

MELISSA A. DURAND, M.D.
CURRICULUM VITAE

Education:

B.A. Human Biology, University of Kansas, Lawrence, KS, August 1999
M.S. Animal Science-Immunology, University of Massachusetts, Amherst, MA, May 2001
M.D. University of Kansas School of Medicine, Kansas City, KS, May 2005

Career/Academic Appointments:

June 2005 – June 2006 Internship, Internal Medicine, St. Vincent's Hospital,
Worcester, MA
June 2006 – June 2010 Residency, Diagnostic Radiology, Hartford Hospital,
Hartford, CT
May 2008 – Sept 2010 Moonlighting Radiologist, Jefferson Radiology, Hartford, CT
Oct 2010 – March 2011 Staff Radiologist, Jefferson Radiology, Hartford, CT
July 2011 – July 2012 Fellow, Diagnostic Radiology Yale New Haven Hospital/ Yale School of
Medicine, New Haven, CT
August 2012 – present Assistant Professor, Diagnostic Radiology, Yale New Haven Hospital
/Yale School of Medicine, New Haven, CT

Administrative Positions: None

Board Certification: American Board of Radiology
6/30/2010 - Oral Boards, passed
1/29/2010 - Written Boards, passed
9/4/2008 - Physics Boards, passed

Professional Honors and Recognition:

National:

2017: Nominated for Aunt Minnie Scientific Paper of the Year
Rafferty EA, Rose SL, Miller DP, **Durand MA**, Conant EF, Copit DS, Friedewald SM, Plecha
DM, Ott IL, Hayes MK, Carlson KL, Cink TM, Barke LD, Greer LN, Niklason LT. Effect of age
on breast cancer screening using tomosynthesis in combination with digital
mammography. *Breast Cancer Research and Treatment* 2017: 1-8.

2016: Aunt Minnie Scientific Paper of the Year Award
Rafferty EA, **Durand MA**, Conant EF, Copit DS, Friedewald SM, Plecha DM, Miller DP. Breast
Cancer Screening Using Tomosynthesis and Digital Mammography in Dense and Non-Dense
Breasts. *Journal of the American Medical Association (JAMA)*. 2016 315(16):1784-6

2016: Accepted to ARRS Clinician Educator Development Program, Los Angeles, CA

2014: Certificate of Merit Award

Wang S, **Durand M**, Tavassoli F, Raghu M, Hooley R, Philpotts L. Tomosynthesis-detected Architectural Distortion: Management Algorithm with Imaging-Pathology Correlation. RSNA Annual Meeting, Chicago, IL.

2014: Summa cum laude Award for the scientific program

Philpotts L, Andrejeva L, Horvath L, Geisel J, Raghu M, **Durand M**, Butler R. Practical aspects of technologist performed screening breast ultrasound. ARRS Annual Meeting, San Diego, CA.

2013: Magna cum laude Award for the scientific program

O'Connell S, Butler R, **Durand M**, Hooley R, Horvath L, Raghu M, Andrejeva L, Philpotts L. Digital Breast Tomosynthesis and Breast Cancer Visualization in High-Risk Women. ARRS Annual Meeting, Washington, D.C.

2012: Certificate of Merit Award

Durand M, Butler RS, Flynn C, Tavassoli F, Raghu M, Andrejeva L, Geisel J, Hooley R, Horvath L, Philpotts LE. The Digital Breast Tomosynthesis (DBT) Appearance of Breast Cancer: Comparison with 2D Mammography. RSNA Annual Meeting, Chicago, Illinois.

2012: Certificate of Merit Award

Philpotts LE, Hooley R, Horvath L, Butler RS, **Durand M**, Raghu M, Geisel J, Andrejeva L. How Digital Breast Tomosynthesis Can Help Characterize Benign Findings on Mammograms. RSNA Annual Meeting, Chicago, Illinois

Grant/Clinical Trials History:

Active Grant:

Agency: Hologic, Inc.
I.D. # HIC# 1303011637 (Interval cancers- project 3)
Title: "Performance Measures Assessment Before And After Introduction Of Breast Tomosynthesis Into The Screening Environment"
Role: Overall and Yale Site Principal Investigator
Grant award: \$42,611.11
Percent effort: 10%
Project period: through December 2017

Past Grants:

Agency: Hologic, Inc.
I.D. # HIC# 1303011637 (Age and Density- project 2)
Title: "Performance Measures Assessment Before And After Introduction Of Breast Tomosynthesis Into The Screening Environment"
Role: Yale Site Principal Investigator
Grant award: \$19,500 (project 2)

Percent effort: 10%
Project period: Completed 2016

Agency: Hologic, Inc.
I.D. # HIC# 1303011637 (Recall rates and Cancer detection- project 1)
Title: "Performance Measures Assessment Before And After Introduction Of Breast Tomosynthesis Into The Screening Environment"
Role: Yale Site Principal Investigator
Grant award: \$20,000 (project1);
Percent effort: 10%
Project period: Completed 2014

Agency: Lion Heart Pilot Grant
I.D. # HIC# 1401013355
Title: "C-View + 3D Tomosynthesis in the Clinical Environment: Can we decrease radiation dose and maintain increased cancer detection with decreased recall rates?"
Role: Principal Investigator
Grant award: \$18,000
Percent effort: 10%
Project period: January 2014-January 2015

Invited Speaking Engagements, Presentations, Symposia & Workshops Not Affiliated With Yale:

International/National:

2017: DETECT Breast Course, Cairo, Egypt- October 26-27, 2017
"Practical Applications for Digital Breast Tomosynthesis"

2017: 5th Annual Think Pink Conference, Bangkok Thailand- September 7-8, 2017
"Digital Breast Tomosynthesis Adoption in the U.S."
"Synthesized Mammography Case Review"
"U.S. Breast Density Legislation: Origins, Issues, and Options"

2017: ARRS Annual Meeting, New Orleans, LA- May 1, 2017
Keynote speaker for the Breast Scientific Session: "Use of Synthesized 2D Mammography in Digital Breast Tomosynthesis"

2015: Applied Radiology Expert Forum Webinar
"Digital Breast Tomosynthesis Webinar Update"

2015: ARRS Annual Meeting, Toronto, Canada- April 24, 2015
Keynote speaker for the Breast Scientific Session: "Screening Mammography with Tomosynthesis: What we recall and what we don't".

2015: ARRS Annual Meeting, Toronto, Canada- April 24, 2015
Moderator for Breast Scientific Session 26.

- 2014: 26th Annual Conference: Breast Cancer in the 21st Century: Imaging, Diagnosis, Innovations. Jointly sponsored by the Office of Continuing Education of the University of Virginia School of Medicine and the Ellen Shaw de Paredes Breast Cancer Foundation.
Workshop: Ultrasound-guided breast biopsy
“MRI BIRADS: Updates and Revisions”
“Screening Breast Ultrasound: The Connecticut Experience”
“Tomosynthesis in the Diagnosis of Benign and Malignant Disease”
- 2013: Invited speaker on Breast Tomosynthesis at Hologic Congressional Meetings, Washington, DC.
Addressed Members of the Senate and House Connecticut delegation.
- 2013: Applied Radiology Expert Forum Webinar
“Breast Tomosynthesis: Where we are and where we’re going”
- 2013: Applied Radiology Expert Forum Webinar
“Breast Tomosynthesis: Incorporating digital breast tomosynthesis into your practice”
- 2012: Invited speaker on Breast Tomosynthesis at Congressional Meetings, Washington, DC.
Addressed the Senate Finance Committee Majority Staff Meeting, House Energy and Commerce Committee Majority Health Meeting, and House Ways and Means Majority Health Meeting. Held individual meetings with Congressman Frank Wolf (R-Va) and several breast cancer interest groups.

Regional:

- 2017: NERRS Core Review Course- May 5, 2017
“Basic Concepts of Breast Imaging”
- 2017: NERRS Annual Breast Imaging Refresher Course- March 4, 2017
“Architectural Distortion on Digital Breast Tomosynthesis: problem solving tips and tools”
- 2013: Connecticut Society of Radiology Technologists Annual Conference.
“Tomosynthesis in the Diagnosis of Benign and Malignant Disease”

Peer-Reviewed Presentations & Symposia Given at Meetings Not Affiliated With Yale:

National:

- 2016: RSNA Annual Meeting, Chicago, IL.
Trends in Screening Mammography Interpretation over 5 Years with Digital Breast Tomosynthesis: Are Recall and Cancer Detection Rates Maintained?
Chen C, **Durand M**, Raghu M, Hooley R, Philpotts L.
- 2016: ARRS Annual Meeting, Los Angeles, CA
Pediatric Breast Masses: Disease and Management
Wang W, Graeber B, **Durand M**.

- 2016: ARRS Annual Meeting, Los Angeles, CA
Retroareolar Masses Found on Screening Ultrasound: Can biopsy be avoided?
Guo Y, Raghu M, **Durand M**, Tavassoli F, Philpotts L, Hooley R.
- 2016: ARRS Annual Meeting, Los Angeles, CA
Supplementary Views in the Era of Tomosynthesis
Geisel J, Andrejeva L, Raghu M, Hooley R, Levesque P, **Durand M**, Philpotts L.
- 2016: ARRS Annual Meeting, Los Angeles, CA
Performance of screening tomosynthesis by age
Philpotts L, Raghu M, Wu X, Sheiman L, **Durand M**, Hooley R, Forman H.
- 2016: Society of Breast Imaging (SBI) Annual Meeting, Austin, TX
Trends in screening mammography interpretation over 4 years with digital breast tomosynthesis: are recall and cancer detection rates maintained?
Chen C, **Durand M**, Raghu M, Philpotts L.
- 2015: RSNA Annual Meeting, Chicago, IL.
Synthesized 2D Mammography+Tomosynthesis: *Can we see clearly?*
Durand M, Raghu M, Geisel J, Hooley RJ, Philpotts LE.
- 2015: RSNA Annual Meeting, Chicago, IL.
Biopsy Outcomes Following Diagnostic Work-up with Digital Breast Tomosynthesis
Raghu M, **Durand M**, Andrejeva L, Hooley RJ, Geisel J, Philpotts L.
- 2015: RSNA Annual Meeting, Chicago, IL.
Update on Technologist-performed, Screening Breast Ultrasound in Women with Dense Tissue 5 Years after CT Public Act No. 09-41: How Are We Doing Now?
Philpotts, LE, Raghu M, **Durand M**, Horvath L, Butler R, Levesque P.
- 2015: RSNA Annual Meeting, Chicago, IL.
Analysis of False Negative Exams in 2D and Tomosynthesis Screening Mammography: Comparison by Breast Density
Philpotts LE, Thomson C, **Durand M**, Raghu M, Hooley RJ.
- 2015: RSNA Annual Meeting, Chicago, IL.
Decreasing Rates of Atypia with Digital Breast Tomosynthesis
Raghu M, **Durand M**, Andrejeva L, Geisel J, Hooley RJ, Killelea B, Philpotts L.
- 2015: RSNA Annual Meeting, Chicago, IL.
Detailed Analysis of Breast Cancer Appearance on Tomosynthesis: Correlation with Molecular Profile
Narin O, Levesque P, Andrejeva L, Sheiman L, Raghu M, **Durand M**, Hooley R, Geisel J, Horvath L, Butler R, Philpotts L.

- 2014: RSNA Annual Meeting, Chicago, IL.
Effect of Experience on Tomosynthesis Screening Recall Patterns: Is there a Learning Curve?
Durand M, Hooley RJ, Raghu M, Geisel J, Andrejeva L, Butler R, Horvath L, Philpotts L.
- 2014: RSNA Annual Meeting, Chicago, IL.
Tomosynthesis-detected Architectural Distortion: Management Algorithm with Imaging-Pathology Correlation.
Certificate of Merit
Wang S, **Durand M**, Tavassoli F, Raghu M, Hooley R, Philpotts L.
- 2014: RSNA Annual Meeting, Chicago, IL.
Reducing False Positive Biopsy Rate of Screening Ultrasound Detected Breast Masses.
Wells J, Hooley R, Raghu M, **Durand M**, Levesque P, Andrejeva L, Horvath L, Philpotts L.
- 2014: RSNA Annual Meeting, Chicago, IL.
Malignancy in BI-RADS 3 Studies Performed with Tomosynthesis.
Raghu M, Geisel J, Hooley R, Butler R, **Durand M**, Philpotts L.
- 2014: RSNA Annual Meeting, Chicago, IL.
Tomosynthesis in the Diagnostic Setting: Changing Rates of BIRADS Final Assessment Categories over Time.
Raghu M, Geisel J, Hooley R, Butler R, **Durand M**, Philpotts L.
- 2014: RSNA Annual Meeting, Chicago, IL.
Screening Recalls after Tomosynthesis Mammography: Are Additional Mammographic Views Necessary?
Geisel J, Andrejeva L, Raghu M, **Durand M**, Levesque P, Philpotts L.
- 2014: RSNA Annual Meeting, Chicago, IL.
Getting Worked Up Over Nothing: Strategies to Further Reduce False Positives from Tomosynthesis Screening Mammography
Philpotts L, Steenbergen S, Geisel J, Wright L, Raghu M, **Durand M**, Levesque P.
- 2014: SIS World Congress on Breast Imaging, Orlando, FL. October 2014. Screening Breast Tomosynthesis and Ultrasonography in Women with Dense Breasts: How same day combined performance decreases BIRADS 0 rates.
Philpotts L, Thomson C, **Durand M**, Hooley R.
- 2014: ARRS Annual Meeting, San Diego, CA
The Effect of Radiologist Experience on Handheld Whole Breast Ultrasound
Hashemi-Zonouz T, Geisel J, Raghu M, **Durand M**, Philpotts L, Hooley R.
- 2014: ARRS Annual Meeting, San Diego, CA
Should Screening Ultrasound Be Performed on the Same Day as Mammography?
Dave H, Raghu M, Geisel J, **Durand M**, Butler R, Horvath L, Philpotts L, Hooley R.

- 2014: ARRS Annual Meeting, San Diego, CA
Practical aspects of technologist performed screening breast ultrasound
Philpotts L, Andrejeva L, Horvath L, Geisel J, Raghu M, **Durand M**, Butler R.
- 2013: RSNA Annual Meeting, Chicago, IL.
Digital Breast Tomosynthesis in Diagnostic Mammography: Can Tomo Affect the Final Assessment Categories?
Raghu M, Hooley R, Philpotts L, Geisel J, **Durand M**, Andrejeva L, Horvath L, Butler R.
- 2013: RSNA Annual Meeting, Chicago, IL.
Performance of Whole Breast Ultrasound in Women With Dense Breasts Following 3D Tomosynthesis Mammography.
Hooley RH, Raghu M, Geisel J, **Durand M**, Philpotts L.
- 2013: ARRS Annual Meeting, Washington, D.C.
Utility of MRI in Patients with Known Breast Cancer and Recent Tomosynthesis Examination
Haas B, **Durand M**, Butler R, Geisel J, Raghu M, Duarte M, Beck N, Philpotts L.
- 2013: ARRS Annual Meeting, Washington, D.C.
Digital Breast Tomosynthesis and Breast Cancer Visualization in High-Risk Women
Magna cum laude award
O'Connell S, Butler R, **Durand M**, Hooley R, Horvath L, Raghu M, Andrejeva L, Philpotts L.
- 2013: ARRS Annual Meeting, Washington, D.C.
Suspicious Breast Lesions Visible on Tomosynthesis and Occult on 2D Mammography - Imaging Features and Histology
Marx S, Butler R, **Durand M**, Hooley R, Horvath L, Raghu M, Andrejeva L, Philpotts L.
- 2013: ARRS Annual Meeting, Washington, D.C.
One-View versus Two-View Tomosynthesis – A Comparison of Breast Cancer Visibility in the MLO and CC Views
Beck N, Butler R, **Durand M**, Andrejeva L, Hooley R, Horvath L, Raghu M, Philpotts L.
- 2013: ARRS Annual Meeting, Washington, D.C.
Cancer Detection Rates on Screening 2D versus combined 2D + Tomosynthesis Imaging
Geisel J, Raghu M, **Durand M**, Haas B, Philpotts L, Lapia K, Hooley R, Butler R.
- 2013: ARRS Annual Meeting, Washington, D.C.
Comparison of tomosynthesis and spot compression views
Duarte M, Butler R, **Durand M**, Andrejeva L, Hooley R, Horvath L, Raghu M, Philpotts L.
- 2012: RSNA Annual Meeting, Chicago, Illinois
The Digital Breast Tomosynthesis (DBT) Appearance of Breast Cancer: Comparison with 2D Mammography

Certificate of Merit

Durand M, Butler RS, Flynn C, Tavassoli F, Raghu M, Andrejeva L, Geisel J, Hooley R, Horvath L, Philpotts LE.

- 2012: RSNA Annual Meeting, Chicago, Illinois
Comparability of Digital Breast Tomosynthesis with Conventional Mammography, Ultrasonography and MRI for Tumor Measurement
Chen C, **Durand M**, Butler RS, Philpotts LE.
- 2012: RSNA Annual Meeting, Chicago, Illinois
Effect of Digital Breast Tomosynthesis Screening on Diagnostic Work-up Patterns
Butler RS, Hui A, Chen C, **Durand M**, Philpotts LE.
- 2012: RSNA Annual Meeting, Chicago, Illinois
How Digital Breast Tomosynthesis Can Help Characterize Benign Findings on Mammograms
Certificate of Merit
Philpotts LE, Hooley R, Horvath L, Butler RS, **Durand M**, Raghu M, Geisel J, Andrejeva L.
- 2012: ARRS Annual Meeting, Vancouver, Canada
Role of 3T Imaging in MR-Guided Breast Biopsies: Improved reproducibility of findings and fewer cancelled biopsies
Durand M, Butler RS, Raghu MR, Andrejeva L, Geisel J, Hooley R, Horvath L, Philpotts LE.
- 2012: ARRS Annual Meeting, Vancouver, Canada
Initial Clinical Experience with Digital Breast Tomosynthesis for Screening Mammography
Durand M, Haas B, Raghu MR, Andrejeva L, Butler RS, Geisel J, Hooley R, Horvath L, Philpotts LE.
- 2012: Annual Meeting of the Plastic Surgery Council, Ann Arbor, Michigan
The Impact of Breast Implants on NAC Perfusion, in vivo
Teng E, Lentz RK, Broer PB, **Durand M**, Raghu M, Kwei SK.

Professional Service

Journal Service: Reviewer for European Radiology

Professional Service for Professional Organizations

2014-present: Scientific Program Subcommittee Member, American Roentgen Ray Society.

Yale University Service:

2017- present: Smilow Workflow Taskforce: attending physician member to improve workflow efficiency within Radiology at the Smilow Breast Center.

2012-present: Yale Medical Professions Outreach Program: Host for shadowing students

2012: Fellow Handbook: authored a handbook for incoming Breast Fellows.

Public Service:

2016- present: RAD-AID Chapter member

Bibliography:

Peer-Reviewed Original Research

1. Haas B, Kalra V, Geisel J, Raghu M, **Durand M**, Philpotts L. "Performance of Digital Breast Tomosynthesis Compared to Conventional Digital Mammography for Breast Cancer Screening", *Radiology* 2013 269(3), 694-700.
2. Friedewald SM, Rafferty EA, Rose SL, **Durand MA**, Plecha DM, Greenberg JS, Hayes MK, Somers Copit D, Carlson KL, Cink TM, Barke LD, Breer LN, Miller DP, Conant EF. "Breast Cancer Screening Using Tomosynthesis in Combination With Digital Mammography", *Journal of the American Medical Association (JAMA)*. 2014 311(24), 2499-2507.
3. **Durand M**, Haas B, Yao X, Geisel J, Raghu M, Hooley R, Horvath L, Philpotts LE. "Early Clinical Experience with Digital Breast Tomosynthesis for Screening Mammography", *Radiology* 2015 274, 85-92.
4. Rafferty EA, **Durand MA**, Conant EF, Copit DS, Friedewald SM, Plecha DM, Miller DP. Breast Cancer Screening Using Tomosynthesis and Digital Mammography in Dense and Non-Dense Breasts. *Journal of the American Medical Association (JAMA)* 2016 315(16): 1784-1786.
5. Raghu M, **Durand MA**, Andrejeva L, Goehler A, et al. Tomosynthesis in the Diagnostic Setting: Changing Rates of BI-RADS Final Assessment over Time. *Radiology*. 2016 281(1):54-61.
6. Teng E, Broer PN, Heidekrueger PI, Forte AJ, Lentz R, **Durand M**, Raghu M, Kwei SL. In vivo changes of breast perfusion after augmentation. *Aesthetic Surgery Journal* 2016 36(10):1133-1140.
7. Rafferty EA, Rose SL, Miller DP, **Durand MA**, Conant EF, Copit DS, Friedewald SM, Plecha DM, Ott IL, Hayes MK, Carlson KL, Cink TM, Barke LD, Greer LN, Niklason LT. Effect of age on breast cancer screening using tomosynthesis in combination with digital mammography. *Breast Cancer Research and Treatment* 2017: 1-8.

Chapters, Books, Reviews

1. **Durand, MA** and Philpotts LE. Chapter 5 Tomosynthesis in Screening Mammography. *Breast Tomosynthesis*. 2017 Elsevier, Philadelphia, PA.
2. **Durand MA** (contributing author), Scoutt LM, Hamper UM, Angtuaco TL (editors). *Ultrasound*. 2017, Oxford University Press, New York, NY.
3. **Durand MA**, Philpotts LE. Can Tomosynthesis Replace 2D Mammography as a Future Breast Screening Tool? *Current Breast Cancer Reports* 2016 8(4) 213-220.
4. Hooley RJ, **Durand MA**, Philpotts LE. Advances in Digital Breast Tomosynthesis. *AJR Am J Roentgenology* 2017 Feb 208(2):256-66.
5. **Durand MA**, Hooley RJ. Implementation of Whole-Breast Screening Ultrasonography. *Radiologic Clinics of North America*. 2017 55(3): 527-539.

Peer-Reviewed Educational Materials

1. **Durand M**, Wang S, Tavassoli F, Raghu M, Hooley R, Philpotts L. Tomosynthesis-detected Architectural Distortion: Management Algorithm with Imaging-Pathology Correlation. *Radiographics* 2016 36, 311-321.

Case Report

1. **Durand M**, Philpotts LE. Tomosynthesis improves cancer detection and simplifies workup of suspected abnormalities, *Applied Radiology Clinical Case Review*. October 2012, page 18-19.
2. Samim M, Honarpisheh H, **Durand M**, Butler R. Breast Fibromatosis *ACR Case in Point* August 2013.

Scholarship in Press

Chapters

1. **Durand M**. Architectural Distortion Chapter. *Rotations in Radiology: Breast Imaging*, Oxford press, chapter submitted, manuscript in progress.