

# ***CURRICULUM VITAE***

**Marc S. Mendonca, Ph.D., FRRS**  
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Indiana University School of Medicine  
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## **EDUCATION:**

### **POSTDOCTORAL**

Institution	Degree	Date Awarded
Departments of Radiation Oncology & Medical Genetics University of California, Irvine		1987-1992

### **GRADUATE**

Institution	Degree	Date Awarded
University of California, Berkeley	Ph.D. Biophysics	1987

### **UNDERGRADUATE**

Institution	Degree	Date Awarded
College of the Holy Cross	A.B. Biology	1978

## **APPOINTMENTS:**

### **ACADEMIC**

Institution	Rank/Title	Inclusive Dates
University of California, Irvine	Assistant Researcher I	1992-1994
California State University, Long Beach	Adjunct Assistant Professor of Health Sciences	1993-1994
Indiana University School of Medicine	Director of Radiation & Cancer Biology	1994-2022
Indiana University School of Medicine	Assistant Professor Radiation Oncology & Medical + Molecular Genetics	1994-2001
Indiana University	Graduate Faculty	1999-present
Indiana University School of Medicine	Assistant Scientist & Professor Radiation Oncology & Medical + Molecular Genetics	2001-2004
Indiana University School of Medicine	Associate Research Professor & Associate Professor (part-time) Radiation Oncology & Medical + Molecular Genetics	2004-2008
Indiana University School of Medicine	Associate Professor (tenured) Radiation Oncology & Medical + Molecular Genetics	2008-2016

**APPOINTMENTS: (continued)**

Indiana University School of Medicine	Professor (tenured) Radiation Oncology & Medical + Molecular Genetics	2016 - present
Indiana University, Purdue University, Indianapolis	Associate Vice Chancellor for Research, IUPUI	4/1/20 – 12/31/23
Indiana University, Purdue University, Indianapolis	Interim Vice Chancellor for Research, IUPUI	9/1/22 – 3/31/23
Indiana University	Interim Associate Vice President for Research, IU	9/1/22 – 3/31/23
Indiana University, Purdue University, Indianapolis	Director of 1 <sup>st</sup> Year Research Immersion Program (1RIP), IUPUI	8/1/23 – present
Indiana University	Director of Research Development Office of the AVP IU Research	1/1/24 – present

**NON-ACADEMIC APPOINTMENTS**

Institution/Entity	Title	Inclusive Dates
American College of Radiology	Member, Committee on Residency Training in Radiation Oncology	1996 - 2003
IUSOM, Radiation Oncology	Member, Executive Committee	2006 - 2008
American Board of Radiology	Member, Radiation Biology Task Force	2000 - 2006 2011 - present
Radiation Research Society	Associate Editor, <i>Radiation Research</i>	2004 - 2010
Radiation Research Society	Editor-in-Chief, <i>Radiation Research</i>	2011 - present
Radiation Research Society	Member, RRS Council	2011 - present
Radiation Research Society	Member, Executive Committee	2011 - present
Radiation Research Society	Member, Finance Committee	2011 - present
American Institute of Biological Sciences (AIBS)	Appointed Member	2011 - present
American Board of Radiology	Member, Radiation & Cancer Biology Board Exam Creation Committee	2013 - present
American Society for Therapeutic Radiology and Oncology	ASTRO Radiation & Cancer Biology Committee	2010 - 2013
American Society for Therapeutic Radiology and Oncology	Vice Chair, ASTRO Science Council Workshop Committee & Task Force	2013 - 2017
American Society for Therapeutic Radiology and Oncology	ASTRO Science Council Workshop Steering Committee	2016 - 2017
American Society for Therapeutic Radiology and Oncology	ASTRO Science Council Promoting Science through Research and Training Committee	2018 - 2020

**NON-ACADEMIC APPOINTMENTS**

Institution/Entity	Title	Inclusive Dates
American Society for Therapeutic Radiology and Oncology	ASTRO Science Council Science Education and Program Development Subcommittee	2020 - 2022
American Association for Cancer Research	Advancing Research Talent AACR Radiation Science & Medicine Working Group Steering Committee	2021 - 2022 2020 - 2023
Winter Institute of Medical Physics	Board Member, Program & Finance Committee	2012 - present
American Lives Theatre	VP & Board Member, Program & Finance Committee	2019 - present
Radiation Research Foundation	Co-Chair & Board Member	2019 - present

**PROFESSIONAL ORGANIZATION MEMBERSHIPS:**

Organization	Inclusive Dates
Radiation Research Society	1985-present
American College of Radiology	1996-2003
American Association for Cancer Research	2000-present
American Board of Radiology	2000-2006 2011-present
American Association for the Advancement of Science	2001-present
American Society for Therapeutic Radiology and Oncology	2003-present
Sigma Xi	2007-present
American Institute of Biological Sciences	2011-present
International Association of Radiation Research	2015-present

**PROFESSIONAL HONORS AND AWARDS:**

**TEACHING**

Award Name	Granted By	Date Awarded
Teaching Award – Best Lecturer	Osler Institute	2008 & 2009
Trustee Teaching Award	Indiana University SOM	2013

**RESEARCH**

Award Name	Granted By	Date Awarded
National Research Service Award	NIH	1981-1985

**SERVICE**

Award Name	Granted By	Date Awarded
IUSM Student Mentor Program (5 years of Service 2002-2007)	IUSM	2007
Volunteer Service Award	American Board of Radiology	2012 & 2014
Lifetime Service Award	American Board of Radiology	2015
Fellow	Radiation Research Society	2022

**PROFESSIONAL DEVELOPMENT:**

Course/Workshop Title	Provider	Date
Scientific Writing from the Reader's Perspective	Dr. George Gopen	6/1 - 6/3 2009
"Write Winning Grants" workshop	Dr. David Morrison	11/2/2009
Emerging Trends in Scholarly Publishing Seminar	Allen Press (Washington, DC)	4/8/2010
Emerging Trends in Scholarly Publishing Seminar	Allen Press (Washington, DC)	4/14/2011
Scientific Writing from the Reader's Perspective	Dr. George Gopen	6/27 - 6/28/2011
BioOne Publishers & Partners meeting	BioOne (Washington, DC)	4/21/2011
Emerging Trends in Scholarly Publishing Seminar	Allen Press (Washington, DC)	4/19/2012
BioOne Publishers & Partners meeting	BioOne (Washington, DC)	4/20/2012
Scientific Writing from the Reader's Perspective	Dr. George Gopen	7/9/2013
Emerging Trends in Scholarly Publishing Seminar	Allen Press (Washington, DC)	4/3/2013
Emerging Trends in Scholarly Publishing Seminar	Allen Press (Washington, DC)	4/24/2014
BioOne Publishers & Partners meeting	BioOne (Washington, DC)	4/25/2014
Distilling Your Message: Communicating Scientific Research to All	Alan Alda Center Stony Brook	5/2/2014
Scientific Writing from the Reader's Perspective	Dr. George Gopen	8/5/2014
Putting Your Best Foot Forward: Preparing for your Annual Faculty Review	Dr. Mary Dankowski (Online)	1/9/2014
Emerging Trends in Scholarly Publishing Seminar	Allen Press (Washington, DC)	4/16/2015
BioOne Publishers & Partners meeting	BioOne (Washington, DC)	4/24/2015
American Institute of Biological Science Council Meeting- Peer Review in Informed Decision-making	AIBS (Washington, DC)	12/6/2016
American Institute of Biological Science Council Meeting- Engaging Decision-makers: Opportunities and Priorities for Biological Science Organizations	AIBS (Washington, DC)	12/4/2017
American Institute of Biological Science Council Meeting- NEXT Gen International Biology (Invited Speaker and panelist)	AIBS (Washington, DC)	12/5-12/6 2018

**TEACHING:****UNDERGRADUATE TEACHING Assignments**

Course #	Short Title	Format	Role	Term	Enrollment
RAON J406	Radiation & Cancer Biology	Lecture	Lecturer 28 Hrs	Spring'94	13
RAON J406	Radiation & Cancer Biology	Lecture	Lecturer 28 Hrs	Spring'95	13
RAON J406	Radiation & Cancer Biology	Lecture	Lecturer 28 Hrs	Spring'96	13
RAON J406	Radiation & Cancer Biology	Lecture	Lecturer 28 Hrs	Spring'97	13
RAON J406	Radiation & Cancer Biology	Lecture	Lecturer 28 Hrs	Spring'98	13
RAON J406	Radiation & Cancer Biology	Lecture	Lecturer 14 Hrs	Spring'99	13
RAON J406	Radiation & Cancer Biology	Lecture	Lecturer 13 Hrs	Spring'00	13
RAON J406	Radiation & Cancer Biology	Lecture	Lecturer 14 Hrs	Spring'01	13
RAON J406	Radiation & Cancer Biology	Lecture	Lecturer 13 Hrs	Spring'02	13
RAON J406	Radiation & Cancer Biology	Lecture	Lecturer	Spring'03	13

RAON J406	Radiation & Cancer Biology	Lecture	14 Hrs Lecturer 13 Hrs	Spring'04	13
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**UNDERGRADUATE TEACHING Assignments**

Course #	Short Title	Format	Role	Term	Enrollment
RAON J406	Radiation & Cancer Biology	Lecture	Lecturer	Spring'05	17
H399	Independent Honors Research Lab		Instructor	Spring'05	1
RAON J406	Radiation & Cancer Biology	Lecture	Lecturer	Spring'06	18
RAON J406	Radiation & Cancer Biology	Lecture	Lecturer	Spring'07	16
RAON J406	Radiation & Cancer Biology	Lecture	Lecturer	Spring'08	16
RAON J406	Radiation & Cancer Biology	Lecture	Lecturer	Spring'09	16
RAON J406	Radiation & Cancer Biology	Lecture	Lecturer	Spring'10	13
RAON J406	Radiation & Cancer Biology	Lecture	Lecturer	Spring'11	13
RAON J406	Radiation & Cancer Biology	Lecture	Lecturer	Spring'12	13
RAON J406	Radiation & Cancer Biology	Lecture	Lecturer	Spring'13	15
RAON J406	Radiation & Cancer Biology	Lecture	Lecturer	Spring'14	14
RAON J406	Radiation & Cancer Biology	Lecture	Lecturer	Spring'15	15
RAON J406	Radiation & Cancer Biology	Lecture	Lecturer	Spring'16	13
RAON J406	Radiation & Cancer Biology	Lecture	Lecturer	Spring'17	15
RAON J406	Radiation & Cancer Biology	Lecture	Lecturer	Spring'18	13
RAON J406	Radiation & Cancer Biology	Lecture	Lecturer	Spring'19	13
RAON J406	Radiation & Cancer Biology	Lecture	Lecturer	Spring'20	13
HON-H398	Independent Study	Lab Res	Mentor	Spring'20	1
RAON J406	Radiation & Cancer Biology	Lecture	Lecturer	Spring'21	13
RAON J406	Radiation & Cancer Biology	Lecture	Lecturer	Spring'22	15
RAON J406	Radiation & Cancer Biology	Lecture	Lecturer	Spring'23	15
RAON J406	Radiation & Cancer Biology	Lecture	Lecturer	Spring'24	15

**GRADUATE TEACHING**

Course #	Short Title	Format	Role	Term	Enrollment
G724	Molecular Cancer Genetics	Lecture	Lecturer 2 Hrs	Spring'08	14
93SG830	Prep. for Surgical Residency	Lecture	Lecturer 2 Hrs	Spring'08	5
G724	Molecular Cancer Genetics	Lecture	Lecturer 2 Hrs	Spring'09	14
G755	Principles of Toxicology 3	Lecture	Lecturer 3 Hrs	Spring'09	5
HSCI540 (Purdue)	Radiation Biology	Lecture	Lecturer 1.5 Hrs	Spring'09	30
G724	Molecular Cancer Genetics	Lecture	Lecturer 2 Hrs	Spring'10	10
G755	Principles of Toxicology 3	Lecture	Lecturer 3 Hrs	Spring'10	3
Enrollment G724	Molecular Cancer Genetics	Lecture	Lecturer 2 Hrs	Spring'11	10
G755	Principles of Toxicology 3	Lecture	Lecturer 3 Hrs	Spring'11	3
G756	Radiation & Cancer Biology	Lecture	Lecturer 13 Hrs	Spring'12	2
G755	Principles of Toxicology 3	Lecture	Lecturer 3 Hrs	Spring'12	3
G724	Molecular Cancer Genetics	Lecture	Lecturer 2 Hrs	Spring'12	10
G756	Radiation & Cancer Biology	Lecture	Lecturer 13 Hrs	Spring'13	1
G724	Molecular Cancer Genetics	Lecture	Lecturer 1.5 Hrs	Spring'13	14
G724	Molecular Cancer Genetics	Lecture	Lecturer 1.5 Hrs	Spring'14	14
G756	Radiation & Cancer Biology	Lecture	Lecturer 13 Hrs	Spring'15	3
G756	Radiation & Cancer Biology	Lecture	Lecturer 14 Hrs	Spring'17	6
G756	Radiation & Cancer Biology	Lecture	Lecturer 14 Hrs	Spring'18	8
G756	Radiation & Cancer Biology	Lecture	Lecturer 14 Hrs	Spring'19	8
G756	Radiation & Cancer Biology	Lecture	Lecturer 14 Hrs	Spring'20	12
G756	Radiation & Cancer Biology	Lecture	Lecturer 2 Hrs	Spring'21	5

**GRADUATE TEACHING (continued)**

Course #	Short Title	Format	Role	Term	Enrollment
G756	Radiation & Cancer Biology	Lecture	Lecturer 2 Hrs	Spring'22	9
G756	Radiation & Cancer Biology	Lecture	Lecturer 2 Hrs	Spring'23	8

**OTHER TEACHING:**

Short Title	Format	Role	Term	Enrollment
Osler Institute, National Board Review Course in Radiation & Cancer Biology	Lecture	Lecturer 11 Hrs	6/03-6/05 2006	15
Osler Institute, National Board Review Course in Radiation & Cancer Biology	Lecture	Lecturer 11 Hrs	5/26-5/30 2007	15
Osler Institute, National Board Review Course in Radiation & Cancer Biology	Lecture	Lecturer 11 Hrs	5/24-5/25 2008	15
Osler Institute, National Board Review Course in Radiation & Cancer Biology	Lecture	Lecturer 11 Hrs	5/22-5/24 2009	15
Osler Institute, National Board Review Course in Radiation & Cancer Biology	Lecture	Lecturer 20 Hrs	5/16-5/18 2010	15
Osler Institute, National Board Review Course in Radiation & Cancer Biology	Lecture	Lecturer 11 Hrs	5/15-5/16 2011	15

**MENTORING:**

Individual	Role	Inclusive Dates
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**High School IUSCC Minority Summer Research & Howard Hughes Precollege Students**

Berry McDowell (HS)	Research Mentor	2000 & 2001
Fatima Patino (Roncali HS)	Research Mentor	2004
Imade Edwina Imasuen (Pike HS)	Research Mentor	2006 & 2007
Gabriel Rangel (HS) HHMR (Howard Hughes PhD Fellow)	Research Mentor	2009 & 2010
Amanuel Kibrom (Pike HS) (Gates Millennium Scholar 2012)	Research Mentor	2011 & 2012
Yakaren Aguilera-Balmez (Ben Davis HS)	Research Mentor	2015
Ariez Christmon (Crispus Attucks HS)	Research Mentor	2017
Devyn Townsend (North Central HS)	Research Mentor	2018
Lara Rahman (Park Tudor HS)	Research Mentor	2023

**Undergraduate Research Students**

Nicholas Datzman (IUPUI)	Research Mentor	2002
Matthew Nobari (IUPUI) Chemistry Honors	Research Mentor	2003
Monica Nye (IUPUI) McNair Scholar	Research Mentor	2004
Laura Benjamin (Depauw University)	Research Mentor	2004 & 2005
Adam Losch (Purdue University)	Research Mentor	2005, 2006, 2007
William Hughes (Yale University)	Research Mentor	2005
Jennifer Lentes (IUSOM, RTT program)	Research Mentor	2005

## Undergraduate Research Students (continued)

Individual	Role	Inclusive Dates
Ryan Dhaemers (IUB & IUPUI)	Research Mentor	2006 - 2007
Rishi Megha (Butler University)	Research Mentor	2006 & 2007
Nicholas Smolen (IUB)	Research Mentor	2007 & 2008
Misha Rose Ownbey (Purdue University)	Research Mentor	2008
Benny Singh (IUPUI Life-Health Sciences)	Research Mentor	2008 - 2009
Melanie Day (IUPUI Life-Health Sciences)	Research Mentor	2009 - 2010
Dong Lim (Purdue University)	Research Mentor	2010
Jeremy Sherer (IUPUI Top 10)	Research Mentor	2010 - 2012
Marie Kikvidze (IUPUI)	Research Mentor	2010 - 2011
Kiran J. Gill (IUPUI McNair Scholar)	Research Mentor	2011 - 2012
Anna Hollansky (Emory University)	Research Mentor	2012
Adriana Saldan (University of Rochester)	Research Mentor	2012
Stephanie Anne Metcalf (IUPUI LHS Chem H)	Research Mentor	2012 - 2014
Jacqueline Hernandez (IUB)	Research Mentor	2014
Daniel Bose (IUPUI-LHSI)	Research Mentor	2016-2017
Joseph Boone (IUPUI, Diversity Scholar) (best undergraduate poster IUPUI Research Day 2016) (Chancellor's Research Award, Honors College)	Research Mentor	2016-2019
David Kronenberger (Univ. of Notre Dame)	Research Mentor	2017
Seth Losiewicz (IUPUI-LHSI)	Research Mentor	2017-2018
Amandeep Kaur (IUPUI-LHSI)	Research Mentor	2017-2018
Maria Van de Vord (IUPUI-LHSI)	Research Mentor	2019-2020
Mintare (Mindy) Cesiuinaite (IUPUI-LHSI)	Research Mentor	2019-2021
Ishita Sameer Bhedi (LHSI) (IUPUI Top 10)	Research Mentor	2021-2022
Logan E. Clark (IUPUI-LHSI, UROP)	Research Mentor	2021-2022
Wilson Freije (Wooster College/IUSM) (APEX Intern Fellowship Recipient)	Research Mentor	2021-2022
Sarah Aisha Boudaia (IUPUI-LHSI & Capstone)	Research Mentor	2022-2024
Salma Khadija Chemmaoui (IUPUI-LHSI)	Research Mentor	2022-2023
Ava G. McKim (IUPUI-1RIP)	Research Mentor	2023-2024
Ishameal D. Bargue (IUPUI-1RIP)	Research Mentor	2023-2024
Ammar Elsayed Abdelsamad (IUPUI-1RIP)	Research Mentor	2023-2024

## Rotating Graduate Students

Holly Martin (Med. & Molec. Genetics)	Rotation Advisor	2006
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## Masters Students

Davina Lewis, MS (St. Bart's London, UK)	Research Mentor	1999
Conner Holloway, MS (Purdue)	Member	2015
Ani Yalamanchali (IUSM Medical Student)	Member	2018-2019
Christina Huang (IUSM Medical Student)	Chair	2019-2020
Rachel Minne (Purdue Medical Physics)	Research Mentor	2021-2022

## IUSM & Other Medical Student Researchers

Individual	Role	Inclusive Dates
Douglas Miller, MS1	Research Mentor	2004
Steve Harris, MS1	Research Mentor	2004
Berry McDowell, MS2 (research year)	Research Mentor	2005 - 2006
Chris Gordon, MS1	Research Mentor	2007



## **IUSM & Other Medical Student Researchers**

Individual	Role	Inclusive Dates
Christopher Watson, MS1 & (research year)	Research Mentor	2007 - 2008
Neil C. Estabrook, MS1 & MS2	Research Mentor	2008 - 2009
Tony Borgman, MS1	Research Mentor	2008
Ben T. Pruden, MS1	Research Mentor	2009
Pavel (Paul) Morozov, MS1	Research Mentor	2010
Ashish Arshanapalli, MS1	Research Mentor	2012
Garrett Velasquez Sevigny, MS1	Research Mentor	2013
William Tyler Turchan, MS1 - MS4	Research Mentor	2014 - 2017
John S. Brenia, MS1	Research Mentor	2015
Anirudh Yalamanchali, MS1	Research Mentor	2016
Shawn K. Chaung, MS1	Research Mentor	2017
Ryan Erdwins, MS1 (Oregon, CUPID)	Research Mentor	2018
Madison Tenbarge, MS1, IMPRS	Research Mentor	2018
Maria Khan, MS1 (IUSM, CUPID)	Research Mentor	2019
Joshua Streveler, MS1, IMPRS	Research Mentor	2019
Joseph Boone, MS1, IMPRS	Research Mentor	2020
David Kronenberger, MS1, IMPRS	Research Mentor	2021
April Gettelfinger, MS1, (IUSM, CUPID)	Research Mentor	2021
Kristen G. Pogue, MS1, (IUSM, CUPID)	Research Mentor	2022
Clayton Hicks, MS1, (IUSM, CUPID)	Research Mentor	2023

## **Ph.D. Advisory and Dissertation Committees**

Li Liang (Med. & Molec. Genetics PhD)	Member	1996-2001
Jieping Yang (Anatomy PhD)	Member	2003-2007
David Carlson (Purdue U, Med. Physics PhD)	Member	2003-2006
Amy Breman (Med. & Molec. Genetics PhD)	Member	2004-2007
Dawn Brown (Biochemistry PhD)	Member	2004-2008
Erin Goldblatt (Med. & Molec. Genetics PhD)	Member	2006-2008
Amy Pressler (Med. & Molec. Genetics PhD)	Member	2006-2007
Amruta Phatak (Med. & Molec. Genetics PhD)	Member	2013-2016
Eric R. Wolf (Biochem. & Mol. Biology PhD)	Member	2015-2018
Colton L. Starcher (Biochem. & Mol. Bio. PhD)	Member	2019-Pres.
Yiu-Hsin Chang (Purdue U. Med Physics, PhD)	Member	2020-Pres.

## **Medical Resident Researchers**

Jeffrey Hemmerlein, MD (Radiology)	Research Mentor	1996-1997
Michael Hardacre, MD (Rad. Oncology)	Research Mentor	2002-2004
Brent Tinnel, MD (Rad. Oncology)	Research Mentor	2004-2006
Ron Shapiro, MD (Rad. Oncology)	Research Mentor	2011-2012

## **Postdoctoral Advisor**

Yan Qin, MD	Research Mentor	1998
Jaime Gomez Millan, MD	Research Mentor	2005-2006
Kah Tan Allen, PhD (IUB & IUSOM)	Co-Research Mentor	2010-2013
Archana Kotha, MBBS	Research Mentor	2015

## **Faculty Mentoring**

David Gilley, PhD (Med. Mol. Gen.)	Faculty Mentor (chair)	2006-2009
Arthur Ko, MD, PhD (Rad. Onc.)	Faculty Mentor	2007-2010
Hiroshi Tanaka, PhD (Med. Mol. Gen.)	Faculty Mentor (chair)	2008-2021

Susannah G. Ellsworth, MD (Rad. Onc.)	Faculty Mentor	2015-2019
Tim Lautenschlaeger, MD, PhD (Rad. Onc.)	Faculty Mentor	2015-present
Xiumei Huang, Ph.D. (Rad. Onc.)	Faculty Mentor	2018-present

**TEACHING ADMINISTRATION AND CURRICULUM DEVELOPMENT:**

I arrived at IUSOM in September 1994 and over the next several months I developed 28 lectures for RAON J406 Radiation and Cancer Biology course that I teach yearly. In 2011, I updated the RAON J406 Radiation and Cancer Biology course for graduate study and successfully applied for graduate course credit as G756 in Radiation and Cancer Biology with our first graduate students taking the course in 2012.

**RESEARCH/CREATIVE ACTIVITY:**

**GRANTS IN RESEARCH/CREATIVE ACTIVITY (PI or Co-I on over \$27,000,000 in grant funding)**

**ACTIVE RESEARCH/CREATIVE GRANTS**

Title	Granting Agency	Role	% Effort	Amount	Dates
<i>Radiation Research</i>	Radiation Research Society	PI	50%	\$1,800,000	1/1/22 - 12/31/26
P01- CA "Increasing the therapeutic index of brain tumor treatment through innovative FLASH radiotherapy	NIH/NCI (PI: Limoli, IU PI: Maxim)	Co-I	5%	\$14,052,434	6/1/2020 - 5/31/2025
Improving Airway Stenosis Surgery using External Beam Irradiation	Varian Medical Systems (PI: B. Anthony)	Co-I	5%	\$100,000	7/1/20 - 12/30/23 (no cost extension)

**COMPLETED RESEARCH/CREATIVE GRANTS**

Title	Granting Agency	Role	% Effort	Amount	Dates
NIH/NCI R01CA224493 Tumor-Selective Radiosensitization of NSCLC using NQ01 Bioactivatable Drugs"	NIH/NCI (PI: Huang)	Co-I	10%	\$1,056,881	1/1/18 - 12/31/22
Regulation of Cutaneous Immune Function and Anti-Tumor Immune Responses by PPARgamma-mediated transrepressive signaling	VA (PI: Konger)	Co-I	2%	\$649,000	4/1/17 - 3/30/21
<i>Radiation Research Journal</i>	Radiation Research Society	PI	50%	\$1,674,713	1/1/17 - 12/31/21
"Mechanism of DMAPT & DCA Cytotoxicity and Enhancement of Radiation-induced Cell Killing in Pancreatic Cancer Cells & Patient Derived	IUSCC-PCSC	PI	5%	\$30,000	4/1/16 - 3/30/19

Cell Models ”

**COMPLETED RESEARCH/CREATIVE GRANTS**

Title	Granting Agency	Role	% Effort	Amount	Dates
“Mechanism of DMAPT & DCA Cytotoxicity and Enhancement of Radiation -induced Cell Killing in Pancreatic Cancer Cells & Patient Derived Cell Models”	IUSCC-PCSC	PI	5%	\$30,000	4/1/16 - 3/30/19
“Investigating the Effects of Altered Circulating Blood Dose Circulating Lymphocyte Subtypes and Cytokine Levels in Patients Undergoing External Beam Radiation Therapy”	IUSM-BRG (PI: Ellsworth)	Faculty Mentor	5%	\$50,000	12/1/15 - 11/30/17
“Radio-Luminescent Nanoparticles for Enhancement of Radiation Therapy of Lung Cancer”	CTSI-CTR (PI: Won - Purdue Univ.)	IUSM-PI (IUSM-PI Mendonca)	5%	\$75,000 (\$37,500)	10/1/15 - 4/30/18
<i>Radiation Research</i>	Radiation Research Society	PI	35%	\$849,678	1/1/14 - 12/31/16
“Dual Targeting of DNA Repair and p53 pathways for treatment of brain cancer	NIH/NCI (PI: Pollock)	Co-I	5%	\$1,250,000	7/1/10 - 6/30/16 (no-cost extension)
“Initial Characterization of a Non-pharmacological Radiation Countermeasure	NIEHS (PI: Dynlacht)	Co-I	5%	\$427,500	9/1/12 - (no-cost extension)
“Radiation-Induced Osteoporosis in Woman with Cancer: Mechanisms and prevention.”	NIH-NIAMSD (PI: Bateman UNC)	Co-I	5%	\$1,165,825	4/1/11 - 3/31/16
Ionizing Radiation Induced DNA Demethylation and Brain Development.”	IUCRG (PI: Zhou)	Co-I	15%	\$63,000	3/1/12 - 2/28/13
<i>Radiation Research</i>	Radiation Research Society	PI	35%	\$618,000	1/2/12 - 12/31/14
<i>Radiation Research</i>	Radiation Research Society	PI	35%	\$192,000	7/1/10 - 12/31/13

**COMPLETED RESEARCH/CREATIVE GRANTS (continued)**

<b>Title</b>	<b>Granting Agency</b>	<b>Role</b>	<b>% Effort</b>	<b>% Effort</b>	<b>Amount</b>	<b>Dates</b>
"In vivo imaging and therapeutic targeting of the hypoxic-niche associated with CD44+/CD24-/low/p65+/HER2+ cancer stem cells"	NIH/NCI (PI:Stantz-Purdue U)	PI-IU subcontract	10%		\$230,258	10/1/11-10/31/13
"Radioresistance of Breast Cancer Stem Cells" (PI: Li UC Davis)	NIH/NCI	PI-IU sub contract	3-10%		\$91,930	9/22/09 - 7/31/14
"Dosimetric & radiobiological verification of a 200 MeV electron beam produced by a laser plasma accelerator"	Clarian Values Fund	Co-I	3%Yr1 8%Yr2		\$80,000	3/1/08 - 7/28/11
"Optimization of Lung Cancer Treatment with Large Fraction Irradiation and Concurrent (Targeted) DMAPT Chemotherapy"	IUSCC	PI	15%		\$75,000	3/5/08 - 7/14/11
"Effects of Estrogen on Cataract Induction After Exposure to High LET Radiation"	NASA	Co-I	10%		\$1,389,342	9/8/05 - 9/7/11
"International Conference on Radiation Biology & Translational Research" Jaipur, India	DOE Meeting Grant	PI	0%		\$15,000	9/19/08 - 4/30/09
"Solar Proton Radiobiology Institute" (PI:Sokol)	NASA	PI Radiobiology	25%		\$453,568 (radiobiology)	10/15/06 - 9/14/09
"Biomedical Strategies for the Prevention, Treatment, Assessment and Prediction of Health Effects of Ionizing Radiation"	DOD/ARMY	PI	15%		\$839,000 (with no-cost extension)	9/11/06 - 10/10/09
"Targeting Telomerase for Breast Cancer Treatment (PI: Herbert)	Showalter	Co-I	5%		\$50,000	7/15/05 - 7/14/06
"Regulation of BCL-2 and Tumorigenicity"	NIH/NCI	PI	38%		\$600,000 (with no-cost extension)	7/1/04 - 6/30/09
"Effect of Estrogen on Radiation-induced (PI: Dynlacht)	NIH/NEI	Co-I	5%		\$446,450	9/3/03 - 8/31/07

Cataractogenesis”

**COMPLETED RESEARCH/CREATIVE GRANTS (continued)**

Title	Granting Agency	Role		% Effort	Amount	Dates
“MR Spectroscopy and Imaging of Sodium in Tumors” (PI: Bansal)	NIH/NCI	Co-I		5%	\$356,000	5/1/02 - 4/1/04
“Effect of Large Fraction Radiotherapy on the Bronchus: A Pilot Proposal” (PI: McGarry)	IUSM Thoracic Oncology	Co-I		5%	\$23,550	1/1/03 - 8/30/05
“In Vivo Assesment of Ovarian Tumor Response to Radiation and Cisplatin therapy”	NCI/Indiana Center for Molecular Imaging	PI		15%	\$31,000	4/1/02 - 3/31/04
“DNA repair and Cell Cycle Therapeutic Targets for Ovarian Cancer” (PPG PI: Williams)	DOD	Co-PI (animal core)		10%	\$1,300,000	9/29/01 - 9/28/04
“Evaluation of Five Gene Candidates from the HeLa/ cervical Cancer Tumor Suppressor Gene Locus on Chromosome 11q13”	Showalter Research Trust	PI		15%	\$50,000	7/1/01 - 6/30/03
“The Localization of the HeLa/Cervical Cancer Tumor Suppressor Gene on Chromosome 11q13”	ACS Institutional Grant	PI		25%	\$19,643	9/1/98 - 8/31/99
“Paclitaxel Radio-sensitization in Head & Neck Cancer” (PI: Saxman)	NIH/NCI	Co-I		5%	\$84,000 (Shannon)	11/1/96 - 11/1/97
“Delayed Mutations and Epigenetics in Radiation-Induced Neoplastic Transformation of Human Cell Hybrids”	ACS Institutional Grant UC Irvine	PI		15%	\$15,000	7/1/92 - 6/30/93
“Influence of Oncogene Expression & Growth State on the Radio-sensitivity of Human Keratinocytes”	UC CRCC	PI		10%	\$25,000	7/1/92 - 6/30/93

## INVITED PRESENTATIONS – RESEARCH

### LOCAL PRESENTATIONS

Title	Organization	Date
"Apoptotic misregulation and radiation-induced carcinogenesis"	Department of Biochemistry and Molecular Biology IU School of Medicine Indianapolis, IN	March 11th, 2002
"Over-expression of BCL-2 and avoidance of apoptosis: a model of radiation-induced neoplastic transformation"	Department of Medical & Molecular Genetics IU School of Medicine Indianapolis, IN	October 9th, 2002
"The radiobiology of radiation sensitizing chemotherapy"	Department of Gynecological Oncology IU School of Medicine Indianapolis, IN	August 6th, 2003
"Mechanisms of radiation-induced carcinogenesis: Suppressor gene deletion, BCL-2 expression, and apoptotic dysregulation"	Department of Medical & Molecular Genetics IU School of Medicine Indianapolis, IN	February 24th, 2004
"The mechanisms of radiation sensitizing chemotherapy"	Department of Gynecological Oncology IU School of Medicine Indianapolis, IN	August 11th, 2004
"Curing the headache of tumor radiation sensitization: Take 2 parthenolide and go for x-rays in the morning"	Department of Medical & Molecular Genetics IU School of Medicine Indianapolis, IN	October 5th, 2004
"Curing the headache of tumor radiation sensitization: Take 2 parthenolide and go for x-rays in the morning"	Biocrossroads/IURTC IUSCC IU School of Medicine Indianapolis, IN	December 16th, 2004
"Insights from studies of the molecular mechanism of radiation-induced carcinogenesis in a human cell model"	Tumor Micro-environment Working Group IU School of Medicine Indianapolis, IN	June 20th, 2005
"Insights from studies of the molecular mechanism of radiation-induced carcinogenesis in human hybrid cells"	Department of Biology Butler University Indianapolis, IN	February 22nd, 2006
"The Radiation Biology of Radiation Oncology"	Department of Surgery IU School of Medicine	April 11th, 2006

<b>LOCAL PRESENTATIONS (continued)</b>	Indianapolis, IN	
<b>Title</b>	<b>Organization</b>	<b>Date</b>
“Effects of low and intermediate doses of ionizing radiation: nuclear power plants, nuclear war, and radiological terrorism”	IUSM Student Chapter of the Physicians for Social Responsibility	April 14th, 2006
“Epigenetic silencing of the FRA-1 tumor suppressor gene leads to upregulation of the BCL-2 oncogene in radiation carcinogenesis”	Department of Medical & Molecular Genetics IU School of Medicine Indianapolis, IN	January 9th, 2007
“Epigenetic silencing of the FRA-1 tumor suppressor gene leads to upregulation of the BCL-2 oncogene in radiation carcinogenesis”	Department of Medical & Molecular Genetics Retreat IU School of Medicine Indianapolis, IN	September 8th, 2007
“20 years of hybrids or how x-rays caused a tumor suppressor gene to shut down and cause cancer”	Lion’s cancer Control Fund Meeting, IUSCC IU School of Medicine Indianapolis, IN	November 11th, 2007
“Of Mice and Mars”	Department of Medical & Molecular Genetics IU School of Medicine Indianapolis, IN	January 8th, 2008
“Epigenetic silencing of the FRA-1 tumor suppressor gene leads to radiation carcinogenesis”	Center for Environmental Health IU School of Medicine Indianapolis, IN	January 24th, 2008
“Stereotactic Body Frame Radiotherapy for Lung Cancer: Approaches and Limiting Toxicities”	IU Simon Cancer Center: Lung Cancer Working Group IU School of Medicine Indianapolis, IN	March 7th, 2008
“Lessons from studying the proton SOBPs back edge”	Lion’s cancer Control Fund Meeting, IUSCC IU School of Medicine Indianapolis, IN	November 11th, 2012
“Cancer Research: What is it? & Why do I do it?”	Crispus Attucks Medical Magnet School 6 <sup>th</sup> grade AVID class	November 28th, 2012
“Of Mice and Mars”	Department of Medical & Molecular Genetics IU School of Medicine	March 26th, 2013

Indianapolis, IN		
<b>LOCAL PRESENTATIONS (continued)</b>		
<b>Title</b>	<b>Organization</b>	<b>Date</b>
<i>“Improving the Radiation Response of Pancreatic Cancer by Starving its Sweet Tooth”</i>	Lion’s cancer Control Fund Meeting, IUSCC IU School of Medicine Indianapolis, IN	September 13th, 2015
<i>“Improving the Radiation Response of Pancreatic Cancer by Starving its Sweet Tooth”</i>	Department of Medical & Molecular Genetics Seminar IU School of Medicine Indianapolis, IN	September 30th, 2015
<i>“Update on Ongoing Pancreatic Cancer Research Projects”</i>	Lion’s Cancer Control Fund Meeting, IUSCC IU School of Medicine Indianapolis, IN	September 12th, 2016
<i>“Ongoing Radiation &amp; Cancer Biology Research in Lung &amp; Pancreatic Cancer”</i>	Lion’s Cancer Control Fund Meeting, IUSCC IU School of Medicine Indianapolis, IN	June 11th, 2017
<i>“Suppression of Warburg Metabolism and NF-kB Signaling Enhances Pancreatic Cancer X-ray Sensitivity”</i>	Department of Radiation Oncology, CUPID Program IU School of Medicine Indianapolis, IN with Johns Hopkins Univ. & Ohio State University	June 22nd, 2017
<i>“Epigenetic Silencing of the FRA-1 Tumor Suppressor Gene and upregulation of the BCL-2 Oncogene in Radiation-induced Carcinogenesis”</i>	Department of Radiation Oncology, CUPID Program IU School of Medicine Indianapolis, IN with Johns Hopkins Univ. & Ohio State University	July 19th, 2018
<i>“Good Experiments &amp; Scientific Fraud”</i>	Department of Radiation Oncology, CUPID Program IU School of Medicine Indianapolis, IN with Johns Hopkins Univ. & Ohio State University	July 23rd, 2019
<i>“The study of Very, Very Low (Zero) Doses of Radiation - The SNOlab update”</i>	Lion’s Cancer Control Fund Meeting, IUSCC IU School of Medicine Indianapolis, IN	November 8th, 2020
<i>“Use of Low Dose Lung Irradiation for COVID-19: Background, Biology, and Current Status.”</i>	RRS Multidisciplinary Tumor Cancer Conference IU Health West Hospital	November 10 <sup>th</sup> , 2020
Welcome to 1RIP!	Introduction of the new 1 <sup>st</sup> Year Research Immersion	August 17 <sup>th</sup> & 18 <sup>th</sup> , 2023



Program (1RIP) - 400 Students

**REGIONAL PRESENTATIONS**

<b>Title</b>	<b>Organization</b>	<b>Date</b>
"Role of Bcl-2 and delayed apoptosis in radiation-induced neoplastic transformation of human hybrid cells."	School of Health Sciences Purdue University West Lafayette, IN	October 30th, 2001
"Apoptotic misregulation and radiation-induced carcinogenesis"	Medical Sciences Program Indiana University Bloomington, IN	December 10th, 2002
"Mechanisms of radiation-induced carcinogenesis: Suppressor gene deletion, BCL-2 expression, and apoptotic dysregulation"	School of Health Sciences Purdue University West Lafayette, IN	January 24th, 2004
"Radiation-induced Cell Killing: Mitotic Death, Necrosis, and Apoptosis"	School of Health Sciences Purdue University West Lafayette, IN	April 1st, 2004
"Radiation-induced Cell Killing: Mitotic Death, Necrosis, and Apoptosis"	Medical Physics Mini-Symposium Purdue University West Lafayette, IN	January 24 <sup>th</sup> , 2009
"Lessons from Studying the Proton SOBP back edge"	AAPM Ohio River Valley Chapter Fall Symposium Indianapolis, IN	October 13th, 2012

**NATIONAL PRESENTATIONS**

<b>Title</b>	<b>Organization</b>	<b>Date</b>
<b>Symposium &amp; Session Co-Chair</b> "Radiation-Induced gene expression as a consequence of tumor suppressor gene inactivation"	40th Annual Radiation Research Society Meeting Salt Lake City, Utah	July 15th, 1991
"Lack of correlation between activated <u>c-H-ras</u> oncogene expression and radioresistance in transfected human keratinocyte cell lines"	40th Annual Radiation Research Society Meeting Salt Lake City, Utah	July 18th, 1991
"A delayed DNA degradation process resembling apoptosis may be associated with the expression of delayed heritable damage and neoplastic transformation of human hybrid cells"	11th Annual Meeting of Mallinckrodt Institute of Radiology, Washington University School of Medicine St. Louis, MO	Nov. 4th, 1995
"Acute and delayed apoptosis in radiation-induced neoplastic transformation of human hybrid cells"	47th Annual Meeting of the Radiation Research Society Albuquerque, NM	May 2nd, 2000

**NATIONAL PRESENTATIONS (continued)**

<b>Title</b>	<b>Organization</b>	<b>Date</b>
<b>Visiting Professor</b>		
“Over-expression of BCL-2 and avoidance of apoptosis: a model of radiation-induced neoplastic transformation”	Department of Genetics Rutgers University Piscataway, NJ	April 15th, 2002
“Endothelial stem/progenitor cells are X-ray sensitive with limited repair capacity”	52 <sup>nd</sup> annual meeting of the Radiation Research Society Denver, CO	October 19 <sup>th</sup> , 2005
“Supply and Demand: Is the tumor vasculature a target for Therapy”	Winter Institute of Medical Physics XXVIII Frisco, CO	February 15 <sup>th</sup> , 2006
“Bronchial Injury in a rat model”	Stereotactic Body Radiation Therapy: Clinical, Technical and Translational Aspects Dallas, TX	May 20th, 2006
“Radiation-induced neoplastic transformation involves loss of the FRA-1 tumor suppressor and the upregulation of the BCL-2 oncogene”	53 <sup>rd</sup> Annual meeting of the Radiation Research Society Philadelphia, PA	November 7th, 2006
“20 years of hybrids or how x-rays caused a tumor suppressor gene to shut down and cause cancer...”	Winter Institute of Medical Physics XXIX Frisco, CO	February 7th, 2007
<b>Invited Symposium</b>		
Acute Effects of Solar Proton Storms combined with space flight factors”	American Society for Gravitational and Space Biology NASA Ames Moffett Field, CA	October 25th, 2007
<b>Ground Rounds Lecture &amp; Visiting Professor</b>		
“Epigenetic silencing of the FRA-1 tumor suppressor gene leads to radiation-induced carcinogenesis”	Department of Pathology University of Iowa Iowa City, IA	January 9th, 2008
“Of Mice and Mars”	Winter Institute of Medical Physics-XXX Frisco, CO	February 9th, 2008
<b>*Visiting Professor</b>		
“Epigenetic silencing of the FRA-1 tumor suppressor gene leads to radiation-induced carcinogenesis”	Cancer Institute Southern Illinois University, School of Medicine	May 7th, 2008

## NATIONAL PRESENTATIONS (continued)

Title	Organization	Date
<p><b>*Visiting Professor</b>            "Radiation and Cancer Biology Update"</p>	Department of Radiation Oncology Ohio State University School of Medicine	June 21st, 2008
<p>"In Vitro and In Vivo RBE Measurements of Protons in the Spread Out Bragg Peak at MPRI/IU Cyclotron"</p>	Winter Institute of Medical Physics-XXXI Frisco, CO	February 11th, 2009
<p><b>Visiting Professor</b>            "DMAPT induces X-ray Sensitization of Lung Cancer through inhibition of NF-<math>\kappa</math>B dependent Split Dose and DNA Double strand break repair"</p>	Department of Radiation Oncology New York University School of Medicine New York, NY	May 28th-29th, 2009
<p>"Vitamin E and the green tea active agent EGCG suppress radiation-induced carcinogenesis by different molecular mechanisms"</p>	56th Annual Meeting of the Radiation Research Society Maui, Hawaii	September 29 <sup>th</sup> , 2010
<p><b>Invited ASTRO Faculty &amp; Speaker</b>            "The Traditional LQ Model: Challenge for extreme hypofractionation"</p>	ASTRO 54 <sup>th</sup> Annual Meeting Boston, MA	October 31 <sup>st</sup> , 2012
<p>"An Editor-in-Chief's View - the world can be EICy"</p>	Winter Institute of Medical Physics XXXII Breckenridge, CO	February 27 <sup>th</sup> , 2013
<p><b>Symposium &amp; Session Co-Chair</b>            "Modes of cell death in adult and cord blood endothelial progenitors"</p>	59 <sup>th</sup> Annual Meeting of the Radiation Research Society New Orleans, LA	September 17 <sup>th</sup> , 2013
<p><b>Invited Symposium</b>            "Hindlimb Unloading Increases the High-Energy Proton Radiation Sensitivity of C57BL/6 Mice"</p>	30 <sup>th</sup> Annual Meeting of the American Society for Gravitational and Space Biology Pasadena, CA	October 22nd, 2014
<p>"Should WIMPs remain in academics?"</p>	Winter Institute of Medical Physics XXXIII Breckenridge, CO	February 25th, 2015
<p><b>Invited ASTRO Faculty &amp; Discussant</b>            "Biology III-Carcinogenesis and Radiation Toxicity"</p>	ASTRO 57 <sup>th</sup> Annual Meeting San Antonio, TX	October 10 <sup>th</sup> , 2015

## NATIONAL PRESENTATIONS (continued)

Title	Organization	Date
<b>Invited Speaker and Panelist</b> NAS Workshop on “Adopting the International System of Units for Radiation Measurements in the United States”	National Academy of Sciences Washington, DC	September 29 <sup>th</sup> , 2016
<b>Symposium Chair &amp; Speaker</b> “Enhancing the X-ray Sensitivity of Radioresistant Tumors by Altering Warburg Metabolism”	61 <sup>st</sup> Annual Meeting of the Radiation Research Society Big Island, Hawaii	October 17 <sup>th</sup> , 2016
“How SI radiation dose units became des rigeur”	Winter Institute of Medical Physics XXXIX Breckenridge, CO	March 1 <sup>st</sup> , 2017
<b>Invited Participant</b>	AAPM Workshop on “Practical Big Data” in Radiation Oncology University of Michigan Ann Arbor, MI	May 19-20 <sup>th</sup> , 2017
<b>Organizing Committee &amp; Session Co-Moderator</b> <i>“Rationale Combinations of Radiation and Immunotherapy</i>	ASTRO/NCI Workshop on “Incorporating Radiation Oncology into Immunotherapy” NIH Bethesda, MD	June 15-16 <sup>th</sup> , 2017
<b>Invited Participant</b>	NCI Workshop on “High-Dose, Ultra-High Dose Rate, Spatial Fractionated Radiotherapy ” NIH Bethesda, MD	August 21 <sup>st</sup> , 2018
<b>Symposium Speaker</b> “Metabolic Reprogramming increases Radiation-induced cell killing in Pancreatic Cancers”	64 <sup>th</sup> Annual Meeting of the Radiation Research Society Chicago, IL	Sept 22-23 <sup>rd</sup> , 2018
<b>Invited panelist &amp; Speaker</b> “International Collaborations”	AIBS Council Meeting Washington, DC	Dec 5-6 <sup>th</sup> , 2018
<b>Invited Speaker</b> “Ultra-High Dose Rate Radiotherapy- The Biology”	Winter Institute of Medical Physics XLI Breckenridge, CO	Feb 23-27 <sup>th</sup> , 2019
<b>Invited Participant</b>	NCI “Basic Research Needs Workshop on Compact Accelerators for Security And Medicine” Sheraton	May 5-6 <sup>th</sup> , 2019

Tysons, Virginia

## NATIONAL PRESENTATIONS (continued)

<b>Title</b>	<b>Organization</b>	<b>Date</b>
<b>Invited Participant</b>	AAPM Workshop on “Practical Big Data” in Radiation Oncology University of Michigan Ann Arbor, MI	June 5 -7 <sup>th</sup> , 2019
<b>Invited ASTRO Faculty &amp; Chair</b> Panel 16 “FLASH-RT: The innovation of ultra-high dose-rate radiotherapy, a transformative collaboration of biology and physics”	ASTRO 2019 Annual Meeting McCormack Center Chicago, IL	Sept 15-18 <sup>th</sup> , 2019
<b>Invited Speaker</b> “FLASH Update: Biology and clinical implementation”	Winter Institute of Medical Physics XLII Breckenridge, CO	Feb 22-26 <sup>th</sup> , 2020
<b>Symposium Speaker</b> “FLASH Therapy: Current Status Biology”	AAPM/COMP Annual Meeting (Virtual)	July 12-16 <sup>th</sup> , 2020
<b>Symposium Speaker</b> “Radiation-Induced Carcinogenesis Mechanisms, And Chemoprevention”	NCI Workshop “Radiation Senescence and Cancer” (Virtual)	August 10 – 11 <sup>th</sup> , 2020
<b>Visiting Professor</b> “DMAPT induces X-ray Sensitization of Pancreatic Cancer through inhibition of NF- $\kappa$ B dependent Split Dose and DNA Double strand break repair”	Department of Radiation Oncology University of Wisconsin School of Medicine Madison, WI	September 15 <sup>th</sup> , 2021
<b>Invited ASTRO Faculty &amp; Chair</b> EDU 26: “Radiation, Autophagy & Senescence in Tumor Response: Mechanisms and Clinical Implications”	ASTRO 2021 Annual Meeting McCormack Center Chicago, IL	Oct. 23 - 27 <sup>th</sup> , 2021
<b>Invited SfRBM Plenary</b> Plenary Session 5: “Radiation-Induced Pancreatic Cancer Cell Killing by Simultaneous Inhibition of NF- $\kappa$ B and Warburg Metabolism”	SfRBM 2022 Annual Meeting Hilton Lake Buena Vista Palace Orlando, FL	Nov 16 - 19 <sup>th</sup> , 2022
<b>Opening Plenary Lecture</b> “Understanding Radiation- Induced Carcinogenesis: A 30+ Year Journey”	RRS Fall Low Dose Workshop Kimpton Armory Hotel Bozeman, MT	Oct. 25 - 27 <sup>th</sup> , 2023

## INTERNATIONAL PRESENTATIONS

<b>Title</b>	<b>Organization</b>	<b>Date</b>
"Imaging by soft x-ray contact microscopy in living CHO-SC1 cells and other biological material"	Ultra Soft X-Ray Workshop Toronto, Canada	July 12th, 1991
"Radiation-induced gene expression in human carcinogenesis: model studies with the HeLa X Skin Fibroblast human hybrid cell neoplastic transformation assay"	Workshop on Molecular, Cellular, and Genetic Basis of Radiosensitivity at Low Doses Whistler, B.C., Canada	May 12th, 1993
"Radiation, genomic instability, and neoplastic transformation of human hybrid cells"	Chinese Academy of Medical Sciences and Peking Union Medical Hospital, Beijing, China	May 27th, 1997
"A delayed apoptosis is associated with the radiation-induced expression of delayed heritable damage and neoplastic transformation of human hybrid cells"	International Congress of Radiation Oncology Beijing, China	June 5th, 1997
"Radiation, genomic instability, and neoplastic transformation of human hybrid cells"	Chinese Academy of Medical Sciences and Sun Yat-sen University of Medical Sciences, Guangzhou, China	June 9th, 1997
"Mechanisms of radiation-induced genomic instability in cancer"	Workshop on Mechanisms & Public Health Implications of Radiation-induced Genomic Instability Dublin, Ireland	April 16th, 1998
"Role of p53 and delayed apoptosis in radiation-induced neoplastic transformation of human hybrid cells"	11th International Congress of Radiation Research Dublin, Ireland	July 23rd, 1999
"Role of Bcl-2 and delayed apoptosis in radiation-induced neoplastic transformation of human hybrid cells"	5th World Congress on Advances in Oncology Hersonissos, Crete, Greece	October 20th, 2000
"Overexpression of BCL-2 and avoidance of apoptosis: a model of radiation-induced neoplastic transformation"	Nagasaki University	March 13th, 2001
"Over-expression of BCL-2 and avoidance of apoptosis: a model of radiation-induced neoplastic transformation"	International Conference on Radiation Damage and its Modification Delhi, India	November 13th, 2002

## INTERNATIONAL PRESENTATIONS (continued)

Title	Organization	Date
"Homozygous deletions within the 11q13 cervical cancer tumor suppressor locus in radiation-induced neoplastically transformed human hybrid cells."	12 <sup>th</sup> International Congress of Radiation Research Brisbane, Australia	August 22nd, 2003
"Curing the headache of tumor radiation sensitization: Take 2 parthenolide and go for x-rays in the morning"	Universitat Klinik Ulm, Germany	March 12th, 2005
<b>Keynote</b> Presentation: "Insights from the molecular mechanism of radiation-induced carcinogenesis in human hybrid cells"	LOWRAD International Conference Hamilton, Ontario, Canada	June 25th, 2005
"Mechanisms of parthenolide-induced radiosensitization of NF- $\kappa$ B activated CGL1 (HeLa Hybrid) cells"	3 <sup>rd</sup> International Conference on Translational Research and Pre-clinical Strategies in Radiation Oncology Lugano, Switzerland	March 14th, 2006
"Radiation-induced neoplastic transformation involves loss of the FRA-1 tumor suppressor and the upregulation of the BCL-2 oncogene"	International Conference on Radiation Biology Banaras Hindu University Varanasi, INDIA	November 20th, 2006
<b>Keynote</b> Presentation: "Multiple signaling cascades activated by parthenolide synergistically sensitize cells to x-ray-induced cell killing through inhibition of split dose repair."	International Conference: Science, Technology, and Society Allahabad, INDIA	November 23rd, 2006
<b>Visiting Scholar</b> "Potential mechanisms of radiation-induced cell killing by Very High Energy Electrons"	Institute of Pharmacy & Biomedical Sciences, University of Strathclyde, Glasgow, Scotland, UK	May 17th -22nd, 2011
<b>Opening Plenary</b> Presentation: "Modes of radiation-induced cell death in adult and cord blood endothelial progenitors In Vitro & In Vivo"	2nd Global Chinese Radiation Research Meeting (GCCRR) Suzhou, China	May 11th, 2014
"A multitarget approach to pancreatic cancer treatment using radiation and concurrent dual targeting chemotherapy"	International Conference on Radiation Biology (ICRB-2014) New Delhi, INDIA	November 13th, 2014
"Alteration of Warburg metabolism and NF- $\kappa$ B signaling to enhance pancreatic X-ray sensitivity"	15th International Congress of Radiation Research Kyoto, Japan	May 27th, 2015

## INTERNATIONAL PRESENTATIONS (continued)

<b>Title</b>	<b>Organization</b>	<b>Date</b>
<b>Visiting Professor</b> “Mechanism of radiation-induced carcinogenesis of CGL1 cells”	Northern Ontario School of Medicine & SNOLAB Sudbury, Canada	March 22 - 25th, 2016
“Suppression of Warburg metabolism and NF-kB signaling enhances pancreatic cancer X-ray sensitivity”	International Conference on Radiation Biology (ICRB-2016) Chennai, INDIA	October 9 -11 <sup>th</sup> , 2016
<b>Invited Speaker and Session Chair</b> “Metabolic Reprogramming Increases Radiation-induced Cell Killing in Pancreatic Cancer”	MICROS 2017 17 <sup>th</sup> Annual Meeting on Microdosimetry Venice, Italy	Nov 5 -10 <sup>th</sup> , 2017
<b>Invited Speaker and Session Chair</b> Metabolic Reprogramming Increases Radiation-induced Cell Killing in Pancreatic Cancer”	International Conference on Radiation Biology (ICRB-2018) Mangalore, India	October 4 -6 <sup>th</sup> , 2018
<b>Keynote Speaker and Session Chair</b> “Transcriptomic Profiling of Gamma Ray-induced Mutants of CGL1 Human Hybrid System Reveals Novel Insights into Mechanisms of Radiation-Induced Carcinogenesis”	7 <sup>th</sup> International Systems Radiation Biology Workshop (7 <sup>th</sup> -ISRBW) Dalian, China	Sept 28-30 <sup>th</sup> , 2019
<b>Session Chair &amp; Debate Participant</b> “How translational is the FLASH Effect to the Clinic?”	FLASH Radiotherapy & Particle Therapy Vienna, Austria (virtual)	Dec. 1-3 <sup>rd</sup> , 2021
<b>Invited Symposium</b> “History of FLASH”	FLASH Radiotherapy & Particle Therapy Barcelona, Spain	Nov 30 <sup>th</sup> – Dec 3 <sup>rd</sup> , 2022



## SERVICE:

### UNIVERSITY SERVICE:

<b>DEPARTMENT Activity</b>	<b>Role</b>	<b>Inclusive Dates</b>
Radiation Oncology: Radiation and Cancer Biology Division	Director	1994-2022
Radiation Oncology: Faculty Search and Screen Committee	Member	1994-present
Radiation Oncology: Resident Search and Screen Committee	Member	1994-present
Radiation Oncology: Computer Committee	Member	1998-2004
Radiation Oncology: Research Committee	Member	1998-2004
Radiation Oncology: Executive & Finance Committee	Member	2006-2008
IUSOM, Med. & Mol. Genetics Graduate Student Affairs and Recruitment Committee	Member	2008-2015

### SCHOOL SERVICE

<b>Activity</b>	<b>Role</b>	<b>Inclusive Dates</b>
IU Radiation Oncology Chairman Search and Screen Committee	Member	2004-2006
IUSOM Imaging Advisory Committee	Member	2004
IUSOM Medical Student Mentor Program	Faculty Facilitator (Team 19) (12 students per year)	2002-2009
IUSOM Faculty Community Relations Committee	Member (Chair 2008-2010) Organized Mini-medical school IUSM Day at the Statehouse IUSM at the State Fair Crispus Attucks Medical Magnet Outreach.	2004-2010
IUSOM Medical Student Peer/Self-assessment Program	Faculty Reviewer Review and discuss medical student peer and self-assessments during clinical rotations	2008-2018
IUSOM Radiation Oncology Chairman Search and Screen Committee	Member	2014

**SCHOOL SERVICE**

<b>Activity</b>	<b>Role</b>	<b>Inclusive Dates</b>
IUSOM Faculty Steering Committee	Member The committee worked on: Extension of the tenure clock Medical School Curriculum State funding of IUSM Rationale for the Indiana Clinic Worked on subcommittee to revise IUSM Constitution	2009-2012 5/2015-7/2015
IUSM Faculty Leadership Forum	Invited Participant	August 15th, 2011
IUSOM Faculty Steering Committee	Member The committee works on: Medical School Curriculum Committee Report Review Adult Health Campus Design and Construction SOM Finance Review P & T committee Report DEI Initiatives	2017 - present
IUSOM Faculty Steering Executive Committee	President-Elect	7/2019 - 6/2020
IUSOM Faculty Steering Executive Committee	President	7/2020 - 6/2021
IUSOM Faculty Steering Executive Committee	Past President	7/2021 – 6/2022

**CAMPUS SERVICE**

<b>Activity</b>	<b>Role</b>	<b>Inclusive Dates</b>
IUPUI Faculty Council	IUSM representative Attended monthly meetings Deliberated and voted on Work statement, Bonus policy	7/2011 - 6/2013 7/2013 - 6/2015
IUPUI Faculty Council	Elected as IUPUI “At Large” Representative	7/2015 - 4/2020
IUPUI Faculty Council Board of Review Pool	Elected to serve on committee(s) to review and address grievances submitted by IUPUI faculty related to university actions on such issues as tenure, salary adjustment, reappointment, and academic freedom.	2/2015 - 4/2020
IUPUI Faculty Council Nominating Committee	Elected to identify and nominate high-quality candidates to stand for election to various IUPUI faculty committees.	7/2015 - 4/2020

**CAMPUS SERVICE**

<b>Activity</b>	<b>Role</b>	<b>Inclusive Dates</b>
IUPUI Faculty Council Research Affairs Committee	Appointed to periodically review research policies and procedures at IUPUI, draft revisions, help to interpret those policies and procedures when questions arise.	7/2015 - 3/2020 4/2020 - present (ex officio)
Administrative Review Committee, Dean School of Science IUPUI	Served as a member of Dean Simon Rhodes 5-year Review Committee Performed interviews, gathered performance data, wrote report for VC CAO, and Chancellor	9/2016 - 5/2017
Faculty Grievance Advisory Panel (FGAP)	Chair, The FGAP works with faculty members who may be facing a grievance to try to help resolve the dispute before reaching Board of Review consideration.	7/2017- 4/2020
IU Policy Review Committee	Member: reviewed, updated and revised all IU policies in collaboration with IFC executive committees	7/2019 – 7/2020
IU Faculty Council Executive Committee	IUPUI Faculty Council representative to the IU Faculty Council Executive Committee. Monthly teleconference with IU leadership. Discuss and vote on various policies and initiatives to present to the IU Faculty Council.	7/2017- 4/2020
Associate Vice Chancellor For Research	IUPUI, OVCR Promote and support research initiatives for all schools on the IUPUI and other IU campuses. Work on new initiatives for government and private foundation grant development & submission, seed funding, grant education seminars, faculty development, and DEI initiatives. Work with the Council of Associate Deans of Research from all IUPUI Schools to discuss OVCR policy and faculty research initiatives.	4/2020 – 12/31/23

Interim Vice Chancellor  
For Research, IUPUI  
Interim Associate Vice President  
For Research, IU

IUPUI, OVCR & IU Research 9/1/2022 – 3/31/23  
Co-Chaired the Vision 2024 Research  
Task Force for the IU and Purdue restructuring  
into separate campuses. Develop policies and strategies  
to maintain, strengthen, and grow research at  
the IU Indianapolis (IUI) campus.

Co-Chaired Research Task Force for the IUI 10-year  
2030 Strategic Plan to increase funding at all IU  
campuses by \$200 million in 5 years.

Worked with the IU VP of Research and IU Research  
senior leadership and staff to reorganize all campus  
research office activities into one combined enterprise IU  
Research to improve efficiency in all aspects of grant  
development and submission.

Worked with the Council of Deans and Associate Deans of  
Research from all IUPUI Schools to discuss IU Research  
policy and develop new initiatives to increase grant  
submission and centralize faculty retainment packages into  
IU Research.

Develop and organize a “Grant Plant” which is a group of  
senior and emeritus faculty and staff to work with all  
faculty members in all schools to develop highly polished  
cutting-edge grant proposals to improve chances of  
funding.

Significantly increase funding to internal research grant  
programs to kick start new research programs at  
all schools and develop the data needed for individual  
new external grant submissions and large multi-PI grant  
submissions. Seek to get all eligible faculty “one grant” to  
reenergize the whole university research enterprise.

Worked with IU Research VP, AVP, and Vice Provosts to  
increase internal funding for medium and large equipment  
grants to **\$5 million per year** to improve the cutting-edge  
tools and technologies available to push the research  
investigations to the next level.

Established interschool and interdisciplinary research  
initiatives for all schools, centers, and institutes on the  
IUPUI and other IU campuses.

Worked on new initiatives for grant development &  
submission. Worked with faculty individually to improve  
submissions to the Keck foundation to improve quality of  
grant applications submitted.

Increased funding of external federal grants at IUPUI from  
**\$68 million in 2021-2022 to \$93 million in 2022 – 2023.**

**Director of Research Development** Manage the IU Research internal grant and limited  
Office of Research Development submission programs.

**CAMPUS SERVICE**

<b>Activity</b>	<b>Role</b>	<b>Inclusive Dates</b>
Indiana Clinical Translational Sciences Institute (CTSI)	Executive Committee & OVCR liaison. Review and approve all grant initiatives being submitted by CTSI institutions: IUB, IUPUI, Purdue, & Notre Dame. Discuss and propose new research initiatives.	4/2020 – 12/31/24
Indiana Addictions Grand Challenge Grant	Executive Committee & OVCR liaison. Review the research progress and finances of all grants awarded through the AGC. Review applications for no cost extensions.	4/2020 - present
Search Committee, EAD for Research, IU School of Nursing	Member	12/2021 – 3/31/23
Administrative Review Committee, Dean School of Medicine IUSOM	Serve as a member of Dean Jay Hess Review Committee Perform interviews, gather performance data, write report for President and Chancellor	2//2024 - present

**PROFESSIONAL SERVICE**

<b>LOCAL Organization</b>	<b>Activity</b>	<b>Inclusive Dates</b>
Intel International Science and Engineering Fair 2006, Indianapolis, IN	Grand Award Judge Biochemistry	May 9th -10th, 2006
Our Lady of Mount Carmel School, Carmel, IN	Science Fair Judge	January 2006-2009
Crispus Attucks Medical Magnet, 6th Grade Field Trip IUSM Mendonca Lab	Organized and hosted lab tour with demonstrations for 60 to 70 6th grade students.	2008-2016

**NATIONAL SERVICE**

<b>Organization</b>	<b>Activity</b>	<b>Inclusive Dates</b>
American College of Radiology	Member, Committee on Residency Training in Radiation Oncology -Wrote and edited questions Radiation Biology national in-service exam for all US Radiation Oncology Residents.	1996-2003

**NATIONAL SERVICE**

<b>Organization</b>	<b>Activity</b>	<b>Inclusive Dates</b>
American Board of Radiology	Member, Radiation Biology Task Force: Write questions for the the U.S. Radiation Oncology Resident Board Exam.	2000-2006 2011-present
American Board of Radiology	Member, Radiation Biology Board Exam Creation Committee. Review and choose questions for the Radiation and Cancer Biology section of the U.S. Radiation Oncology Resident Board Exam.	2011-present
NIH SBIR Peer Review ZRGI ONC-M 11(B)	Panel Member	July 12th, 2004
NASA Peer Review Radiation NSCOR Panel	Panel Member	August 31st, 2004
NIH SBIR Peer Review ZRG1 ONC-R 11(B)	Chair	November 11th, 2004
Ad-Hoc NIH study section NIH/NCI Cancer Molecular Pathobiology (CAMP)	Member	June 5th-7th, 2005
NASA Peer Review Radiation Health Panel 1	Panel Member	July 17th, 2006
DOD Breast Cancer Research Program, Study Section MPA-2	Chair	July 23th-25th, 2006
DOD Radiation Oncology Study Section RON	Member	August 15th-17th, 2007
DOD Breast Cancer Concept Award Study Section (online review)	Member	March 6th-12th, 2008
DOD Breast Cancer Research Program, Study section panel, Physical Imaging and Radiation Oncology Panel	Member	July 13th-15th, 2008
DOE peer review study section “Low Dose Radiation Research Grant Review”	Member	October 20th-22nd, 2008
DOD Breast Cancer Concept Award Study Section (online review)	Member	January 12th-16th, 2009
DOD Breast Cancer Research Program, Breast Cancer Idea Award Panel (CBY-1)	Chair	June 6th-9th, 2009

**NATIONAL SERVICE**

<b>Organization</b>	<b>Activity</b>	<b>Inclusive Dates</b>
DOD Breast Cancer Research Program, Breast Cancer Idea Award Panel (CBY-1)	Chair	June 16th-19th, 2010
DOD Breast Cancer Research Program, Breast Cancer Idea Award Panel (CBY-2)	Chair	October 16th-18th, 2011
DOD Breast Cancer Research Program, Breast Cancer Idea Award Panel (CBY-2)	Chair	October 11th-12th, 2012
American Society for Therapeutic Radiology and Oncology	Vice Chair, ASTRO Science Council Workshop Committee - Planned ASTRO/NCI Workshop on "Precision Medicine" held at the NIH Campus in 2016.	2013-present
ASTRO/NCI Radiobiology Consensus Workshop Bethesda, MD	Invited Panelist Discussed the current state of radiobiology and the future goals of radiation research in terms of: research topics, research translation into the clinic, role of publications, and future research investment.	July 18th, 2014
DOD USAMRMC/CDMRP Peer Review Panel, "Focused Program-Illnesses Related to Radiation Exposure"	Chair	January 11th-12th, 2015
ASTRO/NCI Big Data Workshop NIH Bethesda	Organizing Committee	August 13-14th, 2015
ASTRO/NCI Precision Medicine in Radiation Oncology Workshop NIH Bethesda	Organizing Committee Session Co-Chair	June 16-17th, 2016
NCI/NIH workshop on "Mechanisms and Manifestations of Radiation-induced Fibrosis: Opportunities to Mitigate"	Invited Panelist Helped organize and edited "Commentary for the journal <i>Radiation Research</i> on Radiation Fibrosis	September 19th, 2016
NIH/NCI P01 Peer Review ZCA1 RPRB-6 (M1)	Member Hilton Rockville Rockville, MD	Feb 5-6th, 2019

**NATIONAL SERVICE**

<b>Organization</b>	<b>Activity</b>	<b>Inclusive Dates</b>
NIH/NCI P01 Peer Review ZCA1 SRB-2 (J1) P	Member & Discussion Leader Hilton Washington DC Rockville, MD	Sept 19-20th, 2019
NCI-P01 Peer Review ZCA1 SRB-2 (O2)	Co-Chairperson (virtual)	June 25 <sup>th</sup> , 2020
NIH/NCI SEP Peer Review ZCA1 SRB-X (M1) "NCI Review of (ROBIN) Centers"	Member (virtual)	Feb 3 -4 <sup>th</sup> , 2022
American Association Cancer Research	2023 AACR Scientific Program Subcommittee TB07	11/22 - 12/12 2023
American Association Cancer Research	Chair, 2023 AACR Scientific Program Preclinical Radiotherapeutics Section Experimental Therapeutics Subcommittee AACR Program Committee	11/22 -12/12 2023

**INTERNATIONAL SERVICE**

<b>Organization</b>	<b>Activity</b>	<b>Inclusive Dates</b>
International Scientific Journal Review for the journals: <i>Biochemical Pharmacology, Int. J. Radiat. Oncol. Bio. Physics, J. of Lab. &amp; Clinical Medicine, Cancer Cell Inter., Int. J. Radiat. Biology, Cancer Research, Clin. Cancer Research, Cell and Molecular Life Sciences, British Journal of Haematology, Blood.</i>	Ad-hoc reviewer	1994-present
Radiation Research Society	Membership Committee	2004-2007
Radiation Research Society	Associate Editor, <i>Radiation Research</i> Read and assigned reviewers for 30 to 45 manuscripts per year.	2004-2010
Radiation Research Society	Editor-in-Chief, <i>Radiation Research</i> 450 new and 500 revised manuscripts per year; edit 150 accepted manuscripts; recruit timely, high impact papers; recruit and organize special issues	2011-present
Radiation Research Society	Member, RRS Council	2011-present
Radiation Research Society	Member, Executive Committee Work with RRS Presidents to set strategic vision of the RRS, establish new policies and help plan and execute society financial goals, and help planned annual RRS meeting.	2011-present



**INTERNATIONAL SERVICE**

<b>Organization</b>	<b>Activity</b>	<b>Inclusive Dates</b>
Radiation Research Society	Chair, Website Committee Developed new RRS website; Video production for the website.	2011-2018
Radiation Research Society	READI Task Force Work on promoting DEI in all Aspects of RRS activities.	2021-
Radiation Research Society	Member, Annual Meeting Program Committee	2013-2014 2015-2017 2020-2021 2023-2024
DOREMI-STORE Low Dose Workshop, Rome, Italy	Invited Panelist	January 25th-26th, 2012
NCI/NIH workshop on “Radiation and Immunology”	Invited Panelist Recruited, organized, and edited “Special Issue for <i>Radiation Research</i> on “Radiation and Immunology”	April 4-5 <sup>th</sup> , 2013
Deep Underground Laboratories Integrated Activities (DULIA-bio) Workshop Meeting, Gran Sasso, Italy	Scientific Advisory Committee. Life in Low Radiation Environments	Nov. 4-5 <sup>th</sup> , 2019
RRS Fall Workshop “Where is the Roadmap for the US Low-Dose Program?”	Meeting Organizer & Keynote Speaker Recruited and organized speakers and sessions.	November 25-27 <sup>th</sup> , 2023

## PUBLICATIONS

† = Mentored Publications # = Corresponding author

### RESEARCH/CREATIVE ACTIVITY

#### Refereed

- 1) Röttinger, E.M., **Mendonca, M.S.** and Gerweck, L. "Modification of pH induced cellular inactivation by irradiation - glial cells" *Int. J. Radiation Oncology, Biology, Physics* **6**: 1659-1662 (1980).
- 2) Röttinger, E.M. and **Mendonca, M.**, "The range of maximal tolerance of human glial cells to pH and hyperthermia" *J. National Cancer Institute Monograph* **61**: 131-132 (1982).
- 3) Röttinger, E.M. and **Mendonca, M.S.** "Radioresistance secondary to low pH in human glial cells and chinese hamster ovary cells" *Int. J. Radiation Oncology Biology Physics* **8**: 1309-1314 (1982).
- 4) Rodriguez, A., Alpen, E.L., **Mendonca, M.** and DeGuzman, R.J. "Recovery from potentially lethal damage and recruitment time of noncycling clonogenic cells in 9L confluent monolayers and spheroids" *Radiation Research* **114**: 515-527 (1988).
- 5) **Mendonca, M.S.**, Rodriguez, A., and Alpen, E.L. "Quiescence in 9L44 cells correlation with radiosensitivity and PLD repair" *Radiation Research* **117**: 433-447 (1989).
- 6) **Mendonca, M.S.**, Kurohara, W., Antoniono, R. and Redpath, J.L. "Plating efficiency as a function of time post-irradiation: Evidence for the delayed expression of lethal mutations" *Radiation Research* **119**: 389-393 (1989).
- 7) **Mendonca, M.S.** and Redpath, J.L. "Isolation of human cell hybrids (HeLa x skin fibroblasts) expressing a radiation-induced tumor-associated antigen" *British J. Cancer* **60**: 324-326 (1989).
- 8) Redpath, J.L., Sun, C., **Mendonca, M.**, Colman, M. and Stanbridge, E.J. "The application of a human hybrid cell system to studies of radiation-induced neoplastic cell transformation: Quantitative, cellular and molecular aspects" In: Proceedings of *Workshop on Cell Transformation Systems Relevant to Radiation-induced Cancer in Man*, Dublin, April 1989.
- 9) **Mendonca, M.**, Rodriguez, A. and Alpen, E.L. "Differential potentially lethal damage expression & repair in quiescent and exponentially growing 9L cells" *Radiation Research* **122**: 38-43 (1990).
- 10) **Mendonca, M.S.**, Sun, C., and Redpath, J.L. "Suppression of radiation-induced transformation of human cell hybrids by long term incubation at low extracellular pH" *Cancer Research* **50**: 2123-2127 (1990).
- 11) **Mendonca, M.S.**, Boukamp, P., Stanbridge, E.J. and Redpath, J.L. "The radiosensitivity of human keratinocytes: influence of activated c-H-ras oncogene expression and tumorigenicity" *Int. J. Radiation Biology* **59**: 1195-1206 (1991).
- 12) **Mendonca, M.S.**, Antoniono, R.J., Latham, K.L., Stanbridge, E.J. and Redpath, J.L. "Characterization of intestinal alkaline phosphatase expression and the tumorigenic potential of  $\gamma$  irradiated HeLa x fibroblast cell hybrids" *Cancer Research* **51**: 4455-4562 (1991).
- 13) **Mendonca, M.S.**, Antoniono, R.J., Sun, C., and Redpath, J.L. "A simplified and rapid staining method for the HeLa x skin fibroblast human hybrid cell neoplastic transformation assay" *Radiation Research* **131**: 345-350 (1992).

- 14)** Redpath, J. L., **Mendonca, M.**, Sun, C., Antoniono, R., Colman, M., Latham, K. M. and Stanbridge, E.J. "Tumor suppressor gene inactivation and radiation-induced neoplastic transformation *in vitro*: Model studies using human hybrid cells" In *Radiation Research: A twentieth-century perspective, Proceedings of the 9th International Congress of Radiation Research* (W. C. Dewey, M. Edington, R.J. M. Fry, E.J. Hall and G. Whitmore, Eds.), pp. 342-347, Academic Press, San Diego, 1992.
- 15) Mendonca, M.S.**, Antoniono, R.J. and Redpath, J.L. "Delayed heritable damage and epigenetics in radiation-induced neoplastic transformation of human hybrid cells" *Radiation Research* **134**: 209-216 (1993).
- 16)** Redpath, J.L., Antoniono, R.J., Mendonca, M.S. and Sun, C. "The effect of post-irradiation holding at 22° C on the repair of sublethal, potentially lethal and potentially transforming damage in gamma-irradiated HeLa x skin fibroblast human hybrid cells" *Radiation Research* **137**: 323-329 (1994).
- #17) Mendonca, M.S.**, Fasching, C.L., Srivatsan, E.S., Stanbridge, E.J. and Redpath, J.L. "Loss of a putative chromosome 11 tumor suppressor locus after gamma ray-induced neoplastic transformation of HeLa x fibroblast human cell hybrids" *Radiation Research* **143**: 34-44 (1995).
- †18)** Hemmerlein, J.B., Trerotola, S.O., Kraus, M.A., **Mendonca, M.S.** and Desmond, L.A. "Local *in vitro* cytotoxicity of silver-impregnated subcutaneous collagen cuff designed to decrease infection in tunneled catheters" *Radiology* **204**: 363-367 (1997).
- #19) Mendonca, M.S.**, Howard, K.L., Fasching, C.L., Farrington, D.L., Desmond, L.A. Stanbridge, E.J. and Redpath, J.L. "Loss of suppressor loci on both chromosomes 11 and 14 may be required for radiation-induced neoplastic transformation of HeLa x fibroblast human cell hybrids" *Radiation Research* **149**: 246-255 (1998a).
- #20)** Boothman, D.A., Odegaard, E., Yang, C-R, Hosley, K and **Mendonca, M.S.** "Molecular analyses of adaptive survival responses (Asrs): Role of Asrs in radiotherapy" *Human & Experimental Toxicology* **17**: 448-453 (1998).
- #21) Mendonca, M.S.**, Temples, T.M., Farrington, D.L. and Bloch, C. "Evidence for a role of delayed death and genomic instability in radiation-induced neoplastic transformation of human hybrid cells" *International J. Radiation Biology* **74**: 755-764 (1998b).
- #22) Mendonca, M.S.**, Howard, K.L., Farrington, D.L., Desmond, L.A., Temples, T., Mayhugh, B.M., Pink, J.J. and Boothman, D.A. "Delayed apoptotic responses associated with radiation-induced neoplastic transformation of human hybrid cells" *Cancer Research* **59**: 3972-3979 (1999).
- #23) Mendonca, M.S.**, Desmond, L., Howard, K. and Weissman Derrow, C. "Previous loss of chromosome 11 containing a suppressor locus increases radiosensitivity, neoplastic transformation frequency, and delayed death in HeLa X Fibroblast human hybrid cells" *Mutagenesis* **14**: 483-490 (1999).
- 24) Mendonca, M.S.** "Role of p53 and Delayed Apoptosis in Radiation-induced Neoplastic Transformation of Human Hybrid Cells" In: *Radiation Research, Volume 2: Proceedings, Eleventh International Congress of Radiation Research*, Dublin, Ireland, July 18-23, 1999. (M. Moriarty, C. Mothersill, C. Seymour, M. Edington, J.F. Ward, R.J.M. Fry, Editors), pp. 496-499, Allen Press, Inc. Lawrence, Kansas (2000).

- #25) Mendonca, M.S.**, Desmond, L., Temples, T., Farrington, D.L. and Mayhugh, B.M. "Loss of chromosome 14 increases the radiosensitivity of CGL1 human hybrid cells but lowers their susceptibility to radiation-induced neoplastic transformation" *Mutagenesis* **15**: 187-193 (2000).
- 26) Nakshatri, H., Mendonca, M.S.**, Bhat-Nakshatri, P., Goulet Jr., R.J. and Cornetta, K., "The orphan receptor COUP-TFII regulates G2/M progression of breast cancer cells by modulating the expression/activity of p21(WAF1/CIP1), cyclin D1, and cdk2" *Biochem. Biophys. Res. Commun.* **270**: 1144-1153 (2000).
- †#27) Lewis, D., Mayhugh, B.M., Qin, Y., Trott, K. and Mendonca, M.S.**, and "Production of delayed death and neoplastic transformation in CGL1 cells by radiation-induced bystander effects" *Radiation Research* **156**: 251-258 (2001).
- 28) Mendonca, M.S.** "Regulation of transcription by tumor suppressor alleles: a potential role in radiation-induced neoplastic transformation of human hybrid cells" *Recent Research Developments in Cancer* **3**: 295-307 (2001).
- †#29) Liang, L., Shao, C., Deng, L., Mendonca, M.S.**, Stambrook, P.J. and Tischfield, J.A. "Radiation-induced genetic instability in vivo depends on p53 status" *Mutation Research* **502**: 69-80 (2002).
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- 31) Timmerman, R.D. and Mendonca, M.** In regard to Donaldson et al.: Results from the IRS-IV randomized trial of hyperfractionated radiotherapy in children with rhabdomyosarcoma- A report from the IRSG IJROBP 2001; 51: 718-728. *Int J Radiat Oncol Biol Phys.* **54**:(5)1579-80 (2002).
- 32) +DesRosiers, C., +Mendonca, M. S., Tyree, C., Moskvin, V., Bank, M., Massaro, L., Bigsby, R., Caperell-Grant, A., Valluri, S., Dynlacht, J. R. and Timmerman, R.** "Use of the Leksell Gamma Knife for localized small field lens irradiation in rodents" *Technology in Cancer Research and Treatment* **2**: 449-454 (2003). (+Co-first authors)
- #33) Mendonca, M.S.**, Farrington, DL, Mayhugh, BM, Qin, Y., Temples, T., Comerford, K. Rita Chakrabarti, R., Zainabadi, K., Redpath, J.L., Stanbridge, E.J. and Srivatsan, E.S. "Homozygous deletions within the 11q13 cervical cancer tumor suppressor locus in radiation-induced neoplastically transformed human hybrid cells" *Genes, Chromosomes & Cancer* **39**: 277-287 (2004).
- †#34) Mendonca, M.S.**, Mayhugh, B.M., McDowell, B., Helen Chin-Sinex, H., Smith, M.L., Dynlacht, J.R., Spandau, D.F. and Lewis, D.A., "A radiation-induced acute apoptosis involving TP53 And BAX precedes the delayed apoptosis and neoplastic transformation of CGL1 human hybrid cells" *Radiation Research* **163**: 614-622 (2005). (Featured article for June - BioOne Website).
- †#35) Tanaka, H., Mendonca, M.S.**, Bradshaw, P.S., Hoelz, D. J., Malkas, L.H., Meyn, M.S. and Gilley, D. "DNA damage –induced phosphorylation of the human telomere associated protein TRF2" *PNAS* **102**: 15539-15544 (2005).
- 36) Dynlacht, J.R., Craig Tyree, C., Valluri, S., DesRosiers, C., Caperell-Grant, A., Mendonca, M.S., Timmerman, R. and Bigsby, R.M.** "Effect of Estrogen on Radiation-induced Cataractogenesis" *Radiation Research* **165**: 9-15 (2006).

- 37)** Henderson, M.A., Haider Shirazi, H., Lo, S.S., **Mendonca, M.S.**, Fakiris, A.J., Witt, T.C., Worth, R.M. and Timmerman, R.D. "Stereotactic Radiosurgery and Fractionated Stereotactic Radiotherapy in the Treatment of Uveal Melanoma: A Review of Published Studies" *Technology in Cancer Research and Treatment* **4**: 411-420 (2006).
- †38)** Gomez-Millan, J., Goldblatt, E.M., Gryaznov, S.M., **Mendonca, M.S.**, and Herbert, B-S "Specific Telomere Dysfunction Induced by GRN163L Increases Radiation Sensitivity in Breast Cancer Cells" *Int. J. Rad. Onc., Biol., & Physics* **67**: 897-905 (2007).
- †39)** Xu, Y. Jagtap, M.R., Garland, T., Ying, J., McGarry, R.C., **Mendonca, M.S.** and McLennan, G., "Iododeoxyuridine uptake in proliferating smooth muscle cells in vitro" *Journal of Vascular and Interventional Radiology* **18**: 73-78 (2007).
- †40)** Liang, L., **Mendonca, M.S.**, Deng, L., Nguyen, S.C., Shao, C., and Tischfield, J.A. "Reduced apoptosis and increased deletion mutations *in vivo* in mice exposed to repeated ionizing radiation" *Cancer Research* **67**: 1910-1917 (2007).
- †41)** Liang, L., Deng, L., **Mendonca, M.S.**, Chen, Y., Zheng, B., Stambrook, P.J., Shao, C. and Tischfield, J.A. "X-rays induce distinct patterns of somatic mutation in fetal versus adult hematopoietic cells" *DNA Repair* **6**: 1380-1385 (2007).
- †42)** Brutkiewicz, S., **Mendonca, M.**, Stantz, K., Comerford, K., Bigsby, R., Hutchins, G., Goebel, M. and Harrington, M. "The expression of luciferase within tumor cells can alter tumor growth upon *in vivo* bioluminescence imaging" *Luminescence* **22**: 221-228 (2007).
- 43)** Bartkowiak, D., Hipp, P.R., **Mendonca, M.S.**, and Röttinger, E.M. "A radioprotective effect of imatinib (Gleevec®) in human squamous carcinoma cells" *Strahlentherapie und Onkologie* **183**; 432-439 (2007).
- †44)** Tinnel, B. **Mendonca, M.S.**, Henderson, M., Cummings, O., Chin-Sinex, H., Timmerman, R. and McGarry, R.C. "Pulmonary Hilar Stereotactic Radiation Therapy in a Rat" *Technology in Cancer Research and Treatment* **6**: 425-431 (2007).
- †#45)** **Mendonca, M.S.**, Chin-Sinex, H, Gomez-Millan, J., Datzman, N., Hardacre, M. Comerford, K., Nakshatri, H., Nye, M., Benjamin, L., Mehta, S., Patino, F. and Sweeney, C. "Parthenolide sensitizes cells to X-ray-induced cell killing through inhibition of split dose repair" *Radiation Research* **168**: 689-697 (2007).
- 46)** Fishel, M.L., He, Y., Reed, A.M., Chin-Sinex, H., Hutchins, G.D., **Mendonca, M.S.** and Kelley, M.R. "Knockdown of the DNA repair and redox signaling protein Ape1/Ref-1 blocks ovarian cancer cell and tumor growth" *DNA Repair* **7**: 177-186 (2008).
- 47)** Veena, M.S., Lee, G., Keppler, D., **Mendonca, M.S.**, Redpath, J.L., Stanbridge, E.J., Wilczynski, S.P. and Srivatsan, E.S. "Inactivation of the Cystatin E/M tumor suppressor gene in cervical cancer" *Genes, Chromosomes, and Cancer* **47**: 740-754 (2008).
- 48)** Dynlacht, J.R., Valluri, S., Lopez, J., Greer, F., DesRosiers, C., Caperell-Grant, A., **Mendonca, M.S.** and Bigsby, R.M. "Estrogen Protects Against Radiation-induced Cataractogenesis" *Radiation Research* **170**: 758-764 (2008).
- †49)** Brown, D., Chin-Sinex, H., Nie, B., **Mendonca, M. S.** and Wang, M. "Targeting Superoxide Dismutase 1 to Overcome Cisplatin Resistance in Human Ovarian Cancer" *Cancer Chemotherapy and Pharmacology* **63**: 723-730 (2009) (Epub July 12<sup>th</sup>, 2008).
- †#50)** Watson, C., Miller, D.A., Chin-Sinex, H., Losch, A., Hughes, W., Sweeney, C. and **Mendonca, M.S.** "Suppression of NF- $\kappa$ B Activity by Parthenolide Induces X-ray Sensitivity

through Inhibition of Split-dose Repair in TP53 Null Prostate Cancer Cells" *Radiation Research* **171**: 389-396 (2009).

**51)** Bigsby, R.M., Valluri, S., Lopez, J.T., **Mendonca, M.S.**, Caperell-Grant, A., Henderson, M.A., DesRosiers, C., and Dynlacht, J.R. "Ovarian hormone modulation of radiation-induced cataractogenesis: dose response studies" *Invest Ophthalmol Vis Sci* **50**: 3304- 3310 (2009) E-pub Feb 28<sup>th</sup>, 2009.

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## Books

“**Basic Radiotherapy Physics and Biology**” David S. Chang, Foster D. Lasley, Indra J. Das, **Marc S. Mendonca**, and Joseph R. Dynlacht, 2014, Springer, ISBN-13: 978-3319068404 ISBN-10: 3319068407.

“**Basic Radiotherapy Physics and Biology**” David S. Chang, Foster D. Lasley, Indra J. Das, **Marc S. Mendonca**, and Joseph R. Dynlacht, **2<sup>nd</sup> Edition**, 2020, Springer, ISBN-13: 978-3319068404 ISBN-10: 3319068407.

“**Fundamentals of Radiation Biology**” Susan B. Klein and **Marc S. Mendonca**. World Scientific Press, Textbook, 400 pages, **2023**, ISBN-13: 978-9811258916, ISBN-10: 9811258910.

## Book Chapter(s)

1) Gutman, G.D., Goodwin, E.H., **Mendonca, M.S.**, Swain, J. "Imaging living CHO-SC1 cells by soft X-ray contact microscopy" In X-ray Microscopy III, Springer-Verlag, Heidelberg, 1991.

2) *Report of the Gynecologic Cancers Progress Review Group*, National Cancer Institute, Radiobiology, Olive, P., Randall, M.E., **Mendonca, M.S. et al.**, pgs. 45-53, November 2001. NIH Publication No. 02-5112, February 2002.

## Other Publications

1) Rodriguez, A., Alpen, E.L., DeGuzman, R.J., Kavanau, K.S. and **Mendonca, M.S.** "Post spheroid cell kinetic behavior and radiation response". *Biology & Medicine Division Annual Report 1983-1984*, Lawrence Berkeley Laboratory, April 1985. (**report**)

2) Boothman, D.A., Odegaard, E., Yang, C-R, Hosley, K and **Mendonca, M.S.** Molecular analyses of adaptive survival responses (Asrs): Role of Asrs in radiotherapy. BELLE Newsletter **7**, 17-22 (1998). (**newsletter**).

## Television, Radio, Newspaper, Podcasts, Website Production, Video

1) **Television Interview** with Angela Cain host of "Community Calendar" on Indianapolis TV station Channel 13 to talk about "IUSM Mini-medical School 2010" (eight minutes) February, 4<sup>th</sup> 2010.

2) **NPR "Sound Medicine" Radio** Interview with Dr. Kathy Miller, IUSM, about low dose radiation effects from medical procedures. Host Barbara Lewis, Interview July 27<sup>th</sup>, 2010, 1<sup>st</sup> Broadcast September 10<sup>th</sup>, 2010.

3) **Podcast:** Radiation Research Society Scholars in Training. Topic "Becoming the Editor-in – Chief of the journal *Radiation Research*." Radiation Research Society website.

4) **Podcast:** Radiation Research Society "Scholars in Training" about my recent publication in *Radiation Research* on the radiation response of human endothelial progenitor cells.

5) Newspaper Interview with Ms. Barbara Berggoetz, Health & Fitness Reporter, Indianapolis Star, Article "Radiation: How much is too much?" concerning the potential dangers of widespread use of CT scans in Medicine. Interview, Sept 20<sup>th</sup> 2011, published Oct 2<sup>nd</sup> 2011.

6) **Project Lead** with professional website designer Kyle Jennings to develop a new prototype \*website for the Radiation Research Society called "radiationresearchsociety.org" which has since been retired and replaced by our new website [www.radres.org](http://www.radres.org) that the RRS website committee and I developed with Liz Kidwell at our society managing agency AMBD.

7) **Project Lead** with professional filmmaker John Earley (Earley Enterprises, LLC) of Billings, MT to develop a series of HD video projects for the Radiation Research Society. Wrote questions and helped with interviews when we filmed the first segments at the Radiation Research Society Executive Retreat in Big Sky, MT June 30<sup>th</sup> to July 1<sup>st</sup>, 2013. The video "What is Radiation?" can be viewed at [www.radres.org](http://www.radres.org) under the Education tab/Media subtab.

8) Worked with professional filmmakers at Thunder Bay Pictures on documentary "The Evolution of Stem Cell Research". Supplied HD pictures of *Radiation Research* covers and articles of the groundbreaking work on stem cells by J.E. Till and E.A. McCulloch published in *Radiation Research* in 1960 and 1961 for inclusion in documentary.

## Television, Radio, Newspaper, Podcasts, Website Production, Video (continued)

**9) Project Lead** with professional filmmaker John Earley (Earley Enterprises, LLC) of Billings, MT to develop additional HD video projects for the Radiation Research Society. Wrote questions and helped with interviews of members of the Rad Res Society at the 2014 Radiation Research Society Annual Meeting in New Orleans, September. The videos “No Threshold for Fear” and “Radiation Research Recruitment Video” can be viewed at [www.radres.org](http://www.radres.org) under the press and public tab. The video “RRS2014 Annual Meeting Teaser” can be viewed at [www.radres.org](http://www.radres.org) under the Education tab and Media subtab.

**10) Project Lead** with professional filmmaker John Earley (Earley Enterprises, LLC) of Billings, MT to develop additional HD video projects for the Radiation Research Society. Developed questions and helped with interviews of members of the Rad Res Society at the 2015 Radiation Research Society Annual Meeting in Weston, FL. The videos “Your Brain on Mars”, “Of Telomeres and Twins”, and “Fallout Man, with Tony Brooks” can be viewed at [www.radres.org](http://www.radres.org) under the Education tab and Media subtab. **In 2017, “Fall Out Man” won two national “Silver Telly Awards” in the categories “Science and Technology” and “Public Interest/Awareness”.**

**11) Project Lead** with professional filmmaker John Earley (Earley Enterprises, LLC) of Billings, MT to develop additional HD video projects for the Radiation Research Society. Developed questions and helped with interviews of members of the Rad Res Society at the 2016 Radiation Research Society Annual Meeting in Kona, Hawaii. The videos “Lending a Hand” with Norman Coleman and “Curiosity, Radiation, and the Mars Mission” with Cary Zeitlin (**Bronze TELLY Award Winner 2018**) can be viewed at [www.radres.org](http://www.radres.org) under the Education & Media subtabs.

**12) Project Lead** with professional filmmaker John Earley (Earley Enterprises, LLC) of Billings, MT to develop additional HD video projects for the Radiation Research Society. Developed questions and helped with interviews of members of the Rad Res Society at the 2017 Radiation Research Society Annual Meeting in Cancun, Mexico. The video “A Voice for Cancer Research and Treatment” with Dr. Quyn-Thu Leh, Stanford University can be viewed at [www.radres.org](http://www.radres.org) under the Education tab and Press and Public subtab. The video “Captain Cassidy: A Talk Among the Stars” with NASA astronaut Capt. Christopher Cassidy can be viewed at [www.radres.org](http://www.radres.org) under the Education and Media subtabs.

**13) Project Lead** with professional filmmaker John Earley (Earley Enterprises, LLC) of Billings, MT to develop additional HD video projects for the Radiation Research Society. Developed concepts and helped with interviews at the 2018 Radiation Research Society Strategic Planning Meeting in Billings, MT. The video “Radiation Research Society - A Continuing Legacy”. Can be viewed at [www.radres.org](http://www.radres.org) under the Education and Media subtabs.

**13) Project Lead** with professional filmmaker John Earley (Earley Enterprises, LLC) of Billings, MT to develop additional HD video projects for the Radiation Research Society. Developed concepts and helped with interviews at the 2018 Radiation Research Society meeting for an update of the video “Radiation Research Society - A Continuing Legacy” that was shown at the RRS 2019 meeting. Can be viewed at [www.radres.org](http://www.radres.org) under the Education & Media subtabs.

**14) Project Lead** with professional filmmaker John Earley (Earley Enterprises, LLC) of Billings, MT to develop HD video project “Dr. Jack Little Memorial Video” for the Radiation Research Society 2019 - 2020. **In 2021, “Dr. Jack Little: Memorial” Video won two national “Bronze and Silver Telly Awards” in the categories “Science and Technology” and “Public Interest/Awareness”.** See [www.radres.org](http://www.radres.org) under the Education tab Media subtab.

## Television, Radio, Newspaper, Podcasts, Website Production, Video (continued)

**15) ASTRO ROCKS Webinar:** The NCI Mentored Clinical Scientist Research Development Award (K08), **Session Co-Moderator.** This session was originally recorded as an ASTRO "ROCKS" Web Session on February 17, 2021. It is available for review on the ASTRO Academy Website.

**16) ASTRO ROCKS Webinar:** The NCI Small Business Innovation Research/Technology Transfer (SBIR/STTR) Programs. **Session Co-Moderator.** This session was originally recorded as an ASTRO "ROCKS" Web Session on April 16, 2021. It is available for review on the ASTRO Academy Website.

**17) ASTRO ROCKS Webinar:** The NCI Research Program Projects (P01) Mechanism, **Session Moderator.** This session was originally recorded as an ASTRO "ROCKS" Web Session on July 20, 2021. It is available for review on the ASTRO Academy Website.

**18) Project Lead** with professional filmmaker John Earley (Earley Enterprises, LLC) of Billings, MT, HD video project "SL-1 Inside a destroyed Nuclear Reactor" for the Radiation Research Society 2019 - 2022. **In 2022, this piece won two national "Silver Telly Awards" in the categories "Online Documentary" and "Online History".** It be viewed at [www.radres.org](http://www.radres.org) under the Education & Media subtabs and on the RRS YouTube channel.

**\*PUBLISHED ABSTRACTS \*2004-present, † = Mentored Abstracts**

**\*55) Mendonca, M.S.**, Miller, D., Comerford, K., Chin-Sinex, H., and Sweeney, C., “Parthenolide inhibits cell growth and increases the radiation sensitivity of prostate cancer cells. Poster presentation at the 51<sup>st</sup> annual meeting of the Radiation Research Society, Saint Louis, MO, April 24<sup>th</sup> – 27<sup>th</sup>, 2004.

**\*†56)** Tinnel, B., McGarry, R.C., **Mendonca, M.** Timmerman, R. and Sheshiki, F. “Stereotactic Body Radiotherapy of the lung: an animal model of Toxicity”, 3<sup>rd</sup> annual Conference on: Stereotactic Body Radiation Therapy, Indianapolis, IN, May 21<sup>st</sup> – 23<sup>rd</sup>, 2004.

**\*†57)** Nye, M., Hardacre, M., Datzman, N., Comerford, K. Chin-Sinex, H., Patino, F., Sweeney, C. and **Mendonca, M.S.** “Mechanisms of Parthenolide induced Radiation Sensitivity in Human CGL1 Cells”, Committee on Institutional Cooperation (CIC) Conference, University of Iowa, Iowa City, IA, July 9-11<sup>th</sup>, 2004.

**\*†58)** Nye, M., Hardacre, M., Datzman, N., Comerford, K., Chin-Sinex, H., Patino, F., Sweeney, C., and **Mendonca, M.S.** “Mechanisms of Parthenolide induced Radiation Sensitivity in Human CGL1 Cells”, Ronald E. McNair Scholars Indiana Regional Research Conference, Indiana State University, Terre Haute, IN, August 5-6<sup>th</sup>, 2004.

**\*59) Mendonca M.S.**, Chin-Sinex H., Mayhugh B., Comerford K.: Altered AP-1 in Radiation-induced Neoplastic Transformation of CGL1 Cells: FRA1 as a candidate tumor suppressor gene. Poster presentation at the IUSM Scientific Session, Indianapolis, IN, September 30<sup>th</sup>, 2004.

**\*†60)** Brutkiewicz S., **Mendonca M.**, Stantz K., Goebel M., Harrington M.: An *In Vivo* Bioluminescent Model of Ovarian Cancer. Poster presentation at the IUSM Scientific Session, Indianapolis, IN, September 30<sup>th</sup>, 2004.

**\*†61)** Gilley, D, Tanaka H., **Mendonca, M.S.**, “DNA damage induces phosphorylation of TRF2”, Poster presentation at the AACR Special Conference in Cancer Research - The Role of Telomeres and Telomerase in Cancer, San Francisco, CA, November 3<sup>rd</sup> - 7<sup>th</sup>, 2004.

**\*†62)** Nye, M., Benjamin, L., Comerford, K., Chin-Sinex, H., Sweeney, C. and **Mendonca, M.S.** “Mechanisms of Parthenolide induced Radiation Sensitivity in Human CGL1 cells”, Center for Research and Learning (CRL) Board of Directors Meeting, (IUPUI), Indianapolis, IN, January 14<sup>th</sup>, 2005. **(One of only two Ronald McNair research students selected to give presentation).**

**\*63) Mendonca M.S.**, Chin-Sinex H., Mayhugh B., Comerford K.: Altered AP-1 in Radiation-induced Neoplastic Transformation of CGL1 Cells: FRA1 as a candidate tumor suppressor gene. Poster presentation at the AACR Special Conference in Cancer Research – Regulation of Cell Death in Oncogenesis, Waikoloa, HI, January 26<sup>th</sup> - 30<sup>th</sup>, 2005.

**\*†64)** Nye, M., Benjamin, L., Comerford, K., Mehta, S., Chin-Sinex, H., Sweeney, C., and **Mendonca, M.S.**, “Mechanisms of Parthenolide induced Radiation Sensitivity in Human CGL1 cells”, National Institutes of Health (NIH) Minority Training and Research Forum, Bethesda, MD, March 15-19<sup>th</sup>, 2005.

**\*†65)** Nye, M., Benjamin, Comerford, K., Mehta, S., Chin-Sinex, H., Sweeney, C., and **Mendonca, M.S.** “Mechanisms of Parthenolide induced Radiation Sensitivity in Human CGL1 cells”, National Ronald E. McNair Scholars Conference, Binghamton University, Binghamton, NY, April 14-17<sup>th</sup>, 2005.

## **PUBLISHED ABSTRACTS (\*2004-present, †mentored abstracts, continued)**

**\*67) Mendonca, M.S.**, Chin-Sinex, H., Mead, L., Yoder, M.C., and Ingram, D.A., Endothelial stem/progenitor cells are X-ray sensitive with limited repair capacity, Poster, Proceedings of the 52<sup>nd</sup> annual meeting of the Radiation Research Society, Denver, CO, October 15<sup>th</sup>-19<sup>th</sup>, 2005.

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\*†144) Losiewicz, S., Chin-Sinex, H., and Mendonca, M.S., "Determining if NF- $\kappa$ B Inhibition via p65 Gene Knockdown Using siRNA Coupled with DCA Treatment Increases Cytotoxicity and Radiation Sensitivity of Pancreatic Cancer Cells" Proceedings of the 2018 IU Undergraduate Research Conference, Life Health Science Initiative - Undergraduate Research Opportunity Program, April (2018).

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- \*†153)** Khan, M., Huang, C., Chin-Sinex, H., and **Mendonca, M.S.**, “Increasing Cytotoxicity and Radiation Sensitivity of Pancreatic Cancer Cells through Simultaneous Inhibition of NF-κB and Warburg Metabolism by Gene Knock down and /or Chemical Inhibition.” Proceedings of the Indiana Medical Student Program for Research (IMPRS), July 24<sup>th</sup>, 2019, Indianapolis, IN. Poster Abstract.
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- \*†155)** Pirkkanen, J., Tharmalingam, S., **Mendonca, M.S.**, Thome, C., Kennedy, K., and Boreham, D.R. “Molecular characterization of ionizing radiation induced segregants of the CGL1 (HeLa x normal fibroblast) human hybrid model cell system.” Proceedings of the 16<sup>th</sup> International Congress of Radiation Research, August 25-29<sup>th</sup>, 2019, Manchester, UK. Poster Abstract.
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**161)** Mendonca, M.S. “Overview of Ultra-High Dose Rate *In Vitro* and FLASH-RT *In Vivo* Radiation Biology.” Invited SAM Therapy Scientific Symposium. Track: SU-AB-TRACK3 Proceedings of the joint AAPM COMP meeting (virtual) July 12<sup>th</sup> - 16, 2020.

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**\*†168)** \*Gettelfinger, A. Boone, J., Cesiuinaite, M., Vandevord, M., Maria Khan, M. Streveler, J., Erdwins, R., Chin-Sinex, H., and Mendonca, M.S. "Role of Inhibition of DNA Double-Strand Break Repair and Autophagy in Pancreatic Cancer Cytotoxicity and Radiation-Induced Cell Killing." Cancer In the Under-Privileged Indigent or Disadvantaged (\*CUPID Fellow) Annual Oral Presentations (Virtual). July 23<sup>rd</sup>, 2021.

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**\*†172)** Pogue, K.G., Chin-Sinex, H.J., Clark, L., Mayo L.D., Mendonca, M.S., "The role of MDMX in radiation-induced cell killing." Cancer In the Under-Privileged Indigent or Disadvantaged (\*CUPID Fellow) Annual Oral Presentations (Virtual). August 5<sup>th</sup>, 2022.

**\*†173)** Huang, C.C., Boone, J., Cesiuinaite, M., Vandevord, M., Maria Khan, M. Streveler, J., Erdwins, R., Chin-Sinex, H., and Mendonca, M.S. "Radiation-induced pancreatic cancer cell killing by simultaneous inhibition of Warburg metabolism." Proceedings of the SfrBM Annual Meeting. November 16 – 19<sup>th</sup> 2022, Orlando, FL. Oral Plenary, Session 5.

**\*174)** Mendonca, M.S. "History of FLASH." Proceedings of the FLASH Radiotherapy and Particle Therapy Annual Meeting. November 30 – December 2<sup>nd</sup>, 2022, Barcelona, Spain. Oral Plenary.

**\*175)** Mendonca, M.S. "Understanding Radiation-Induced Carcinogenesis: A 30+ Year Journey" Opening Plenary Lecture, RRS Fall Low Dose Workshop, Oct. 25 - 27<sup>th</sup>, 2023 Kimpton Armory Hotel Bozeman, MT.