protections in human kidney T1-cells. *Bioelectrochemistry and Bioenergetics* 30:111-117, 1993
3. Amundson, S.A., Xia, F., Wolfson, K., and Liber, H.L. Different cytotoxic and mutagenic responses induced by X-rays in two human lymphoblastoid cell lines derived from a single donor. *Mutat Res* 286:233-241, 1993
4. Kelsey, K.T., Xia, F., Bodell, W.J., Spengler, J.D., Chritiani, D.C., Dockery, D.W., and Liber, H.L. Genotoxicity to human cells induced by air particulates isolated during the Kuwait oil fires. *Environ Res* 64:18-25, 1994
5. Xia, F., Amundson, S.A., Nickoloff, J.A., and Liber, H.L. Different capacities for recombination in closely related human lymphoblastoid cell lines with different mutational responses to X-irradiation. *Mol Cell Biol* 14:5850-5857, 1994
6. Xia, F., Liber, H.L. Electroporation of human lymphoblastoid cells. In Nickoloff, J. A., Walker, J. M. *Methods in Molecular Biology*, Vol. 48 pp. 151-160, New Jersey: Humana Press Inc., 1995
7. Phillips, E.N., Xia, F., Kelsey, K.T., and Liber, H.L. X-ray-induced and spontaneous mutational spectra at hprt in related human lymphoblast cell line that express wild-type or mutant forms of p53. *Radiat Res* 143:255-262, 1995
8. Xia, F., Wang, X., Wang, Y-H., Tsang, N-M., Yandell, D.W., Kelsey, K.T., and Liber, H.L. Altered p53 status correlates with differences in sensitivity to radiation-induced mutation and apoptosis in two closely related human lymphoblast lines. *Cancer Res* 55:12-15, 1995

9. Xia, F. and Liber H.L. Tumor suppressor gene p53 modifies mutational processes in a human lymphoblastoid cell lines. *Mutat Res* 373:87-97, 1997
10. Turner, N.A., Xia, F., Azhar, G., Zhang, X., Liu, L., and Wei J.Y. Oxidative stress induces DNA fragmentation and caspase activation via the c-Jun NH2-terminal kinase pathway in cardiac muscle cells. *J Mol Cell Cardiol* 30:1789-801, 1998
11. Mao, Z.X., Bonni, A., Xia, F., Nadal-Vicens, M., and Greenberg, M. Neuronal activity dependent cell survival mediated by the transcription factor MEF2. *Science* 286: 785-90, 1999
12. Willers, H., McCarthy, E.E., Wu, B., Tang, W., Taghian, D.G., Xia, F., Powell, S.N. Dissociation of p53-mediated suppression of homologous recombination from G1/S cell cycle checkpoint control. *Oncogene* 19:632-639, 2000
13. Xia, F., Taghian, D.G., Defrank, J.S., Willers, H., Iliakis, G., Powell, S.N. Deficiency of human BRCA2 leads to impaired homologous recombination but maintains normal nonhomologous end-joining. *Proc Natl Acad Sci U.S.A* 98:8644-9, 2001
14. Wang, H., Zeng, Z., Dibiase, S.J., Xia, F., Powell, S.N., Iliakis, G. Non-homologous end-joining of ionizing radiation-induced DNA double strand breaks in human tumor cells deficient in BRCA1 or BRCA2. *Cancer Res* 61:270-7, 2001
15. Willers, H., Xia, F., Powell, S.N. Recombinational DNA repair in cancer and normal cells: the challenge of functional assay. *J Biomed Biotechnol* 2:86-93, 2002
16. Xia F. and Powell S.N. The molecular basis of radiosensitivity and chemosensitivity in the treatment of breast cancer. *Semin Radiat Oncol* 12:296-304, 2002
17. Powell S.N., Willers H., Xia F. BRCA2 keeps Rad51 in line, high-fidelity homologous recombination prevents breast and ovarian cancer? *Molecular Cell* 10:1262-3, 2002
18. Zhang, J., Willers, H., Feng, Z., Weaver, D.T., Powell, S.N., Xia, F. Chk2 phosphorylation of BRCA1 regulates DNA double-strand break repair. *Mol Cell Biol* 24:708-18, 2004
19. Feng, Z., Kachnic, L., Zhang, J., Powell, S.N., Xia, F. DNA damage induces p53-dependent BRCA1 nuclear export. *J Biol Chem* 279:28574-28584, 2004
20. Zhuang, J., Zhang, J., Willers, H., van Gent, D., Chung, J., Hallahan, D.E., Powell, S.N., Xia, F. Chk2-mediated phosphorylation of BRCA1 regulates the fidelity of nonhomologous end-joining. *Cancer Res* 66(3),1401-1408, 2006
21. Yan J, Kim YS, Yang XP, Li LP, Liao G, Xia F, Jetten AM. The ubiquitin-interacting motif containing protein RAP80 interacts with BRCA1 and functions in DNA damage repair response. *Cancer Res* 67(14):6647-56, 2007

22. Shinohara, E., Wang, H., and Xia, F. The role of sub-cellular location in the regulation of BRCA1 function. *Res. Adv. in Cancer*, 7:139-150, 2007
23. Li LP, Wang H, Yang ES, Arteaga CL, and Xia F. Erlotinib attenuates homologydirected recombinational repair of chromosomal breaks in human breast cancer cells. *Cancer Res* 68(22):9141-9146, 2008
24. Yang ES, Wang H, Hallahan DE, and Xia F. Lithium-mediated protection of hippocampal cells involves enhancement of DNA-PK-dependent nonhomologous end joining of chromosomal breaks. *J. Clin Invest* 119(5):1124-35, 2009
25. Zhuang J, Jiang GC, Willers H, and Xia F. The exonuclease function of human Mre11 promotes deletional non-homologous end-joining. *J Biol Chem* 279:28574-28584, 2009
26. Yang ES, Xia F. BRCA1 16 years later: DNA damage-induced BRCA1 shuttling. *FEBS J*, 2010, 277(15):3079-85.
27. Wiltshire TD, Lovejoy CA, Wang T, Xia F, O'Connor MJ, Cortez D. Sensitivity to poly (ADP-ribose) polymerase (PARP) inhibition identifies ubiquitin specific peptidase 11 (USP11) as a regulator of DNA double-strand break repair. *J Biol Chem* 7; 285(19): 14565-71, 2010.
28. Wang H, Yang ES, and Xia F. Dissociation of BRCA1's DNA repair function from DNA damage-induced cytotoxicity: A dependence on BRCA1 localization. *Cancer Res* 70: 6258-6267, 2010
29. Chambless, L.B., Angel1, F.B., Abel, T.W., Xia, F., and Weaver, K.D. Delayed cerebral radiation necrosis following treatment for a plasmacytoma of the skull. *Surgical Neurological International* 2010 Oct 25;1:65
30. S. Bhaskara, Sarah K. K., G. Jiang, M. B. Chandrasekharan, A. J. Wilson, S. Zheng, A. Yenamandra, K. Locke, J. l. Yuan, A. Summers, K. Washington, Z. Zhao, Z-W Sun, F. Xia, D. Khabele, and S. W. Hiebert. Hdac3 is essential for maintenance of chromatin structure and genome stability. *Cancer Cell* 16;18(5):436-47.2010
31. Eddy S. Yang, Somaira Newsheen, Dinesh Thotala, and Fen Xia. Glycogen synthase kinase 3beta inhibition enhances repair of DNA double-strand breaks in irradiated hippocampal neurons. *Neuro-Oncology* 13(5):459-470, 2011
32. Jiang J, Yang ES, Jiang G, Newsheen S, Wang H, Wang T, Wang Y, Billheimer D, Chakravarthy AB, Brown M, Haffty B, Xia F. p53-dependent BRCA1 nuclear export controls cellular susceptibility to DNA damage. *Cancer Res* 15; 71(16):5546-5557. 2011

33. ES. Yang, S Nowsheen, M Rahman, RS Cook, F Xia. Targeting BRCA1 localization to augment breast tumor susceptibility to poly (ADP-ribose) polymerase inhibition. *Cancer Res* 72(21):5547-55, 2012, PMID 22962264
34. SC. Wentz, Z Zhao, Y Shyr, C Shi, NB. Merchant, K Washington, F Xia, A. Bapsi Chakravarthy. Lymph node ratio and preoperative CA 19-9 levels predict overall survival and recurrence-free survival in patients with resected pancreatic adenocarcinoma. *World Journal of Gastroenterology* 4(10): 207-215, 2012 PMID:23444312
35. Nowsheen, S., Xia, F., Yang, E. S. Assaying DNA Damage in Hippocampal Neurons Using the Comet Assay. *J Vis Exp.* 2012 Dec 19 ;(70):e50049. doi: 10.3791/50049, PMID:23271144
36. T Wang, SC Wentz, NL Ausborn, MK Washington, N Merchant, ZG Zhao, Y Shyr, AB, Chakravarthy, F Xia. Pattern of BRCA1 expression is a potential prognostic biomarker in resectable pancreatic ductal adenocarcinoma *Pancreas*, 2013 Aug 42(6): 977-82 , PMID: 23851432
37. WL. Santivasi and F Xia, The role & clinical significance of DNA damage response & repair pathways in primary brain tumors. *Cell Biosci* 2013 Feb 6;3(1):1, PMID:23388100
38. Jiang G, Plo I, Wang T, Rahman M, Cho JH, Yang E, Lopez BS, Xia F. BRCA1-Ku80 protein interaction enhances end-joining fidelity of chromosomal double-strand breaks in the G1 phase of the cell cycle. *J Biol Chem* 2013 Mar 29;288(13):8966-76. PMID:23344954
39. N L Ausborn, T Wang, S C Wentz, M K Washington, N Merchant, Z Zhao, Y Shyr, A. B. Chakravarthy, F. Xia. 53BP1 expression is a modifier of the prognostic value of lymph node ratio and CA 19-9 in pancreatic adenocarcinoma. *BMC Cancer* 2013, 13:155, PMID 23530749
40. H Willers, CG Azzoli, WL Santivasi, and F Xia. Basic mechanisms of therapeutic resistance to radiation and chemotherapy in lung cancer. *Cancer J* 2013 May-Jun;19(3):200-7. PMID:23708066
41. M Fang, F Xia, M Mahalingam, N Wajapeyee, and M Green. MEN1 is a melanoma tumor suppressor that promotes homologous recombination-directed DNA repair. *Mol. Cell Biol* 2013 Jul;33(13):2635-47. PMID:23648481
42. W Santivasi, and F Xia Ionizing Radiation-Induced DNA Damage, Response, & Repair, *Antioxidants & Redox Signaling*, 2014 Feb 3, PMID: 24180216
43. DA. Liebner, SA. Walston, R Cavaliere, CJ. Powers, E Sauvageau, NL. Lehman, HW Slone, F Xia*, KL. Kendra, Radiation necrosis mimicking rapid intracranial progression

of melanoma metastasis in two patients treated with vemurafenib, *Melanoma Research*, 2014 Apr; 24(2):172-6. PMID: 24407165, *corresponding author

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50. K. Arneson, J. Mondschein, M. Stavas, AJ. Cmelak, L. Horn, K. Niermann, I. Puzanov, B. Chakravarthy, F. Xia, A phase I study of concurrent Sorafenib and stereotactic radiosurgery for patients with brain metastasis, *Journal of Neuro-Oncology*, accepted Jan 2017
51. CO. Abana, BS. Bingham, JH. Cho, AJ. Graves, T. Koyama, RT. Pilaski, B Chakravathy, f. Xia, IL-6 variant is associated with metastasis in breast cancer patients. *Breast Cancer Research and Treatment*, Under review, 2017

Invited Presentations (selected)

“The ATM-PKM2-CtIP axis bridges cancer cell metabolism to DAN repair” Cold Spring Harbor meeting on DNA metabolism, Genomic stability and disease, Suzhou, China, 06/2016

- “Target BRCA1 nuclear/cytoplasmic shuttling to enhance synthetic lethality in glioblastoma by PARP1 inhibition” the 21st conference on brain tumor research and therapy ICBTRT, Okinawa, Japan, 04/2016
- “The roles of GSK3-beta in NHEJ repair of radiation induced-DNA damage and neurotoxicity” Stephenson Cancer Center Excellence in Cancer Research Seminar, the University of Oklahoma, Oklahoma city, 09/2015
- “The roles of GSK3-beta in NHEJ repair of radiation-induced DNA damage and neurotoxicity”, Emory Winship Cancer Institute, Atlanta, GA, 09/2015
- “Targeting BRCA1 in HR-proficient breast cancer to PARP1 inhibition induced cytotoxicity” MD, Anderson Cancer Center, The University of Texas, Huston, TX, 09/2015
- “BRCA1 in the choice of DNA double strand break repair pathways” China Institute for Radiation Protection, Taiyuan, Shanshi, China, 08/2015
- “Targeting nuclear-cytoplasmic shuttling to sensitize BRCA1-proficient breast cancer to PARP1 inhibition induced cytotoxicity” Great Lacks Breast Cancer Symposium, Cleveland, Ohio, 06/2015
- “Enhancing Therapeutic Ration via DNA Repair Pathways” Thomas Jefferson University School of Medicine, Philadelphia, 02/2015
- “Radiation-induced secondary cancer- the role of DNA damage repair” Cancer Genetics External Seminar Series at Roswell Park Cancer Center, Buffalo, 11/2014
- “The mechanism of cancer resistance to treatment” Annual Meeting of Radiation Research Society, Las Vegas, 09/2014
- “Stereotactic radiosurgery in the treatment of metastatic brain tumors”2nd Global Congress of Radiation Research, Suzhou, China, 05/2014
- “Advances in the management of brain metastasis” Medical Oncology Division, Lung Cancer Hospital, Beijing, China, 05/2014
- “Targeting DNA repair to enhance cancer treatment ratio” Pathology Department, Guangzhou Medical School, Guangzhou, China, 05/2014
- “Target DNA double strand break repair to improve cancer treatment index” Washington University School of Medicine, 03/2014
- “DNA damage and repair in cancer treatment” University of California, San Francisco, 02/2014
- “Crosstalk between DNA damage response and metabolism in GBM” University of Iowa, 01/2014
- “Target DNA repair in Glioblastoma Multiforme” University of Pennsylvania School of Medicine, Philadelphia, 01/2014
- “DNA repair pathways and therapeutic ratio” Environmental and Radiological Health Sciences, Colorado State University, Fort Collins, Colorado, 07/2013

- “Use of BRCA1 nuclear-cytoplasmic shuttling to induce susceptibility to PARP1 inhibition in BRCA1-proficient solid cancer” Annual World DNA and Genomics Day, Nanjing, China, 04/2013
- “Targeting BRCA1 nuclear/cytoplasmic shuttling in BRCA1-proficient sporadic solid tumors” Beijing 3rd Cancer hospital, Beijing, China 04/2013
- “DNA repair-a double edged sword in cancer treatment” James Cancer Center, Ohio State University, 01/2012
- “Targeting DNA repair in cancer therapy” Ohio State University Medical Center, 12/2010
- “BRCA1 as the central regulator for the fidelity of chromosomal break repair” Radiation Research Society Annual Meeting, Savannah, Georgia, 10/2008
- “Dissociation of BRCA1’s DNA repair function from DNA damage-induced cytotoxicity: A dependence on BRCA1 localization” BIT Annual World Cancer Congress, Shanghai, China, 04/2008
- “The role of BRCA1 in regulation of DNA double strand break repair” University of Michigan School of Medicine, Ann Arbor, 02/2006
- “Dual functions of BRCA1 in DNA repair and cell death” Yale University School of Medicine, New Haven, 12/2005