# Uzoma K. Iheagwara, MD, PhD

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EDUCATION	
UPMC Hillman Cancer Center, Radiation Oncology Residency	Jun 2016- Present
Program Director: Sushil Beriwal, MD, MBA	,
UPMC, Transitional Year Internship	Jun 2015- Jun 2016
University of Pittsburgh School of Medicine, Pittsburgh, PA MD PhD, Immunology Thesis Advisor: Olivera J. Finn, PhD	June 2008-May 2015 Aug 2010-Nov 2013
University of Maryland, Baltimore County (UMBC), Catonsville, MD BS, Biological Sciences	Jun 2004- May 2008

Lab Mentor: Susanne Ostrand-Rosenberg, PhD

Phillips Academy Andover, Andover, MA

Sep 2000-Jun 2004

Diploma

#### **PUBLICATIONS**

- 1. **Iheagwara, UK**, Olson A, <u>Orthopaedic Knowledge Update: Musculoskeletal Tumors 4</u> Chapter 8: Radiation Therapy. In Preparation September 2020.
- 2. **Iheagwara UK**, Vargo JA, Taylor SE, Berger JL, Boisen MM, Comerci JT, Orr B, Sukumvanich P, Olawaiye AB, Kelley JL, Edwards RP, Courtney-Brooks M, Beriwal S, Regional control and dose-response for chemoradiotherapy in locally-advanced endometrial cancer. Submitted IJROBP 2019
- 3. **Iheagwara UK**, Vargo JA, Chen KS, Burton D, Taylor SE, Berger JL, Boisen MM, Comerci JT, Orr B, Sukumvanich P, Olawaiye AB, Kelley JL, Edwards RP, Courtney-Brooks M, Beriwal S, Neoadjuvant Chemoradiotherapy Followed by Extrafascial Hysterectomy in Locally Advanced Type II Endometrial Cancer Clinically Extending to Cervix. Practical radiation oncology. 2019 Feb 22.
- 4. **Iheagwara UK**, Clump DA, Heron DE. Immunoradiosurgery: The Convergence of SBRT and the Immune Response. <u>Stereotactic Radiosurgery and Stereotactic Body Radiation Therapy (SBRT)</u>. 2018 Sep 28:321.
- 5. Slater RC, **Iheagwara UK**, Chen ML. Radiographical Resolution of Renal Lymphangiomatosis Following Cardiac Transplantation: a case report. The Canadian Journal of Urology
- 6. **Iheagwara UK**, Beatty PL, Van PT, Ross TM, Minden JS, Finn OJ. 2013. Influenza virus infection elicits antibodies and T cells to host cell antigens previously identified as tumor associated antigens: a new view of cancer immunosurveillance, Cancer Immunol Res, 2(3), 263-273
- 7. **Iheagwara UK**, Beatty PL, Chan S, Rigatti LH, Ross TM, and Finn OJ; <u>Tumor Immunology and Immunotherapy</u>, "Chapter 19: MUC-1 as a therapeutic target in cancer: programming the immune system through childhood infections", Oxford University Press, Oxford, England, 265-280
- 8. Bosch JJ, **Iheagwara UK**, Reid S, Srivastava MK, Wolf J, Lotem M, Ksander BR, Ostrand-Rosenberg, S. (2010). Uveal melanoma cell-based vaccines express MHC II molecules that traffic via the endocytic and secretory pathways and activate CD8(+) cytotoxic, tumor-specific T cells. Cancer Immunol Immunother, 59(1), 103-112.
- Bosch JJ, Thompson JA, Srivastava MK, Iheagwara UK, Murray TG, Lotem, M, Ksander BR, Ostrand-Rosenberg, S. (2007). MHC class II-transduced tumor cells originating in the immune-privileged eye prime and boost CD4(+) T lymphocytes that cross-react with primary and metastatic uveal melanoma cells. Cancer Res, 67(9), 4499-4506.
- Carrithers MD, Chatterjee G, Carrithers LM, Offoha R, Iheagwara U, Rahner C, Graham M, Waxman SG. (2009). Regulation of podosome formation in macrophages by a splice variant of the sodium channel SCN8A. J Biol Chem, 284(12), 8114-8126.

WO	RK	<b>EXP</b>	FR'	IFN	CF

**Graduate Student Researcher** Dept. of Immunology, University of Pittsburgh

Olivera I. Finn, PhD

Mar 2011 & Mar 2012 **Teaching Assistant** 

Aug 2009- Nov 2013

Medical Microbiology, University of Pittsburgh

Bill F. Goins, PhD

**Graduate Student Researcher** Jun 2008-Aug 2008

University of Pittsburgh Depts of Otolaryngology and Immunology

Robert L. Ferris, MD, PhD

Undergraduate Student Researcher Jun 2005- Aug 2005

Yale University Dept of Immunology

Michael C. Carrithers, MD, PhD

**Undergraduate Student Researcher** Sep 2005-May 2008

University of Maryland, Baltimore County (UMBC) Dept of Biological Science Erica M. Hanson, PhD. Jacobus Bosch, MD. PhD. and Suzanne O. Rosenberg, PhD

Research Assistant Jun 2003- Aug 2003

Corixa Corporation Tong Tong Wang, PhD, Moses L. Williams, PhD

Research Assistant Jun 2002-Aug 2002

Temple University Nahum J. Duker, MD, Moses L. Williams, PhD

### ABSTRACTS

- 1. Iheagwara UK, Vargo JA, Taylor SE, Berger JL, Boisen MM, Comerci JT, Orr B, Sukumvanich P, Olawaiye AB, Kelley JL, Edwards RP, Courtney-Brooks M, Beriwal S, Regional control and dose-response for chemoradiotherapy in locally-advanced endometrial cancer. ASTRO Annual Meeting 2019 (Abstract and Oral Presentation)
- 2. Iheagwara UK, Holeva K, Bakkenist CJ, Shogan J, Engh J, Amankulor N, Clump DA. Immuno-Profile of a Phase II Clinical Trial Utilizing Preoperative Stereotactic Radiosurgery Followed by Surgery in Cancer Patient with Metastatic Lesions in the Brain. ASTRO 2018 annual meeting. (Abstract and Poster) Journal of Radiation Oncology• Biology• Physics. 2018 Nov 1;102(3):e163.
- 3. Iheagwara UK, Burton D, Vargo JA, Boisen MM, Comerci JT, Kim H, Houser CJ, Sukumvanich P, Olawaive AB, Kelley JL, Edwards RP, Is There a Role of Neoadiuvant Radiotherapy Including High Dose Rate Image-Based Brachytherapy in Locally Advanced Type II Endometrial Cancer Clinically Extending to Cervix±Parametria?. Brachytherapy. 2017 May 1;16(3):S14-5. ABS Annual Meeting 2017 (Abstract and Oral Presentation)
- 4. **Iheagwara UK**, Minden JS, Beatty PL, Ross TR, and Finn OJ Viral Infection Induces Cellular Changes and Immune Responses to Many Self-Proteins, Some of Which are Known Tumor Associated Antigens, Biomedical Graduate Student Association (BGSA) Symposium, University of Pittsburgh, PA, 2013 (Abstract+Poster)
- 5. Iheagwara UK, Minden JS, Beatty PL, Ross TR, and Finn OJ Influenza virus infection elicits antibodies and T cells to host cell antigens previously identified as tumor associated antigens: a new view of cancer

- immunosurveillance, American Association of Immunologist (AAI) Annual Meeting, Honolulu, HI, 2013 (Abstract+Poster+Oral)
- 6. **Iheagwara UK**, Beatty PL, Van PT, Ross TR, Minden JS and Finn OJ Influenza virus infection elicits antibodies and T cells to host cell antigens previously identified as tumor associated antigens: Science 2013:Convergence, University of Pittsburgh, Pittsburgh, PA, 2013 (Abstract+Poster)
- 7. **Iheagwara UK**, Minden JS, Beatty PL, Ross TR, and Finn OJ Viral Infection Induces Immune Responses to Many Self-Proteins, Some of Which are Known Tumor Associated Antigens, Biomedical Graduate Student Association (BGSA) Symposium, University of Pittsburgh, Pittsburgh, PA, 2012 (Abstract+ Poster)
- 8. **Iheagwara UK**, Minden JS, Beatty PL, Ross TR, and Finn OJ Viral Infection Induces Immune Responses to Many Self-Proteins, Some of Which are Known Tumor Associated Antigens, Science 2012:Translation, University of Pittsburgh, PA, 2012 (Abstract+Poster)
- Iheagwara UK, Minden JS, Beatty PL, Ross TR, and Finn OJ Viral Infection Induces Immune Responses to Many Self-Proteins, Some of Which are Known Tumor Associated Antigens, American Association of Immunologist (AAI) Annual Meeting, Boston, MA, 2012 (Abstract+Poster+Oral)
- Iheagwara UK, Chan B, Beatty PL, Ross TR, and Finn OJ Exposure to Abnormal Self Antigens during Non-Malignant Events Provide Immunological Defense against Tumors, American Association of Immunologist (AAI) Annual Meeting, San Francisco, CA, 2011 (Abstract+Poster)
- 11. **Iheagwara UK**, Chan B, Beatty PL, Ross TR, and Finn OJ Exposure to Abnormal Self Antigens during Non-Malignant Events Provide Immunological Defense against Tumors, Biomedical Graduate Student Association Symposium, University of Pittsburgh, Pittsburgh, PA, 2011 (Abstract+Poster)
- 12. **Iheagwara UK**, Chan B, Beatty PL, Ross TR, and Finn OJ Exposure to Abnormal Self Antigens during Non-Malignant Events Provide Immunological Defense against Tumors, Science 2011-Next Gen, University of Pittsburgh, Pittsburgh, PA, 2011 (Abstract+Poster)
- 13. **Iheagwara UK**, Chan B, Beatty PL, Ross TR, and Finn OJ, Exposure to Aberrant Self Antigens during Non-Malignant Events Elicits Immunological Defense against Tumor Progression, University of Pittsburgh Cancer Institute (UPCI) Annual Retreat, University of Pittsburgh, Pittsburgh, PA, 2011 (Abstract+Poster)
- 14. **Iheagwara UK**, Chan B, Beatty PL, Ross TR, and Finn OJ, Exposure to Aberrant Self Antigens during Non-Malignant Events Elicits Immunological Defense against Tumor Progression, Immunology of Vaccines Symposium, University of Pittsburgh, Pittsburgh, PA, 2011 (Abstract+Poster)
- 15. Iheagwara UK, Chan B, Beatty PL, Ross TR, and Finn OJ Exposure to Abnormal Self Antigens during Non-Malignant Events Provide Immunological Defense against Tumors, University of Pittsburgh Cancer Institute (UPCI) Annual Retreat, University of Pittsburgh, Pittsburgh, PA, 2010 (Abstract+Poster)
- 16. **Iheagwara UK**, Chan B, Beatty PL, Ross TR, and Finn OJ Exposure to Abnormal Self Antigens during Non-Malignant Events Provide Immunological Defense against Tumors, Biomedical Graduate Student Association (BGSA) Symposium, University of Pittsburgh, Pittsburgh, PA, 2010 (Abstract+Poster)
- 17. Bosch JJ, **Iheagwara UK**, Srivastava MK, Murray TG, Lotem M, Ksander BR, and Ostrand-Rosenberg S, Uveal Melanoma Cell-Based Vaccines Activate Tumor-Cytolytic T Lymphocytes, American Association of Cancer Research (AACR) meeting, San Diego, CA, 2008 (Abstract+Poster)
- 18. **Iheagwara UK**, Bosch JJ, Ksander BR, and Ostrand-Rosenberg S, MHC II Molecules of Invariant Chain Deficient Tumor Cells Traffic Via the Secretory Pathway, American Association of Cancer Research (AACR) meeting, San Diego, CA, 2008 (Abstract+Poster)
- 19. Bosch JJ, **Iheagwara UK**, Srivastava MK, Murray TG, Lotem M, Ksander BR, and Ostrand-Rosenberg S, Uveal Melanoma Cell-Based Vaccines Activate Tumor-Cytolytic T Lymphocytes, Association for Research in Vision and Ophthalmology (ARVO) meeting, Fort Lauderdale, FL, 2008 (Abstract)
- 20. Bosch JJ, **Iheagwara UK**, Srivastava MK, Murray TG, Lotem M, Ksander BR, and Ostrand-Rosenberg S, MHC class II-transduced tumor cells originating in the immune-privileged eye prime and boost CD4(+) T lymphocytes that cross-react with primary and metastatic uveal melanoma cells, American Association of Cancer Research (AACR) meeting, Los Angeles, CA, 2007 (Abstract+Poster)

PRESENTATIONS &	& POSTERS
2019	American Society of Radiologic Technologist (ARST) Lunch Talk 2019
	Immunology 101: Exploring the Role of Immunotherapy in Cancer Care
2018	American Society for Radiation Oncology (ASTRO) Annual Meeting, San Antonia, TX
2018	11th Annual Symposium on Technical and Clinical Advances in Radiation Oncology:
	Recent Technological Advances in Treatment Planning and Treatment: Recent
	Advances in CT and PET CT Imaging for Treatment Planning
2017	Pentecostal Temple Men's Health Conference
2017	Reducing Racial Disparities in Cancer Outcomes Gateway Medical Society Allegheny
	County Medical Society Prostate Cancer & African American Men: Are We Making
	Progress?
2017	American Brachytherapy Society (ABS) Annual Meeting (Oral), Boston, MA
2013	American Association of Immunologists 100th annual Meeting Honolulu, HI 2012 (Oral +
	Poster)
2012	American Association of Immunologists 99 <sup>th</sup> annual Meeting Boston, MA 2012 (Oral + Poster)
2012	UNCF/Merck Fellows Day Blue Bell, PA (Poster)
2011	American Association of Immunologists 98th annual Meeting San Francisco, CA (Poster)
2009	American Medical Student Association Regional Conference Philadelphia, PA(Attended)
2008	Meyerhoff Scholarship Program Twentieth Anniversary Research Symposium (Poster)
2008	American Association for Cancer Research (AACR) San Diego, CA (Poster)
2007	American Association for Cancer Research (AACR) Los Angeles, CA (Poster)
AWARDS	
2015	Student National Medical Association (SNMA) Senior Award
2013	AAI Travel Award, American Association of Immunologist (AAI) Annual Meeting
2013	FASEB-MARC Travel Award, American Association of Immunologist (AAI) Annual
2010	Meeting
2013	Graduate and Professional Student Government (GPSG) Travel Award
2012	AAI Travel Award, American Association of Immunologist (AAI) Annual Meeting
2012-2014	UNCF/MERCK Graduate Science Research Dissertation Fellowship
2011	FASEB-MARC Travel Award, American Association of Immunologist (AAI) Annual
	Meeting
2011	Best Poster in Immunology, Biomedical Graduate Student Association (BGSA)
	Symposium
2008	Outstanding Graduating Senior in Biological Sciences, UMBC
2008	Magna Cum Laude, College of the Mathematical and Natural Sciences, UMBC
2007, 2008	MARC Distinguished Scholar Award
2007, 2008	MARC Outstanding Commitment to Research
2007	Faculty Award for Excellence in Biological Sciences, UMBC
2007-08	UMBC Undergraduate Research Award (URA)
2007-08	American Association for Cancer Research (AACR) Thomas J. Bardos Awardee
2006	ABRCMS best oral presentation (Immunology)
2005-06	UMBC Pre-MARC Trainee
2004-08	UMBC Meyerhoff Scholar
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ACTIVITIES & SERV	
2019-2020	Co-Chief Resident, UPMC Radiation Oncology
2019	ASTRO Advocacy Day, Washington, DC
2015-2016	House Staff Council, UPMC Transitional Year Representative
2015-2016	Programming and Education Committee (PEC), UPMC Transitional Year Representative
2014	University of Pittsburgh School of Medicine White coat ceremony, White coater
2013	Medical Explorers High School Student Program, Medical Student Volunteer

2013-2014	Murmurs Literature and Art Magazine, Contributor
2012	PittMed 2012 Hippocratean senior yearbook contributor
2012	PittMed Scope & Scalpel 2012, Actor
2012	Annual Biomedical Research Conference for Minority Students, Student Recruiter
2012-2013	AMSA MedSibs Undergraduate Mentorship Program, Medical Student Mentor
2010-2013	16th -18th Annual Hoops For A Cure "Ask a scientist" Panel (Nathan S. Arenson Fund)
2009	The Birmingham Free Clinic, South Side, Co-student coordinator
2009	Faculty and Student Together (FAST), student mentor
TRAINING	
Feb 2019	UPMC Medical Education 18th Annual GME Leadership Conference, UPMC,
	Pittsburgh, PA
Aug 2018	UPMC Respiratory Motion Management in Radiation Therapy Training Course,
J	UPMC. Pittsburgh, PA
Feb 2017	UPMC Gamma Knife ® Principles and Practice of Gamma Knife Radiosurgery
100 201.	Training Course. Perfection and ICON training. UPMC, Pittsburgh, PA
May 2017	UPMC SABR/SRS (Stereotactic Ablative Radiotherapy) Training Course UPMC,
May 201/	
	Pittsburgh, PA

## PROFESSIONAL MEMBERSHIPS

I MOLESSIONAL M	LMDLKSIII 3
2016-current	The Radiosurgery Society (RSS)
2016-current	American Society for Radiation Oncology (ASTRO)
2016-current	American Brachytherapy Society (ABS)
2016-current	ARRO Association of Residents in Radiation Oncology
	Radiation Research Society SIT (Scholars-in-Training) group
	American Association of Cancer Research (AACR) Cancer Immunology Working Group
	American Association of Cancer Research (AACR) Radiation Science and Medicine
	Working Group
2015-2016	Member: American Association for Cancer Research (AACR)
2015-current	Member: Radiation Research Society SIT (Scholars-in-Training) group.
2013-2016	Student Member, The Association of Underrepresented Minority Fellows (AUMF)
2013-2016	Student Member, American College of Physicians (ACP)
2012	Member, Pittsburgh Urban Magnet Program (PUMP)
2012	Member, Scope and Scalpel Society Fundraising Committee, University of Pittsburgh
	SOM
2012	Mentor, UMBC Meyerhoff Scholarship Program
2011-current	Member, American Association of Immunologists (AAI)
2011-current	Member, Federation of American Societies for Experimental Biology (FASEB)
2011-current	Member, American Association of Immunologists (AAI)
2011-current	Member, International Union of Immunological Societies (IUIS)
2011-current	Member, Federation of American Societies for Experimental Biology (FASEB)

### COMPLETED RESEARCH SUPPORT

UNCF/MERCK Graduate Science Iheagwara, Uzoma (PI)

Research Dissertation Fellowship

09/01/12-08/31/14

The overall goal of the fellowship is to provide support to African-American graduate students to complete coursework, conduct research, and prepare the dissertation required for a doctoral degree in the biomedically related life or physical science and engineering.

Role: PI

5T32CA082084-13 Finn, Olivera (PI)

09/01/11-08/31/12

The overall goal of our training program is to train a cadre of young immunologists. PhDs and MD/PhDs. who will make it their mission to understand how to harness the immune system in the fight against cancer Role: Trainee

5T32CA082084-12

Finn, Olivera (PI)

09/01/10-08/31/11

The overall goal of our training program is to train a cadre of young immunologists. PhDs and MD/PhDs. who will make it their mission to understand how to harness the immune system in the fight against cancer Role: Trainee

5T32GM008208-21

Wiley, Clayton (PI)

09/01/09-08/31/10

Continue support of a well integrated basic and clinical sciences pre-doctoral training program.

Role: Trainee

5T32GM008208-20

Wiley, Clayton (PI)

09/01/08-08/31/09

Continue support of a well integrated basic and clinical sciences pre-doctoral training program.

Role: Trainee

5T34GM008663-11

Lindahl, Lasse (PI)

09/01/07-

05/31/08The primary goal of the MARC U\*STAR Program at UMBC, which began in 1997, is to provide a comprehensive system of financial and educational support to juniors and seniors from historically underrepresented groups to ensure their success in obtaining terminal degrees and entering careers in biomedical research and/or mathematics.

Role: Trainee

5T34GM008663-10

Lindahl, Lasse (PI)

09/01/06-05/31/07

The primary goal of the MARC U\*STAR Program at UMBC, which began in 1997, is to provide a comprehensive system of financial and educational support to juniors and seniors from historically underrepresented groups to ensure their success in obtaining terminal degrees and entering careers in biomedical research and/or mathematics.

Role: Trainee