**JENNIFER RICHER, Ph.D.**

**Professor, Department of Pathology**

**University of Colorado Anschutz Medical Campus**

## CURRICULUM VITAE

***Professional Address*: *Contact***

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**EDUCATION and TRAINING**

***Undergraduate:*** B.S. 1986 University of Texas at El Paso, Major: Biology, Minor: Chemistry

***Graduate:*** M.S. 1988 University of Texas at El Paso, Dept of Biological Sciences

Ph.D. 1992 Colorado State University, Ft. Collins, CO Dept of Pathology,

Cell and Molecular Biology Interdisciplinary Program

***Postdoctoral:*** 1992-1994 New England Biolabs, Research Division, Beverly, Massachusetts

1994-1996 Dept of Medicine, Div of Endocrinology, Univ of Colorado (K. Horwitz)

**ACADEMIC APPOINTMENTS**

1996-2000 Instructor, Endocrinology Division, University of Colorado Health Sciences Center, (UCHSC), Denver, Colorado

2001-2006 Assistant Professor, Division of Endocrinology, Dept of Medicine, UCHSC

2007-2010 Assistant Professor, Dept of Pathology, Univ of CO Anschutz Medical Campus (AMC)

2010-2015 Associate Professor, Dept of Pathology, Univ of Colorado AMC

2015-present Professor with Tenure, Dept of Pathology, Univ of Colorado AMC

**LEADERSHIP POSITIONS**

***Institutional***

2003-2014 Co-Director of the University of Colorado Cancer Center Tissue Processing and Procurement Shared Resource Facility-Director Laser Capture Microdissection Facility

July 2016-Jan 2017 Acting Vice-Chair for Research, Department of Pathology

2016-present American Cancer Society Institutional Research Grant Principal Investigator

2018-present Co-leader Tumor Host Interactions Program, University of Colorado Cancer Center

***National***

2020-present Associate Editor, *Breast Cancer Research*

2020-present Associate Editor *Endocrinology*

2016 Co-Organizer Keystone Symposium on Nuclear Receptors

2020-2021 Basic Science Chair, Endocrine SocietyAnnual Meeting Steering Committee

**LEADERSHIP TRAINING**

2010 Women in Medicine Professional Leadership Award from Dean’s Office to attend AAMC/ Harvard Medical School Early Career 1 wk workshop in DC

2015-2016 Colorado Clinical and Translational Sciences Institute (CCTSI) Leadership for Innovative Team Science (LITeS) Course 2 full days, 4x/yr

2015-2016 CCTSI Mentoring Training (co-mentor/mentee) program 1 day 4x/yr

2020 Endocrine Society Committee Chair Orientation and Training

2021 HERs Leadership 360 Assessment -coaching on managing diverse teams

**HONORS/AWARDS (since 2000)**

2000-present Full Member University of Colorado Cancer Center

2004 Department of Medicine Research and Teaching Award UCHSC

2006MD Anderson Career Development Award Uterine Cancer SPORE

2014-2016 Outstanding Effort Promoting the Educational Mission of the Dept of Pathology

2015 Dean’s Mentoring Award Graduate School Univ of Colorado AMC

# 2015 NIH Broadening Experiences in Scientific Training (BEST) Faculty Sponsor Award

2017 and 2018 Best of the AACR Journals collection: top 5 most highly cited articles of 2015 and 2016

**NATIONAL GRANT REVIEW PANEL SERVICE (since 2010)**

2010 Komen Foundation for the Cure Pre-doctoral Fellowship Review Panel

2012 2010 NIH Molecular and Cellular Endocrinology Study Section *Ad hoc* panel member

2014 DOD Review Panel for Breakthrough and Idea Expansion Awards

2015 NIH Tumor Cell Biology Study Section, *Ad hoc* panel member

2016 March of Dimes Grant Review Special Panel

2018 AACR Translational Breast Cancer Research Grants Scientific Review Committee

2016-2021 Standing Member - NIH Tumor Cell Biology Study Section

**OTHER SERVICE:**

**N *National:***

2008-2011 The Endocrine Annual Meeting Steering Committee Member Society (three year term)

2010-present University of Texas at El Paso, College of Science Advisory Board

2010-present MD Anderson Uterine Cancer SPORE External Advisory Board

2013-2015 The Endocrine Society Scientific & Educational Programs Core Committee (SCIED) 3 yr term

2015-2016 The Endocrine Society –Women in Endocrinology Laureate Award Nominating Committee

2015-present Editorial Board, *Breast Cancer Research*

*2016-*presentAssociate Editor *Hormones and Cancer*

2015 Bayer Scientific Advisory Board

2016-2019 The Endocrine Society- Research Affairs Core Committee (RACC)

2017 Orion Pharmaceutical Scientific Advisory Board Committee, Helsinki, Finland

2017 Breast Cancer Research Foundation – Think Tank on androgen receptors in breast cancer

2017 Program Committee Member for AACR Annual Meeting

2021 Selected for NIH NCI Emergent Cellular Behavior in Cancer Innovation Lab 5-day event

***Institutional:***

2008-present Cancer Biology Program –currently Chair of Preliminary Exam Committee, Steering Committee, Chair of Graduate Advisory Committee

2006-2010 Review Panel University of Colorado Cancer Center Research Summer Fellowship Program

2008-2010 Review Panel Member for the University of Colorado Cancer Center’s ACS-IRG Seed Grants

2013-present Women's Reproductive Health Research (WRHR)-Program Advisory Committee

2013-2016 Strategic Infrastructure for Research Committee, University of Colorado Medical Campus

2015-2016 President of the Faculty Senate

2016-present   Graduate Program Training Faculty: Cancer Biology T32; Molecular Biology T32 MSTP MD/PhD Program and Physician Scientist Training Program

2016-present Department of Pathology Finance Committee and Strategic planning committee

2017 Lead Organizer Pathology Department Sponsored King Research Symposium

2016-2018 Promotion and Tenure Committee, University of Colorado Anschutz Medical Campus

2016-2020 PI, American Cancer Society-Institutional Research Grant Univ of Colorado Cancer Center

2018-presentCo-leaderTumor Host Interactions Program University of Colorado Cancer Center

***Community:***

1999-present Susan G. Komen Foundation, Denver Chapter, Newsletter and Speaker’s Bureau contributor

2007-present Participation at ACS events including speaker at Relay for Life Events (Durango & Ft. Collins)

2012-2014 Scientific Advisory Board, Cancer League of Colorado

2020-present American Cancer Society Denver Board of Directors

**PATENTS**

Richer *et. al*., U.S. Patent No. 8,507,195, **Issued Aug 13, 2013** “*miRNAs in Triple-Negative Breast Cancer*”

Richer JK and Protter A, **Issued Dec 2016** PCT/US2012/48471 “*Treatment of Breast Cancer.”*

Richer JK *et al* **Issued Jan 8, 2019**Patent No 10,175,240 *“Method for Determining Breast Cancer Treatment”* CU Ref: CU3024H. Licensing fees outside US paid by Ventana, Dec 2015. Continuation application filed Dec 17, 2018 US Application No. 16/221,778; **CU3024H-US2 notice of allowance, Sept 9, 2021**

Cox, Marc B. and Richer, J.K. "FKBP52-Specific Androgen Receptor Inhibitor, MJC13, for Use in Treating Breast Cancer", Claims Priority to U.S. Provisional Patent Application No. 62/350,383, filed June 15, 2016, US Application 15/623,775, United States Patent No. 10,434,075 **issued October 8, 2019**

**MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS**

1998-present Endocrine Society – Active Full Member

2000-present American Association of Cancer Research-Active Full Member

2019-present Metastasis Research Society

**INVITED PRESENTATIONS – SCIENTIFIC MEETINGS AND VISITING LECTURESHIPS**

***Oral Presentations at National and International Meetings -* since 2010**

March 2010 **Keystone Symposia**: **Nuclear Receptors: Signaling, Gene Regulation and Cancer.**

“MicroRNAs in Luminal versus Triple Negative Breast Cancer Control Estrogen and Growth Factor Receptors and Aspects of Tumor Metabolism.” Keystone, Colorado.

April 2011 **AACR 102nd Annual Meeting**. Invited lecture “MicroRNAs that Regulate EMT in Breast and Gynecological Carcinomas” for Educational Section on EMT and Stem Cells in Cancer Progression. Orlando, FL

May 2011 **Anderson Annual Uterine Cancer Biology SPORE Symposium** Invited lecture “MicroRNAs that regulate EMT and tumor progression in gynecological cancers.”

June 2011 **Gordon Conference on Mammary Gland Biolog**y Newport, RI. Invited lecture **“**miRNA guardians of the epithelial phenotype”

July 2011 **Society for the Study of Reproduction Annual Meeting-**.Invited Lecture “MicroRNAs Regulate Endometrial and Ovarian Cancer Sensitivity to Anoikis and Chemotherapy" for Symposium on Reproductive Cancers. Portland, OR,

June 2012 **Annual Endocrine Society Meeting Richer, JK.** Invited Lecture “MicroRNAs and Hormone Receptor Action in Breast Cancer” for the “Putting the Brakes on Breast Cancer.” Houston, TX

Oct 2013 **AACR Advances in Breast Cancer Research Conference** Invited Symposia Lecture “Targeting the Androgen Receptor in Breast Cancer”, Targeted Therapies San Diego, CA.

Jan 2014 **Keystone Symposia on Nuclear Receptors:** Biological Networks, Genome Dynamics and Disease. Invited short talk: Role of Androgen Receptors in ER- Breast Cancer.Taos, NM.

March 2014 **Society for Gynecologic Investigation**. Invited Symposia Lecture “Functional Significance of miRNAs Contributing to Reproductive Cancers” Florence, Italy,

Sept 2015 **US Oncology McKesson Annual Scientific Forum Invited Lecture** “Role of Androgen Receptors in Breast Cancer” Dallas, TX

Jan 2016 **Keystone Symposium Nuclear Receptors** Scientific organizer and speaker “Subtype-Specific AR Action in Breast Cancer” Snowbird, Utah.

April 2016 **Endocrine Society Annual Meeting 2016** Invited Symposia Lecture “Role of Androgen Receptors in Breast Cancers Resistant to ER-Directed Endocrine Therapies” Boston, MA

May 2016 **Gordon Research Conference on Mammary Gland Biology and Cancer** Short talk “Targeting the Androgen Receptor in Triple Negative Breast Cancer, Lucca, Italy

June 2017 **FASEB SRC Meeting** on Rapid Signaling & Genomic Hormone Action in Health & Disease. Invited oral presentation on “Androgen Receptor and mTOR Cross Talk in Breast Cancer”

Oct 2017 **Breast Cancer Research Foundation** Think Tank for Androgen Receptor in Breast Cancer

Dec 2017 **San Antonio Breast Cancer Symposium**. Invited Educational Session presentation “Androgen Receptors in Breast Cancer” Symposium on Androgen, Progesterone and Glucocorticoid Receptors: Reprogramming of Steroid Receptors during Breast Tumor Progression.

March 2018 **Endocrine Society** invited Symposium presentation: Steroid Receptors and Inflammation titled “Triple-Negative Breast Cancer Highjacks a Developmental Program of Immune Suppression.”

April 2018 **AACR** **Invited “Meet the Expert” sessio**n “Update on Potential for Targeting Androgen Receptors in Breast Cancer.”

May 2018 **Gordon Research Conference- Mammary Gland Biology and Cancer**, Lucca, Italy, "Breast Cancer Highjacks a Program of Immune Suppression: Hormonal and Inflammatory Mediators"

April 2019 **International Association of Breast Cancer Research**, Egmond aan Zee Netherlands, “Clinical biopsies and preclinical models reveal therapeutic targets in ER mutant metastatic breast cancer”

Aug 2019 **Gordon Research Conference Hormones and Cancer**, Sunday River, Maine, “Hormone Deprivation Influences Breast Cancer Immune Suppression”

Sept 2020\* **7th Annual Metastatic Breast Cancer Conference**, Huntsman Cancer Institute, Salt Lake City, Utah. “Targetable Pathways in metastatic ER+ BC resistant to aromatase inhibitor therapy.”

April 2021\* **American Society of Biochemistry and Molecular Biology** – Signaling in Breast and Ovarian Cancer Interest Group “Breast and ovarian cancers co-opt mechanisms of immune suppression used during pregancy

May 2021\* **Buenos Aires Breast Cancer Symposium**: From hormone receptors to the immune system. “Breast cancer hijacks a trophoblast-like program of immune suppression.”

Dec 2021 **Society for the Study of Reproduction “**Reproductive Biology: Solutions for Adult Disease”

\* remote due to Covid19

Dec 2021 **San Antonio Breast Cancer Symposium -** Discussant for TNBC Spotlight Posters

***Visiting Professorship Lectures***

***International***

March 2012 **Astellas Pharmaceutical**s, Leiderdorp, Netherlands. “Lecture on the androgen receptor as a therapeutic target in breast cancer.”

March 2014 **University of Florence Dept. Experimental and Clinical Biomedical Sciences, Biochemistry, Human Health Medical School** “Anoikis Resistance in Breast and Ovarian Cancer Progression” Guest of Professor Paola Chiarugi

Sept 2016 **Royal College of Surgeons, Dublin, Ireland**. Meeting on Steroid Receptor Drivers –Breast Cancer. “Rationale for targeting AR in BC resistant to anti-estrogen therapy and TNBC”

Aug 2018 **The Westmead Institute for Medical Research, Sydney, AU “**Targeting AR in BC resistant to anti-estrogen therapy and TNBC”

Aug 2018 **University of Adelaide, Adelaide AU Cancer Biology and Reproductive Sciences** "Triple Negative Breast Cancer Hijacks a Trophoblast-Like Program of Immune Suppression"

Sept 2020\*\* **Prato PDX Workshop Monash University** Prato Campus near Florence, Italy

\*\* cancelled due to Covid19

***National***

Mar 2010 **Baylor College of Medicine**, Department of Molecular & Cellular Biology

June 2010 **Univ of Iowa**, 2 seminars: Depts. of Molecular Physiology and Biophysics and OB/GYN

Jan 2011 **Univ of Miami, Dept. of Molecular & Cellular Pharmacology, Miller School of Medicine** “Manipulation of miRNAs in aggressive breast and gynecological cancers to restore sensitivity to anoikis and chemotherapy**”**

June, 2011 **Massachusetts General Hospital**, **Vincent Center for Reproductive Biology,** Invited lecture: “Role of microRNAs in Breast and Gynecological Cancer Progression.”

Oct, 2011 Medivation, Inc. San Francisco, CA “Targeting Androgen Receptors in Breast Cancer”

Dec 2011 **MD Anderson, Pathology Department**, Molecular Pathology Seminar Series Invited lecture “microRNAs in Breast and Gynecologic Cancers & Hormone Receptor Action”

Feb 2012 **Dana Farber Cancer Institute**, Seminars in Oncology Invited lecture “Androgen Receptors in Breast Cancer: no longer neglected”

Oct 2012 **University of Pittsburgh, PA,** **Magee Women’s Research Institute** “Androgen Receptors in Breast Cancer- Novel Insights”

Jan 2013 **West Virginia University Mary Babb Randolph Cancer Center Program Retreat** on EMT and Metastasis Mechanisms –Keynote talk “The miR-200 and miR-221 Families: Opposing Effects on Epithelial Identity in Breast and GynecologicCancers.

Feb 2014 **City of Hope Duarte, California** -Student Leading Edge Lecture Series invited speaker

May 2014 **MD Anderson Breast Cancer Research Program** **Retreat**. One of two Keynote Speakers with Thea Tilsty “Targeting Androgen Receptors in a Subset of Triple Negative Breast Cancers.”

May 2015 **Bayer Scientific Advisory Board** Whippany, NJ “Androgen Receptors in Breast Cancer

July 2015 **Virginia Commonwealth University** Department of Pathology Grand Rounds

Aug 2015 **Medivation Inc**. SF, CA “Update on Androgen Receptors in Breast Cancer Preclinical Models”

Sept 2015 **Van Andel Institute/Michigan State University**, Department of Obstetrics, Gynecology and Reproductive Biology “Androgen Receptors in Breast Cancer: Estrogen Receptor

alpha Accomplice, Competitor, or Substitute?”

Feb 2016 **Huntsman Cancer Institute, Division of Oncological** **Sciences** “A Potential New Endocrine Therapy for Breast Cancer – Even Triple Negative”

June 2016 **Lankenau Institute for Medical Research, Philadelphia, PA** guest of LIMR Director George Prendergast, Ph.D. “Kynurenine Pathway and TDO2 in Triple Negative Breast Cancer”

Oct 2016 **University of Minnesota Cancer Center**- “Androgen Receptors as a Therapeutic Target in Breast Cancer”

Nov 2017 **University of Iowa** - TNBC and Serous Ovarian Cancer Hijack a Program of Immune Tolerance

Jan 2018 **UT Southwestern, Dallas, TX- Green Center for Reproductive Biology** “TNBC Hijack Mechanisms of Immune Tolerance”

Feb 2019 **MD Anderson - Symposium on Factors Impacting Immune Microenvironment –** “Carcinomas Hijack a Trophoblast-Like Program of Immune Suppression”

\*Sept 2020 **Northwestern University Feinberg School of Medicine Department of Pharmacology**- “Targeting tryptophan catabolism in breast cancer.”

\*Oct 2020 **The University of North Carolina Chapel Hill** Pathology Laboratory Medicine Molecular and Cellular Pathology “Steroid Hormone Milieu and female cancers: context is critical

\*Oct 2020 **Reproductive & Developmental Biology Laboratory (RDBL), National Institute of Environmental Health Sciences NIEHS-** “Steroid Hormone Milieu and female cancers: context is critical.”\*remote due to Covid19

***Local***

Jan 2010 Mammary Gland Program Project Retreat – “MicroRNA control of key events in mammary gland function between late pregnancy and lactation.”

Feb 2010 Cancer Biology Graduate Program Retreat – “MicroRNAs control of breast cancer subtypes.”

March 2011 Cancer Center – Hormone Related Malignancies Retreat: Two miRNA Families Influence the Clinical Behavior of Breast and Gynecological Cancers

Sept 2011 Cancer Center Retreat “Role of Androgen Receptors in Breast Cancer”

March 2012 Pathology Grand Rounds Androgen Receptors in Breast Cancer- no Longer Neglected

Sept 2012 for Oncology Fellows “Androgen Receptors in Breast Cancer- Clinic to Bench and Back”

Sept 2012 Colorado Cancer League Corporate Advisory Board Meeting

Nov 2012 Pathology Grand Rounds “microRNAs in Breast and Gynecologic Cancer”

March 2013 Program Project Grant Retreat: Functional Development of the Mammary Gland Retreat “The Rise and Fall of miR-150 in the Mammary Gland”

April 2013 Endocrine Grand Rounds “Targeting Androgen Receptor Activity in Breast Cancer”

Sept 2013 Cancer Biology Graduate Program Retreat "Targeting AR in Breast Cancer”

Dec 2013 Cancer Center Developmental Therapeutics Program Retreat- “Targeting the Androgen Receptor in Breast Cancer - Preclinical Studies to Clinical Trials”

March 2014 Cancer Center Hormone Related Malignancies Retreat –“Mechanisms of Anoikis Resistance During Breast and Ovarian Cancer Progression”

April 2015 DW King Endowed Lectureship– “Targeting the Androgen Receptor in Breast Cancer”

Nov 2015 Cancer Biology Graduate Program Annual Retreat –“When Projects Collide”

Feb 2016 DOM Research and Innovation Conference- “Reflections on AR in breast cancer”

March 2016 UCCC Hormone Related Malignancy Seminar “Reflections on AR in breast cancer”

Oct 2016 Cancer Biology Graduate Program Retreat

Dec 2016 Molecular Biology Graduate Program Seminar Series

Mar 2017 Tumor Immunology Research in Progress

Oct 2017 RNA Bioscience Initiative Grants Symposium

Nov 2017 OB/GYN Seminar Series- “TNBC Hijack Mechanisms of Fetal Tolerance”

Oct 2018 Molecular Biology Graduate Program Retreat Talk – miRNA Facilitate Immune Evasion

Feb 2019 Pathology Grand Rounds “Androgen Receptors in Breast Cancer-what have we learned?”

April 2019 Endocrine Division Research Conference- “Estrogen Receptor Mutations in “Castrate Resistant Breast Cancer” – a role for androgen receptors?”

Feb 2020 Advances in Breast Cancer: Updates from San Antonio and ESMO" conference CME for Colorado community caregivers Horizon CME

Mar 2021 Virtual Gates Center for Regenerative Medicine Member Seminar Series

**Press/Community engagements:**

2013 University of Texas at El Paso 3rd Annual Careers in STEM Forum

2014 Tour of Richer Lab for Les Garrison, melanoma survivor and wife, breast cancer survivor.

2014     Video representing UCCC Breast Cancer Program for “Plant Select” regarding Carolyn’s Hope flower to raise funds for breast cancer research <http://plantselect.org/2014/02/carolyns-hope/>

2014     Cocktails for a Cure video- represented UCCC Breast Cancer Program with oncologist, Jennifer Diamond. <https://www.youtube.com/watch?v=likSW7wSSAA&feature=youtube>

2014 Colorado – Wyoming High School Academy. “Hormones – Flies, Sex, Aging and Cancer”

2014 <http://medicalresearch.com/cancer-_-oncology/breast-cancer/triple-negative-breast-cancer-tryptophan-degradation-pathway-promotes-metastatic-phenotypes/9881/>

2014/2015 Highlighted in The Department of Defense Breast Cancer Research Program (BCRP) program booklet featured work in the "In the Clinical Pipeline" section.

2013-2016 Interactive visits to 2-4 grader classes for presentations on “Scientific Method and how to grow bacteria” and “Life Cycles.” Bill Roberts Elementary School, Denver, CO

2016 Tour of Lab for ACS and the Denver Broncos Executives July, 2016

2016 The Endocrine Society Hill Day on Capitol Hill, Washington DC

2016 Colorado-Wyoming Junior Academy of Science “MEDICINE AND SCIENCE” 29th Annual Symposium. Lecture on “Steroid Hormones and Women’s Cancers.”

2017 May Advances in Breast Cancer Research Symposium Komen and GTM –organizer/tour host

2017/18 Sept Tour for American Cancer Society donor Rob Kinas

2017/18/19 Learn About Cancer Day (LACD) high school students from Denver metro area

2019 summer Career Panel for High School STEM Students from Denver Colorado in Camp

2020 Feb ACS Presentation for Volunteers – where do the dollars for research go in Colorado?

2020 Sept Host of ACS IRG Grantee Presentations to donors, volunteers and patient advocates- via zoom

2021 May ACS ReseaHERs presentation to the Denver Board of Directors and Raised $3,700

**TEACHING AND MENTORING**

1986-88 Teaching Assistant Univ. of Texas at El Paso: Topics in the Study of Life, Anatomy and Physiology, Electron Microscopy Techniques, Molecular Cell Biology

1990-92 College of Veterinary Medicine and Biomedical Sciences, Colorado State University Biology of Disease Agents – 3 Parasitology Lectures and labs.

2000-2005 CLSC 7500 UCHSC Practical Application of Molecular and Cell Biology: Techniques for the Clinical Investigator. Lecture on Transcription Factors and Cancer.

1999-2003 Med 6626 Molecular Biology of Cancer UCHSC, Hormone Dependent Cancers Lecture

2006 Spring CANB 7600 Cancer Biology Lecture on Hormonal Therapy for Breast Cancer

2009-2015 CANB 7600 Course Director, Cancer Biology Graduate Course each spring MWF (Created syllabus for this team taught class/teach two lectures and w/ co-director, create & grade exams).

2015 CANB 7680 Grant writing class for Cancer Biology Graduate Students

2010-2018 IDPT 5004 -Disease and Defense Course for medical students –Lecture on Metastasis

2021 Faculty facilitator for two CANB journal clubs

***Students Trained* (6 obtaineddoctorate degrees in Richer Lab, 5 held NCI F31 or F99/K00**)

2008-2012 Erin Nicole Howe, Ph.D. – Cancer Biology Graduate Program Recipient, NIH NCI NRSA Pre-doctoral fellowship. Currently fellow Notre Dame 1F32CA210583-01, METAvivor 2020.

2012-2016 Valerie Barton, Ph.D.- Cancer Biology Graduate Program, recipient of NIH NCI NRSA F31 CA192807-02 Project Title: Targeting Androgen Receptor Pathway in a Subset of Triple Negative Breast Cancer Thesis Defense, March 24, 2016. Now at Essen Bioscience, Ann Arbor Michigan as Applications and Chemotaxis Scientist.

2011-2016 Richard Heinz, Ph.D. - Cancer Biology Graduate Program, recipient of Colorado Clinical and Translational Sciences Institute (CCTSI) TL1 training grant. Accepted postdoctoral position with Dr. Ben Spike at the Huntsman Cancer Institute, Salt Lake City, UT

2012-2017 Thomas Rogers, Ph.D. –Cancer Biology Graduate program - NIH NCIRuth L. Kirschstein National Research Service Award (NRSA) Individual Predoctoral Fellowship 1F31CA203394 then 1F99/K00 CA212230 Pre-doctoral to Postdoctoral Fellow Transition Award. Current position: postdoc with Dr. Ralph DeBeradinis, UT Southwestern Medical Center, Dallas, TX

2013-2018 Lisa Greene, Ph.D. Cancer Biology Graduate Program C. Werner and Kitty Hirs Merit Award NIH NCINRSA F31 CA203486-01A1. Now in Medical School Feinberg School of Medicine, Northwestern University Chicago IL

2014-2018 Lynelle Smith medical student, Univ of Colorado, Mentored Scholarly Activity –research track, now a Chief Resident in Pathology

2018-2020 Elaina Lawson medical student Univ of CO, Mentored Scholarly Activity –research track

2015-2020 Emmanuel Rosas, Mol Biology Graduate Program – R01 diversity supp, now NIH IRACDA fellow, University of New Mexico w/ Distinguished Professor and Chief of Molecular Medicine Eric Prossnitz, PhD

***Fellows Trained in lab:*** (8 postdoctoral fellows have completed training in the Richer Lab)

2009-2010 Irina Dimitrova, M.D. NIH WRHR Training Scholar and Gyn/Onc Fellow, practice Seattle, WA

2008-2012 Dawn Cochrane, Ph.D. Current position: Research Associate with David Huntsman, MD, BC Cancer Agency, Vancouver, BC

2009-2013 Diana Cittelly, Ph.D. Assistant Professor, DOD Post-doctoral Fellowship while in lab, then K22CA181250, now tenure track Assistant Prof, R01/R37 MERIT Award Funded

2011-2016 Nicholas D’Amato, Ph.D. doctorate training at Duke, obtained ACS Postdoctoral Fellowship, now Medical Scientist Liaison with Astra Zeneca.

2013-2017 Michael Gordon, Ph.D., from UCLA Keck School of Medicine, obtained RNA Biosciences Research Initiative Grant while in my lab, now Medical Scientist Liaison with Abbvie.

2017-2018 Jordan Reese, Post-doctoral fellow from Mayo Clinic with John Hawes, PhD, July 2018 took position as Assay Development Scientist at Biodesix, Inc Boulder, Colorado

2014-present Jessica Christenson, Ph.D. Postdoctoral Fellow from City of Hope, Duarte, CA, T32 Cancer Biology Graduate Program Training Grant, ACS-IRG pilot project. Promoted to Instructor

2018-2020 Toru Hanamura, MD, breast surgeon from Japan

2021-2022 Dr. Natalia Fernández, PhD postdoctoral fellow from Buenos Aires, Argentina

recipient of the Yamagiwa-Yoshida Memorial International Study Grant from the Union of International Cancer Control (UICC)

***Current full-time trainees in lab:***

Instructor: Jessica Christenson, PhD- Instructor, ACS IRG, METAvivor Early Career Award 2021-2023

Post-doctoral fellows:

2017-present Michelle M. Williams, Ph.D. Awarded NCI 1F32 CA239436-01A1

2021-present Lyndsey Crump, Ph.D. F31CA236140-01

Graduate Students:

2017-present Kathleen O’Neill, doctoral candidate Cancer Biology Graduate Program, NCI F99CA253742-01

2021-present Li-Wei Kuo, first year CANB program doctoral candidate

***Rotating Graduate Students from Cancer Biology and Molecular Biology Graduate Programs:***

2021, Hanne Lind CANB; 2020John Aleman, CANB*,* Li-Wei Kuo CANB; 2018-2019 Claire Ihle*;* 2017-2018 Lucas Harrell, Alexandra McMellon*;* 2016-2017 Haydan Smith, Lauren Jillson, Emmanuel Rosas, Justin Roberts, Kathleen O’Neil; 2015-2016 Amber Johnson, Dan Sisler, Lyndsey Crump*;* 2013-2014*,* Alicia Chitrikar, Molly Kingsley, Lisa Greene, Michael Oliphant*;* 2012-2013Thomas Rogers*,* Erica Goddard, Rick Heinz; 2011-2012; Marybeth Sechler; Valerie Barton*;* 2009-2010 Deepika Neelakantan, Emily Kleczko, Erin McKinsey, Christina Garlington*;* 2007-2008 Jennifer Symonds, Trista Hinz

***Part-time trainees (summer programs):***

2019-2020 Nia Gwen Hammond, Cell and Dev Bio Univ. CO Boulder, RNA Bioscience Summer Fellow, defended honors thesis research on work in lab in 2021, now in graduate school at Northwestern

2018, 2019 Sabrina Hafeez, Cell and Dev Bio Univ. CO Boulder RNA Bioscience, Cancer Center Summer Fellow, defended honors thesis research in my lab in 2021, accepted to MSTP Stony Brook

2018 Yvonne Clarke- Center Summer Fellow from Colorado College

2017 Paul Grew- Drake University undergraduate Cancer Center Summer Fellow

2016 Evelyn Jaewon Lee – Berkeley undergraduate Cancer Center Summer Fellow

2015 Bryce E. deVenecia, Cancer Center Summer Fellow from Notre Dame University, finished

medical school University of Wisconsin

2014 Julian Vann, Cancer Center Summer Fellow, High School Student in Ouray, CO

2014 Monica Rivera Torres, MAP/GEMS/Endocrine Society Minority Scholar from Puerto Rico

2013, 2014 Hanne Lind, finished BS Univ of Michigan, 2015 Oxford, 2017 Post-Bac at NIH now CANB graduate student at CU-AMC

2013 Paola Perez, undergraduate Puerto Rico- MAP and GEMS/ Endocrine Society Minority Scholar

2012 Anna Ballard, Cancer Center Summer Fellow, completed Genetics Graduate Program, Washington University, St. Louis

2012 Brianne Henderson, GEMS/ Endocrine Society Student Minority Affairs Scholar

2011 Carlos Santos, MAP and GEMS/ Endocrine Society Student Minority Scholar, won outstanding poster at ABRCMS, 2011, Current position: MD/PhD program Univ of Minn Medical School.

2009-2011 Connie Liu, High School Student, Siemens’ Science Fair National won $40,000 scholarship for her lab project and presentation on ovarian cancer, also awarded $20,000 Coca Cola Scholarship.Graduated from MIT with BS in Aerospace Engineering and minor in Mathematics, worked at SpaceX in LA then graduate school MIT in Space Propulsion in Fall 2015.

2009 Rosan Nieves. Graduate Experience for Multicultural Students (GEMS/ Endocrine Society Student Minority Affairs Scholar), currently in pre-doctoral NIH program

2009 Ashley Guilford, UCHSC Labcoats Program undergraduate student

2007, 2008 Patricia Teschke Cancer Center Fellow, Univ of Colorado Med. School, now a general surgeon specializing in breast surgery in Norfolk, Virginia

2005 Theresa Medina Summer NIH Medical Student, now Oncology attending UC AMC

2004Amy Liu- Cancer Center Summer Fellow from Washington University, obtained PhD in Epidemiology at University of Washington -graduate work on HIV in Kenya, Africa

2003 Jason Hatch, Summer NIH Medical Student. Now a physician in practice in Denver

2002 Carrie Marshall, NIH Medical Student Received $4,000 Fellowship from The Endocrine Society for summer research training of medical students, finished Cytology Fellowship at MD Anderson Current: Associate Professor of Pathology, Univ of Colorado Anschutz Medical Campus

***Student thesis committees and postdoc and junior faculty advisory committee service:***

**MSTP:** Kelsey Kines 2021 (committee chair),Faye Camp 2018-present, Justine Migdall, MD/Ph.D defended in 2012, Kevin Bauerle, MD/Ph.D graduated Fall 2010

**Cancer Biology:** Petra Dahms (Richer chair) passed comprehensive exam) Oct 2021;Claire Ihle (Richer Chair)passed comprehensive exam) July 2020; Jaidev Bapat (Richer chair) passed comprehensive exam Sept 2020; Allie McMellen passed comprehensive Oct 2019**,** Lyndsey Crump (Richer chair**)**, passed comps Nov 2017, graduated Spring 2021; Lynsey Fettig, MD/Ph.D doctoral candidate passed comps Oct 2015; Raymond Whitson, Ph.D. defended summer, 2012, current: postdoctoral fellow, Stanford**;** Holly Martinson, Ph.D. defended April, 2014 (committee chair).

**Reproductive Sciences/now Integrated Physiology:** MelanieBadhke, Ph.D. defended Fall 2010;

Michael Oliphant (committee chair) passed comp exam Nov 2015, defended March 2019 obtained NCIK99/F00

**Molecular Biology Program:** David Drasin, Ph.D. candidate, defended August 2014, current position: postdoc UCSF**;** Anna Smith, Ph.D candidate, defended 2012, now Postdoctoral Fellow, Joaquin Espinosa, UCAMC

Christina Garlington, Ph.D. candidate, defended Jan 2016, now postdoctoral fellow with Andrew Thorburn UC.

**Cell Biology, Stem Cells and Development:** David Castillo, Ph.D. Defended 2016

***Student and Postdoc advisory committees:***

Co-mentor for DOD Postdoctoral fellowship for Allison Porman, PhD, lab of Dr. Aaron Johnson, Biochemisty Co-mentor for NIH NC1 F31 Lyndsey Crump (committee chair 2017-2021**)** with Dr. Traci Lyons

Co-mentor on NIH F31 CA247343-01A1 Justin Roberts –with Dr. Aaron Johnson

***Faculty Mentoring Service:***

Ben Bitler, PhD- Assistant Professor, OB/GYN, ACS Research Scholar Grant, NCI R37 and the Ovarian Cancer Research Alliance (OCRA) Collaborative Research Award obtained in 2021

Meredith A. Tennis, PhD- Assistant Professor, Div of Pulmonary Sciences - obtained RO1, 2017

Matt Sikora, PhD- Assistant Professor, Pathology. Cancer Center ACS IRG grant, ACS Research Scholar Grant

Phil Owens, PhD- Assistant Professor, Pathology, VA Scholar Award prostate and breast bone metastases

Gyn/Onc Fellows in lab of Dr. Ben Bitler, OB/GYN

Dr. Zachary Watson, MD, PhD, Brandon Sawyer, MD and Lindsay Brubaker, MD

**PUBLICATIONS** (h index 51, i10 index 76)

***Manuscripts in Peer Reviewed Journals***

1. **Richer, J**., Mayberry, L.F., and J.T. Ellzey. 1991. Comparative ultrastructural alterations induced in rat intestinal mucosa by *Eimeria separata* and *E. nieschulzi* (Apicomplexa: Eimeriidae). TRANS AMER MICROSCOPICAL SOC110: 262-268.

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***Book Chapter***

Anoikis:  How the Extracellular Matrix Regulates Life-or-Death Decisions.  Steven M. Frisch (ed.)

Springer Nature Switzerland, 2021 Chapter title “The TGFb and androgen receptor signaling pathways converge to support anoikis resistance in triple negative breast cancer.” P-173-193.

**Research Support**

**Active**

**P30 CA046934 (PI R Schulick**) 03/01/2012 – 01/31/2022

NIH/NCI Cancer Center Core Grant

Provides 10% salary support for J Richer as a Program Leader

**Role:** Program Co-Leader of Tumor Host Interactions Program

**Goal:** Advance translational and scientific interactions and collaborations in the treatment of cancer

**W81XWH-19-BCRP-EA** Richer(PI)15% effort04/01/2020-03/31/2023

**Department of Defense Breast Cancer Research Program**

**Title:** Targeting metastasis by inhibiting breast cancer metabolism and immune-suppression

**Goal:**To test whether TNBC tryptophan catabolism-mediated immune suppression contributes to the metastatic nature of this subtype and if its inhibition will facilitate an anti-tumor immune response.

**BC120183 W81XWH-13-1-0090/91** Richer(PI)08/15/2013-08/15/2022

**Department of Defense**

**Title:** Targeting androgen receptor in breast cancer: enzalutamide as a novel breast cancer therapeutic

**Goal:**The major goal of this project is to confirm whether enzalutamide can block androgen and estrogen driven proliferation of ER+/AR+ and AR+ TNBC cell lines, xenografts, and PDX in vitro and in vivo.

**1I01BX005466-01** Burnstein K PI, Richer JK Co-investigator 10% effort  4/1/2021- 3/31/2023

**Veteran Affairs Miami, FL**

**Role:**

Department of Veteran Affairs

**Title:** Covid-19: Fast-tracking treatment by exploiting the steroid hormone receptor/TMPRSS2 axis

**Goals:** To evaluate steroid hormone receptor (AR and GR) regulation of TMPRSS2 in human primary airway and lung epithelial cells and the capacity of AR and GR antagonists to block CoV-2 entry and infectivity.

**Collaborative Research Development Grant Bitler Ben (PI), Richer Co-I)**01/01/2022 – 12/31/2024

**Ovarian Cancer Research Alliance**

**Title:** A machine learning approach to chemotherapy-induced remodeling of the tumor

**Goal:** To use a multi-pronged approach to develop a predictive model to advance our mechanistic understanding of ovarian cancer chemoresponse and to improve patient outcomes.Contribution: As an expert in hormone receptor activity, women’s cancer, and transcriptional regulation, I will serve to oversee the iterative modeling of the mouse ovarian cancer experiments that will determine the contribution of CEBP/B in driving chemotherapy resistance.

**ACS-IRG-16-184-56** Richer (PI) 04/01/2017-12/31/2022 (NCE)

American Cancer Society

Goal of this project is to provide funding funds for cancer related pilot projects to junior faculty at UCCC-affiliated agencies.

**Grant is for pilot projects for junior faculty**

**NIH NCI F99/K00 CA253742-** 08/03/2020 – 07/31/2022

***Roles:*** Kathleen O’Neill, doctoral candidate Cancer Biology Graduate Program (PI), Richer (Mentor)

***Title:*** EMT drives targetable metabolic dependencies in breast cancer

**METAvivor: Metastatic Breast Cancer Research, Support and Awareness** 01/01/2021 – 12/31/2022

**Early Career Investigator Award 25B0307**

***Roles:*** Jessica Christenson Instructor (PI), Richer (Mentor)

***Title:*** Repurposing lung microenvironment targeted therapies for the treatment of established breast cancer lung metastases

**Goal:** Determine whether FDA-approved drugs that target the lung microenvironment can be repurposed for the treatment of BC patients with established lung metastases.

**NIH NCI F32 CA239436-01A1** 01/01/2020- 12/01/2022

***Roles:*** Michelle M Williams (PI), Richer (Mentor)

***Title:*** Impact of heme catabolism on triple negative breast cancer metastasis via immune-suppression

**Pending**

**BC210997 DOD Expansion Award**

***Role:*** Richer (PI)

***Supporting Agency:*** **Department of Defense Breast Cancer Research Program**

***Title:*** Acquired adaptations/vulnerabilities of persistent, metastatic estrogen receptor positive breast cancer

**Goals**: Identify critical dependencies of ER Mut in MBC under conditions that mimic the selective pressures under which ER mutations arise in patients and determine if these new adaptations can serve as targetable therapeutic vulnerabilities.

**Recently Completed**

**NIH/NCI R01 CA187733** Richer (PI) 07/02/2015-12/30/2020

***Title:*** Androgen Receptor and Intersecting Pathways Critical to Breast Cancer Subtypes

***Goal:*** To identify the role of androgen receptors in the three main subtypes of breast cancer.

**BC151357P1 W81XWH-16-1-0422**  6/15/2016 –6/15/2020

**Department of Defense**

**Role:** Gertz (Initiating PI), Richer (Partnering PI)

**Title:** Molecular modeling of estrogen receptor mutated breast cancer to guide therapeutic strategies

**Breakthrough Award Level 2 W81XWH-15-1-0039** 04/01/2015-03/31/2019

***Role:* PI**

***Supporting Agency*:** Department of Defense Breast Cancer Research Program

***Title:*** Targeting tryptophan catabolism: a novel method to block triple negative breast cancer metastasis.