

Ryan L. Brunsing, MD PhD

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Stanford Profile: <https://profiles.stanford.edu/ryan-brunsing>

TRAINING AND EXPERIENCE

Clinical Instructor, Radiology

Fellow, Body MRI, Radiology

July 2018 – June 2019

Stanford University

Program Director: Shreyas Vasanaawala, MD PhD

Advanced training in abdominal and pelvic MRI, MRI optimization, and MRI-guided procedures

Residency, Radiology & Nuclear Medicine

July 2014 – June 2018

University of California San Diego

Program Director: Tudor Hughes, MD

ABR Pathway for Dual Certification in Diagnostic Radiology and Nuclear Medicine

Internship, General Surgery & Internal Medicine

July 2013 – June 2014

Newton–Wellesley Hospital, Newton MA

Program Director: Kristin A Cox, MD

Busy inpatient medicine, ICU, emergency, and surgery services, first assist for general surgery

Researcher / Lab Manager, Division of Biomedical Sciences

July 2004 – July 2005

University of California San Diego

Principle Investigator: Maho Niwa, PhD

Studied role of unfolded protein response pathway in lymphocyte development using genetically-modified bone marrow transfer experiments

Research Technician, Molecular & Experimental Medicine

July 2002 – June 2004

The Scripps Research Institute, La Jolla CA

Principle Investigator: James Hoch, PhD

Used recombinant DNA technology to characterize the key histidine kinases in Bacillus anthracis, the etiological agent of Anthrax

EDUCATION

Doctor of Medicine, May 2013

University of New Mexico School of Medicine

Studied incidental PE on PET/CT during Nuclear Medicine rotation at UCSF

Doctor of Philosophy, Biomedical Sciences, May 2013

University of New Mexico School of Medicine

Dissertation: Induction of IL-10 within in T(h)17 effector population using the GPER agonist G-1

Bachelor of Science, June 2002

University of California San Diego

CERTIFICATION AND LICENSURE

California Medical License , Physician and Surgeon	Active Since 2015
American Board Radiology Certification in Diagnostic Radiology Certification in Nuclear Medicine Subspecialty	Eligible October 2019 Eligible October 2019

RESEARCH FUNDING

NIH F30 Fellowship National Institute of Diabetes and Digestive and Kidney Diseases Ruth Kirschstein National Research Service Award <i>Grant #: F30 DK084648; \$115,851 total funding awarded;</i> <i>Principle Investigator: RL Brunsing</i>	2010 – 2013
NIH T32 Fellowship National Institute of Allergy and Infectious Diseases Biology of Infectious Diseases <i>Grant #: T32 AI007538; Institutional Training Grant</i> <i>Principle Investigator: B Hjelle</i>	2008 – 2010
MD/PhD Fellowship University of New Mexico School of Medicine	2005 – 2013

ACADEMIC AWARDS / HONORS

Travel Award – AUR Annual Meeting Research Scholar Program	2018
Travel Award – RSNA Annual Meeting Top-rated Scientific Abstract	2016
Certificate of Merit – RSNA Annual Meeting Educational Exhibits	2015
Travel Award – RSNA Annual Meeting Introduction of Academic Radiology Course	2015
Distinction – PhD dissertation defense Biomedical Sciences Graduate Program, UNM	2011
Distinction – PhD oral comprehensive examination Biomedical Sciences Graduate Program, UNM	2009
Top Scientific Poster 2009 Scientific Meeting of ACP – New Mexico Chapter	2009
Graduated with Honors – Warren College University of California San Diego	2002

MANUSCRIPTS

Brunsing RL, Hsiao A. et al. *Free-breathing respiratory self-navigated 4D Flow MRI enables consistent and reproducible quantification of hemodynamic changes in cirrhosis*. In preparation. [Manuscript in preparation](#).

Brunsing RL, Sirlin CB et al. *Gadoxetate-enhanced abbreviated MRI is reliable and effective for HCC surveillance in high-risk patients*. In preparation. [Manuscript in preparation](#).

Brunsing RL, Sirlin CB. *Imaging of focal disease in the cirrhotic liver (LI-RADS)*. 2018 ARRS Categorical Course on Body MRI. [ARRS Course Textbook](#).

Brunsing RL, Schenker-Ahmed N, White N, et al. *Restriction Spectrum Imaging: an evolving imaging biomarker for prostate cancer*. 2016. J Magnetic Resonance Imaging 45(2):323-336. [PMID 27527500](#)

Flavell RR, Behr S, **Brunsing RL**, et al. *The incidence of pulmonary embolism and associated FDG-PET findings in IV contrast-enhanced PET/CT*. 2014. Academic Radiology 21(6):718-25. [PMID 24809314](#)

Brunsing RL, Owens KA, and ER Prossnitz. *The G protein-coupled estrogen receptor (GPER) agonist G-1 expands the regulatory T-cell population under T(H)17 polarizing conditions*. 2013. J Immunotherapy 36(3):190-6. [PMID 23502766](#)

Brunsing RL, and ER Prossnitz. *Induction of interleukin-10 in the T(H)17 effector population by the G protein-coupled estrogen receptor agonist G-1*. 2011. Immunology 134(1):93-106. [PMID 21722102](#)

Brunsing RL, Omori SA, Weber F, et al. *B- and T-cell development both involve activity of the unfolded protein response pathway*. 2008. J Biological Chemistry 283(26):17954-61. [PMID 18375386](#)

Brunsing RL, La Clair C, Tang S, et al. *Characterization of sporulation histidine kinases of Bacillus anthracis*. 2005. J Bacteriology 187:6972-81. [PMID 16199567](#)

ORAL PRESENTATIONS

Brunsing RL, Chen D., Schlein A, Murphy P, Covarrubias, Y., Kuo A, Mendler, M., Vodkin I., Roomba I, Kono Y, Sirlin C. *Gadoxetate-enhanced abbreviated MRI is reliable and effective for HCC surveillance in high risk patients*. [ISMRM 2018](#)

Brunsing RL. *Molecular mechanisms that matter in daily practice*. [San Diego Radiological Society Meeting](#), December 5, 2017.

Brunsing RL, Schlein A, Murphy P, Kuo A, Kono Y, Roomba I, Taouli B, Sirlin C. *Initial Experience using an abbreviated Eovist-based MRI protocol for HCC screening in cirrhotic patients*. [RSNA 2016](#)

Brunsing RL, Kono Y, Kuo A, Sirlin C, Allen M, Vasanawala S, Hsiao A. *Quantification of splanchnic blood flow in cirrhosis with respiratory self-navigated parallel-imaging compressed-sensing 4D flow MRI*. [SCBT-MR Annual Course 2016](#)

Brunsing RL. *Interesting liver cases through the eyes of emerging imaging techniques*. [San Diego Radiological Society Meeting](#), Sept 6, 2016.

Brunsing RL, Hathaway HJ, and ER Prossnitz. *Small molecule induction of regulatory T cells in the Th17 population*. [2010 MD/PhD Student Retreat](#), UNM School of Medicine

Brunsing RL, Hathaway HJ, and ER Prossnitz. *Context-specific induction of regulatory T cells by the GPER-directed agonist G-1*. 2010 Student Research Day, UNM Biomedical Sciences Graduate Program

Brunsing RL, Hathaway HJ, and ER Prossnitz. *Context dependent modulation of T cell populations using the GPR30-directed agonist G-1*. “Works in progress” lecture series: Infectious disease and immunity program, UNM Department of Pathology, 2009

Brunsing RL. *Fluorescent Labeled Cell Sorting of T cells for adoptive transfer and evaluation of autoimmunity*. UNM Shared Flow Cytometry Resource Open House, UNM Health Sciences Center, 2009

Brunsing RL. *Targeting T cells in colitis*. 2009 Student Retreat, UNM Biomedical Sciences Graduate Program

Brunsing RL, Hathaway HJ, and ER Prossnitz. *Estrogen, GPR30, and T cells*. “Works in progress” lecture series: Infectious disease and immunity program, UNM Department of Pathology. October 9th, 2008.

POSTERS / ABSTRACTS

Manidipalli A, Igarashi, S, **Brunsing RL**, Sirlin C. *Lack of standardized terminology and definitions for major imaging features of HCC among clinical practice guidelines released by medical societies*. RSNA 2016

Song B, Hoh C, Rupe E, **Brunsing RL** et al. *Evaluation of compressed sensing image acquisition and processing for single photon emission tomography*. SNMMI Annual Meeting 2016

Brunsing RL, White N, Schenker-Ahmad N, et al. *Restriction Spectrum Imaging: Cellular architecture at eye level*. Educational Exhibit. RSNA 2015

Brunsing RL, Handwerker J, Richman, K. *TB or not TB? That is the question*. Educational Exhibit. RSNA 2015

Flavell R, Behr S, **Brunsing RL**, et al. *The incidence of pulmonary embolism and associated FDG-PET findings in IV contrast-enhanced PET/CT*. SNMMI Annual Meeting 2014

Brunsing RL, Hathaway HJ, and ER Prossnitz. *Small molecule-induced Tregs within the Th17 compartment*. Regulatory Networks in Immunity and Inflammation Conference 2010

Brunsing RL, Hathaway HJ, and ER Prossnitz. *Signaling through the membrane-bound estrogen receptor GPR30 induces IL10 and IL17A expression in Th17 cells*. Annual Meeting of the American Association of Immunologists 2010

Brunsing RL, Hathaway HJ, and ER Prossnitz. *GPR30-induced Tregs: A novel therapeutic approach to reversing colitis*. 2009 Scientific Meeting of the ACP – New Mexico Chapter

Brunsing RL, Hathaway HJ, and ER Prossnitz. *The estrogen receptor GPR30 enhances Th17 differentiation*. 2009 National MD/PhD Student Conference at Keystone, CO

Brunsing RL, Hathaway HJ, and ER Prossnitz. *Estrogen, GPR30, and T cells*. 2008 Student Retreat, UNM Biomedical Sciences Graduate Program

MENTEES

Dennis Chen	12/2016 – 07/2017	Initial clinical experience with abbreviated MRI project
Hashem Almahmoud	12/2016 – current	4D flow MRI in splanchnic vasculature

LEADERSHIP EXPERIENCE

2017-2018 Resident Liaison – San Diego Radiological Society
 2017-2018 Supervisor – Resident Moonlighting at Sharp Memorial Hospital MRI Center, San Diego, CA
 2010-2013 Member – MD Student Research Committee, UNM School of Medicine
 2009-2010 President – New Mexico Society for Student Physician Scientists, UNM School of Medicine
 2009-2010 Student Representative – Steering Committee, UNM Biomedical Sciences Graduate Program
 2008-2009 President – Health Sciences Student Council, UNM Health Sciences Center
 2008-2009 Member – Committee on Long Range Planning – AMA Student Section
 2008-2009 Student Representative – Curriculum Committee, UNM School of Medicine
 2008 Member – Reference Committee for 2008 Annual Meeting – AMA Student Section
 2006-2007 Member – Committee on Legislation and Advocacy – AMA Student Section
 2006-2007 President – New Mexico Student Medical Society, state chapter of the AMA Student Section
 2006-2007 Student Representative – Governing Council, New Mexico Medical Society
 2005-2007 Student Representative – Integrating Group for Medical Education, UNM School of Medicine

TEACHING EXPERIENCE

2017-2018 Co-coordinator and lecturer, Physics for Resident by Residents, UC San Diego
Organized the course and gave lecture on MRI artifacts
 2015 Lecturer, Rad401 MSIV Radiology Course, UC San Diego
Gave lecture on abdominal anatomy to fourth year medical students
 2012 Mentor - “Peer Mentors for USMLE Step I” Project, UNM School of Medicine
Served as a mentor/guide for 2nd year medical student preparing for USMLE Step 1
 2008 Instructor – MCAT training course, Kaplan
Taught entire MCAT training course
 2007 Group Leader – Breakout session on Translational Research, UNM Biomedical Sciences Program
Led small group discussion at graduate student retreat
 2006 Lecturer – Anatomy Review Course, UNM School of Medicine
Gave lecture on abdominal anatomy in preparation for USMLE step 1
 2001-2002 Teaching Assistant – Structural Biochemistry, UC San Diego
Gave weekly lecture and wrote exam questions

COMMUNITY SERVICE AND VOLUNTEER WORK

2017 Volunteer at Alpha Epsilon Delta Annual Health Professional Symposium at UCSD
 2016 Volunteer at Alpha Epsilon Delta Annual Health Professional Symposium at UCSD
 2016 Volunteer at 3D processing lab, AMSER/ACER Radiology Medical Student Expo
 2015-2016 Coordinator, Radiology Resident Journal Club, UC San Diego
 2015 Volunteer at Alpha Epsilon Delta Annual Health Professional Symposium at UCSD
 2012 Panelist representative for MD/PhD program, UNM Health Sciences Center Career Day
 2012 Judge, Student Research Day, UNM Biomedical Sciences Graduate Program
 2011 Judge, Student Research Day, UNM Biomedical Sciences Graduate Program
 2007 Course Director/Organizer – UNM School of Medicine USMLE Step 1 Review Course
 2006-2007 Volunteer, Student Run Homeless Clinic, Albuquerque, NM

PROFESSIONAL MEMBERSHIPS

Radiological Society of North America
 International Society for Magnetic Resonance in Medicine
 Society of Nuclear Medicine and Molecular Imaging
 Society of Abdominal Radiology

American Board of Radiology
American College of Radiology
Association of University Radiologists