

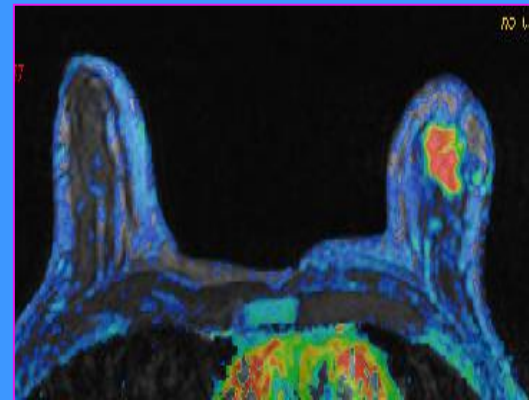
# Why Choose Breast Radiology?

Hannah Gay

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BSBR exec committee trainee representative.

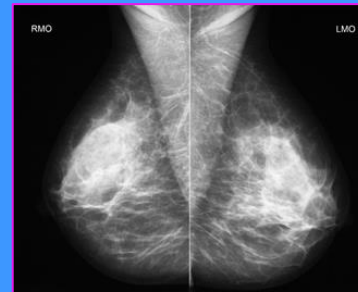
# Introduction

- Breast cancer is the most common cancer in the UK.
- Lifetime risk of 1 in 8 for UK women
- In 2011, nearly 50000 women diagnosed and 11,700 deaths.
- In the UK financial year 09/10, NHSBSP diagnosed 16,500 cases.
- Incidence rates have increased by 72% since the mid 70's.
- Survival rate have improved for last 40 years. Now 2/ 3 women will survive beyond 20 years and 80% survive beyond 5 years.
- Breast radiology is a rapidly expanding & advancing specialty that is well worth consideration when choosing subspecialty training.



# Why trainees don't choose breast radiology

- If your training scheme is not a breast centre, limited exposure to subspecialty.
- Common misconceptions: Endless mammo reading in the dark and ultrasounding fibroadenomas.
- This talk will endeavour to dispel these myths!

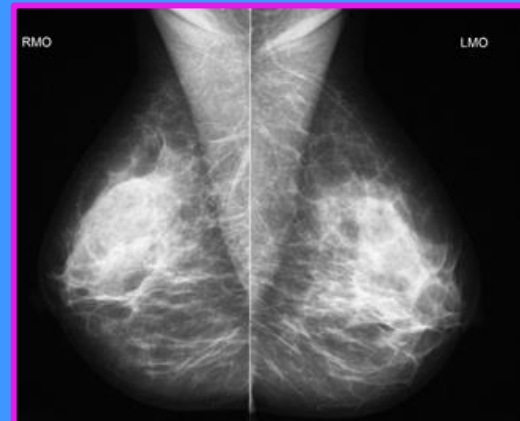


# Patient interaction

- Some miss patient contact when entering radiology.
- Breast radiology has a good balance between mammo reading/cross section/procedures and seeing patients in clinic.
- Screening assessment: whole consultation from history and examination to imaging, intervention and referral.
- Breaking bad news & reassuring those without cancer.

# Team working

- Many subspecialties mainly present imaging findings at MDT.
- As breast radiologists are involved in diagnostic intervention and treatment of patients, they have a crucial MDT role in decision making as regards further management.
- Collaborative working:
  - One stop clinics
  - Double reporting

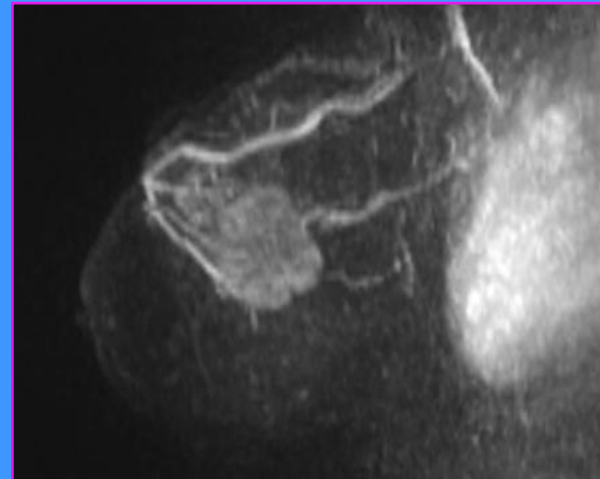


# Performance security & continual feedback

- PERFORMS: Personal Performance in Mammographic Screening (Self assessment tool)
- A key issue is how to improve and maintain image interpretation skills.
- Anonymous and detailed feedback. Performance review in comparison to UK peers.
- Initially daunting but actually in the most part reassuring and provides key information as to areas for improvement.
- Triple assessment and one stop clinics gives ongoing feedback and allows continuous improvement performance.
- Double reporting

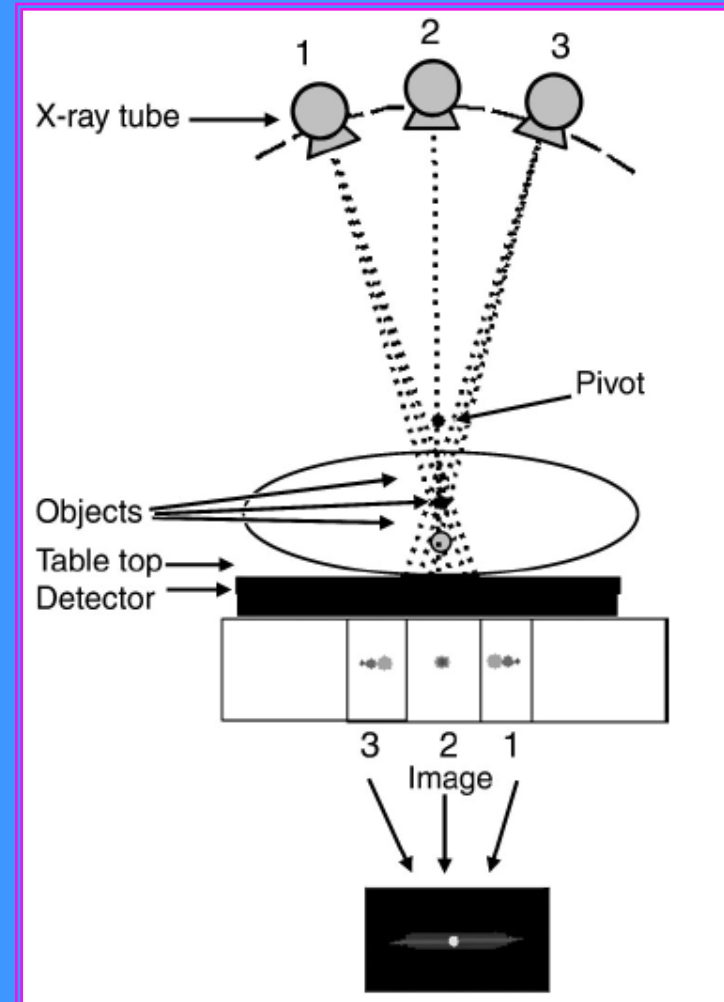
# Multiple technological advancements

- **Recent advances:**
  - Digital Breast Tomosynthesis (DBT)
  - US Elastography
  - Volumetric ultrasound
  - Functional MR (DWI)
  - PET
- **Current research tools:**
  - Contrast enhanced mammography
  - Breast CT
  - MR elastography
  - CAD

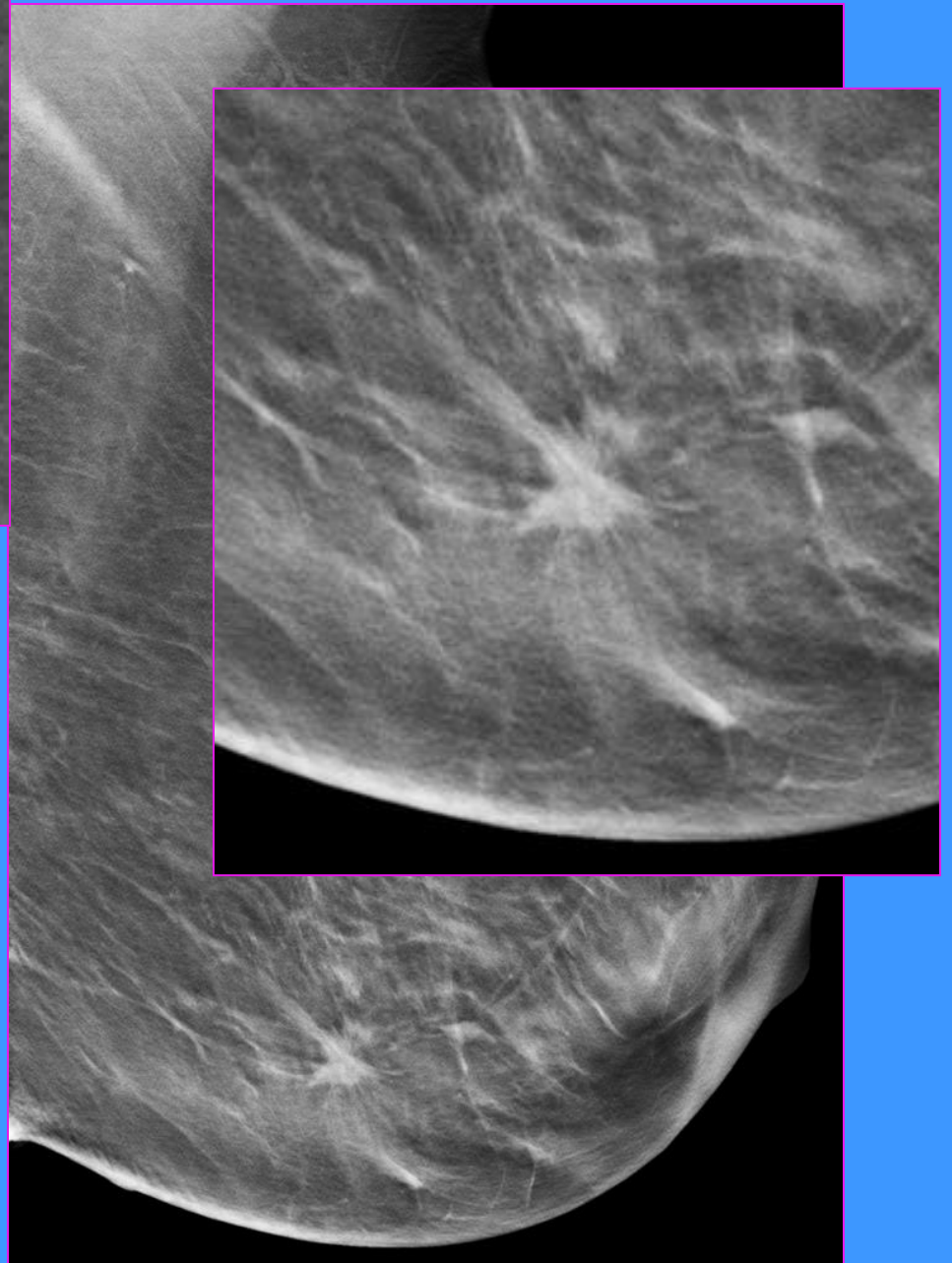
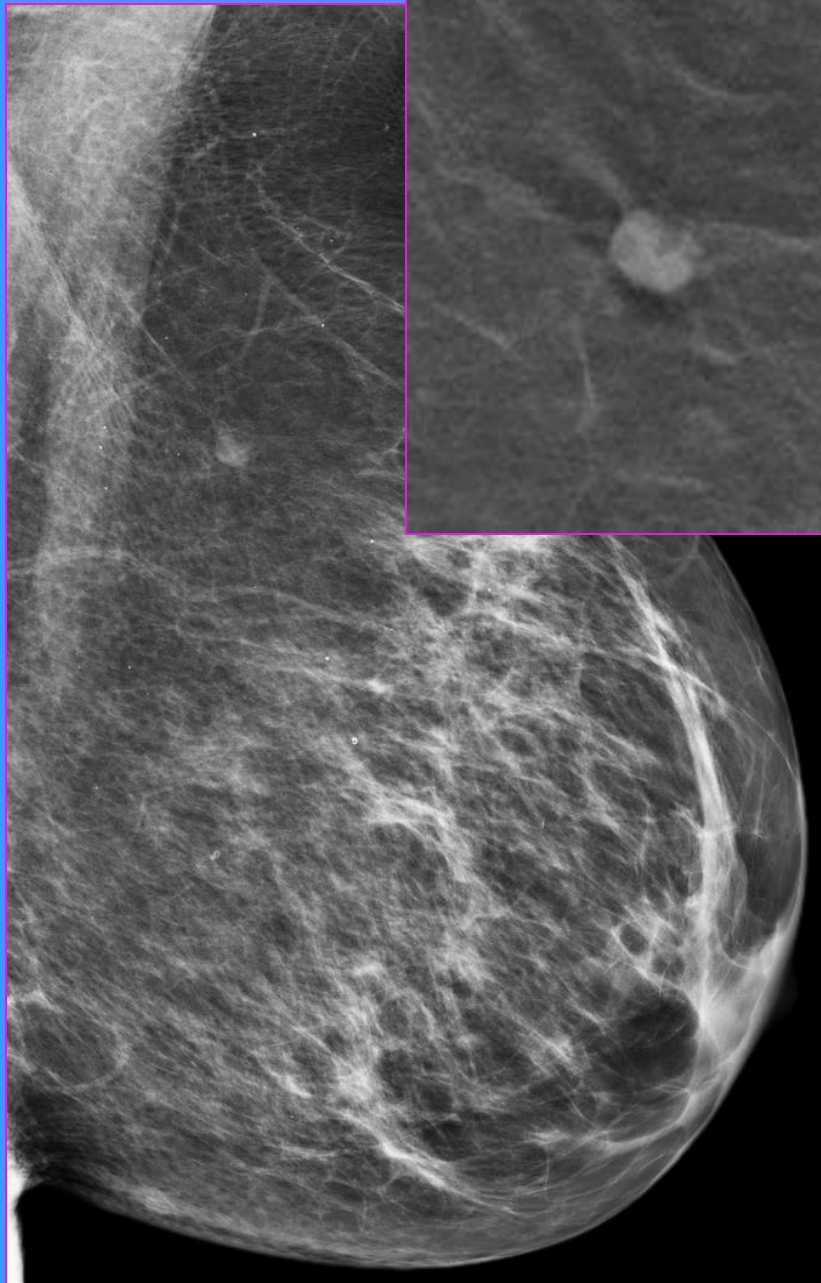


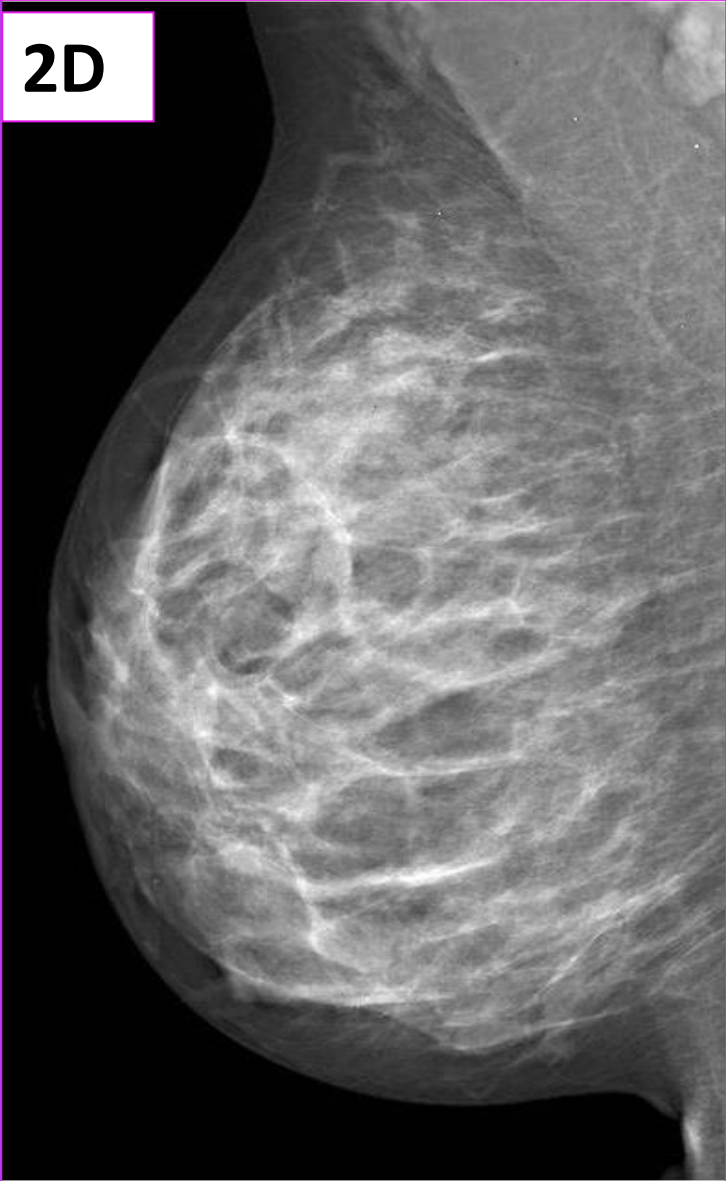
# DBT

- Eliminates overlapping structures and improves lesion visibility
- Digital images reconstructed into high resolution slices.



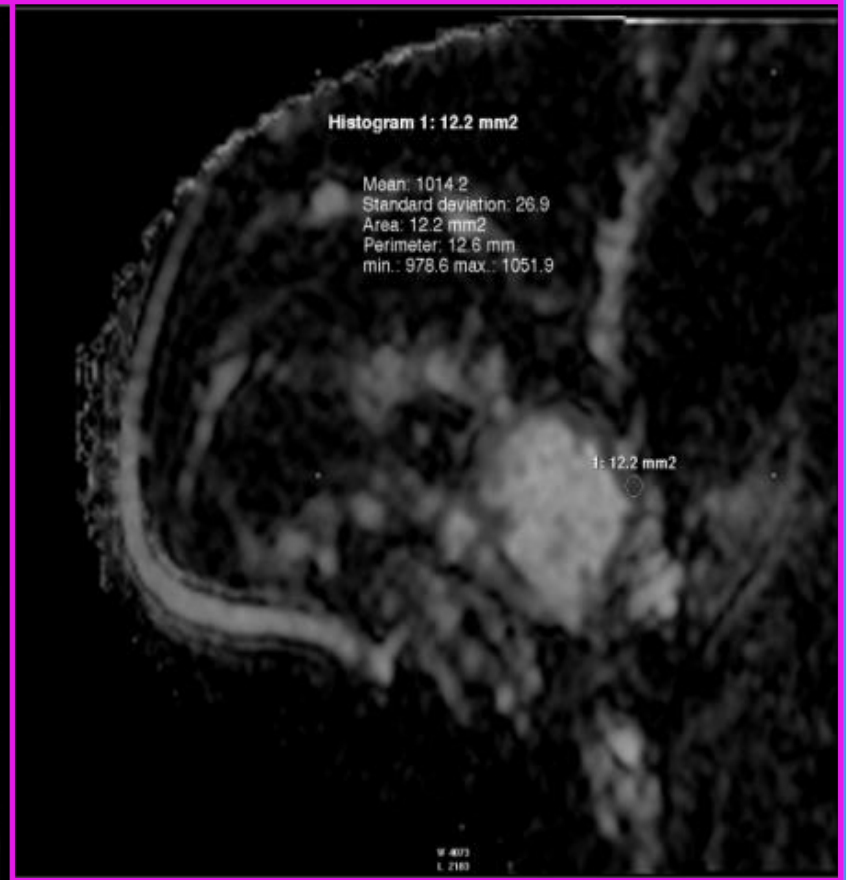
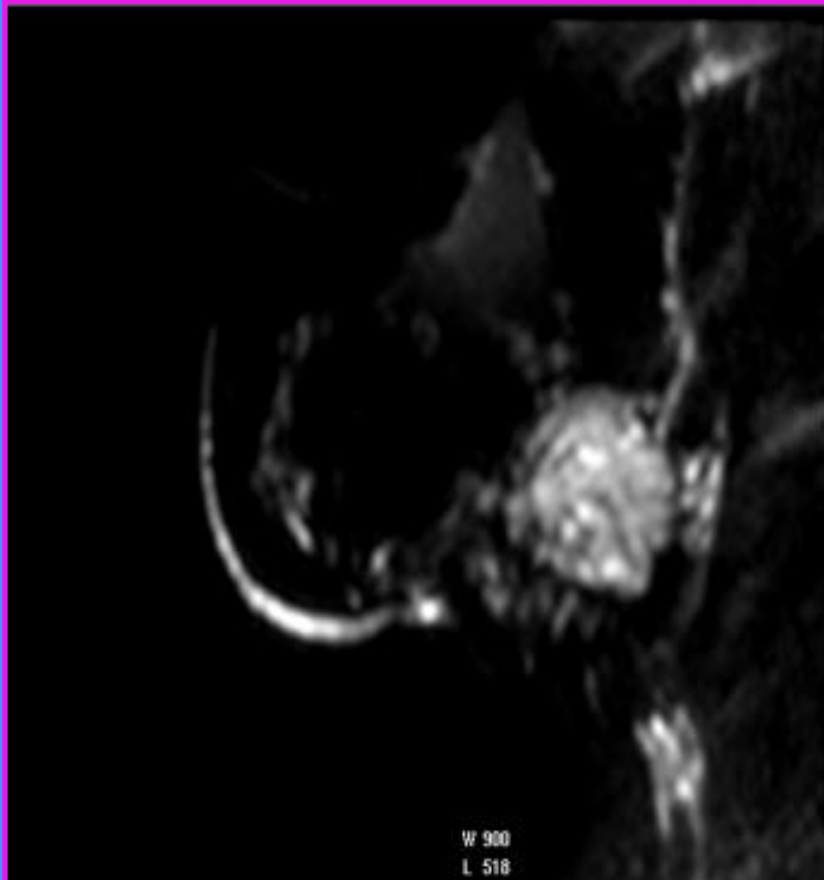






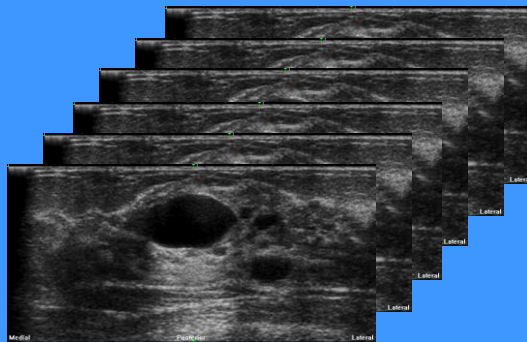
Courtesy of Ingyar Andersson

# Functional MRI (DWI)

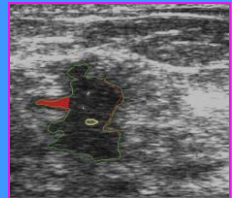




**Volumetric Ultrasound  
Data Set**

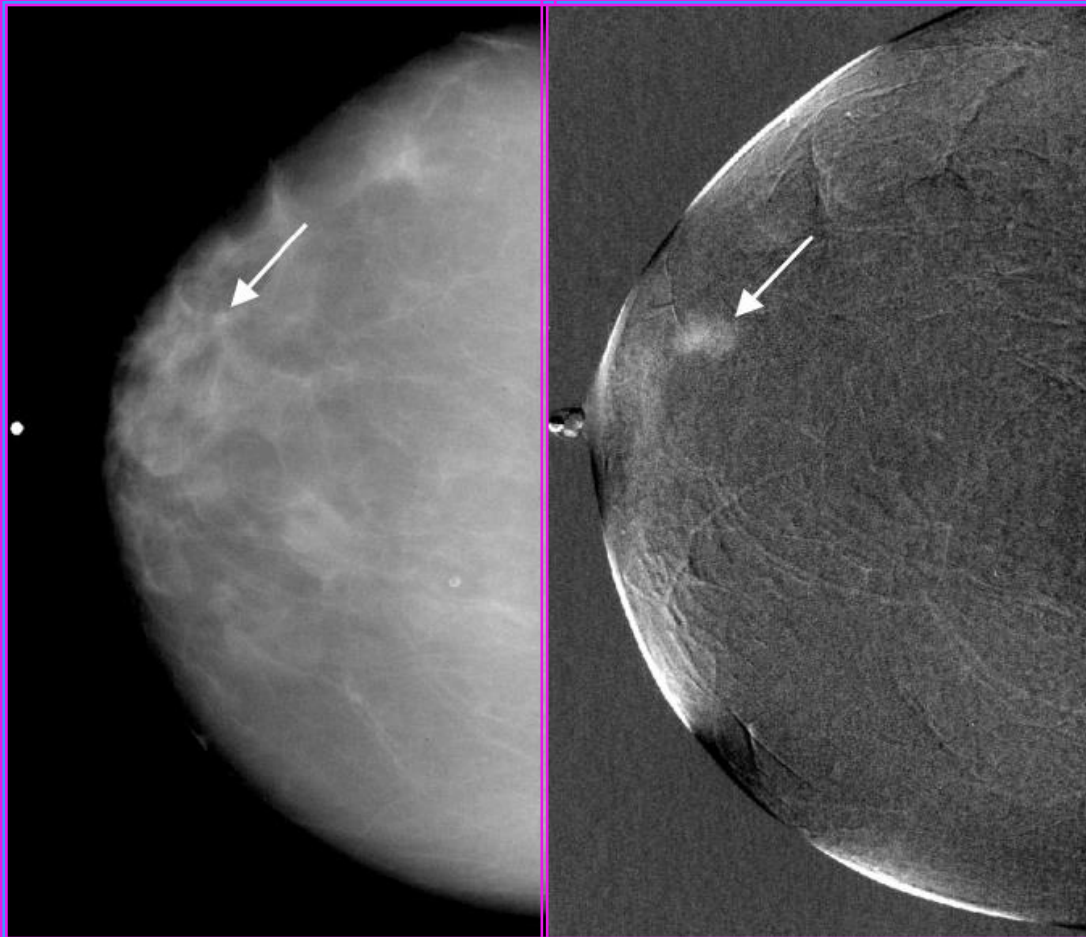


**Self extraction**



# Contrast enhanced mammography

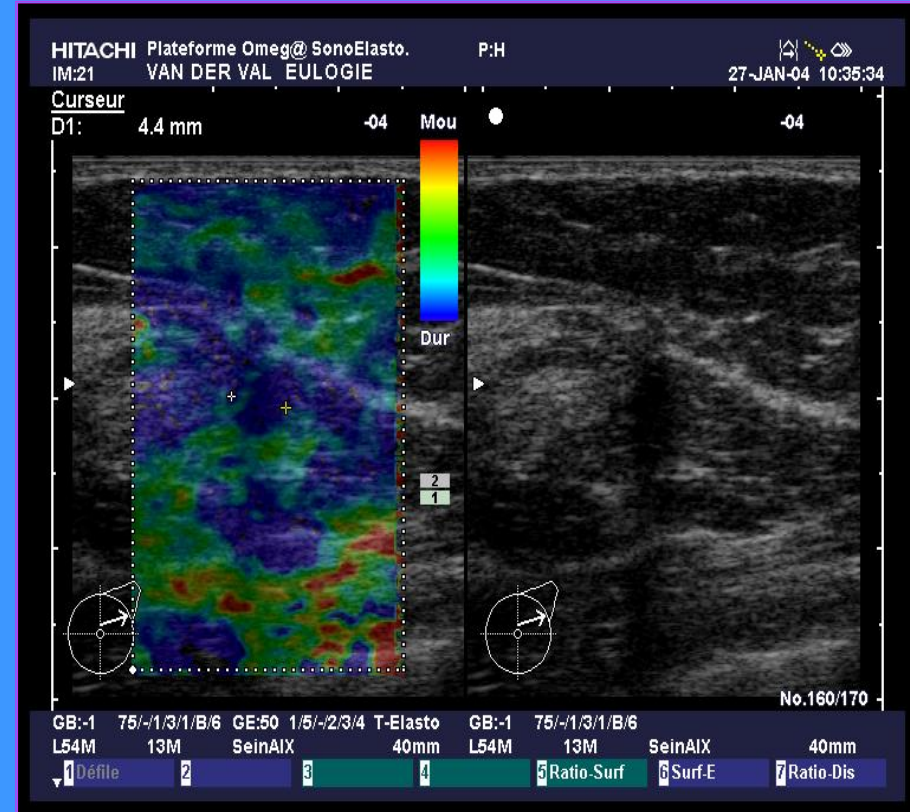
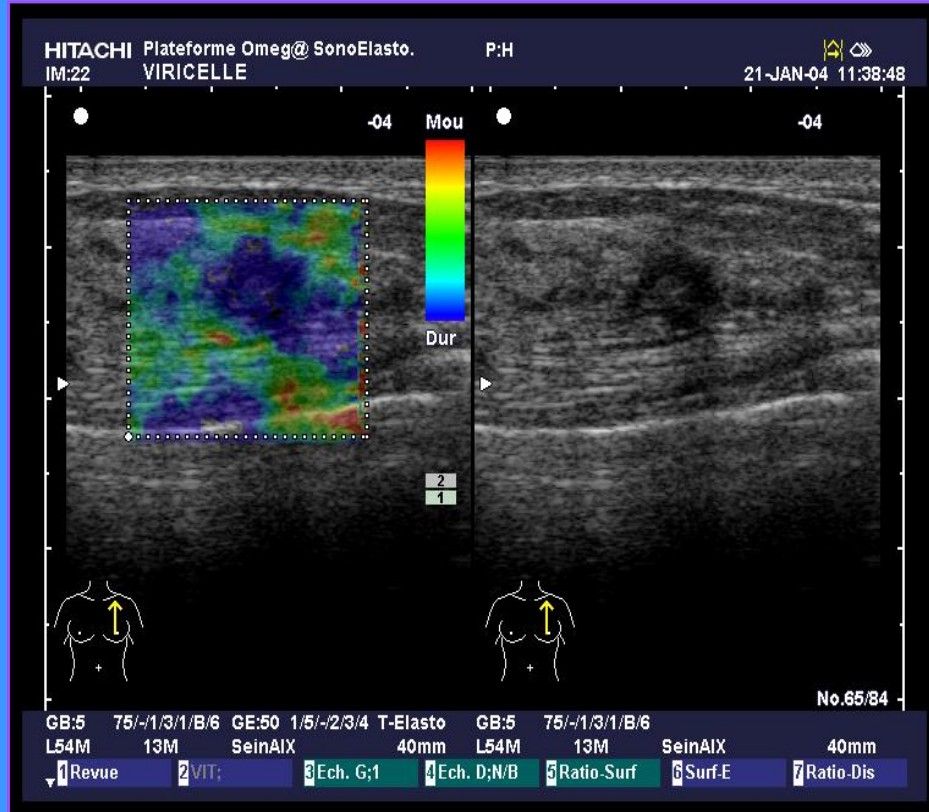
- **2 techniques:**
  - Standard subtraction
  - Dual energy



Etta D. Pisano, MD  
Martin J. Yaffe, PhD

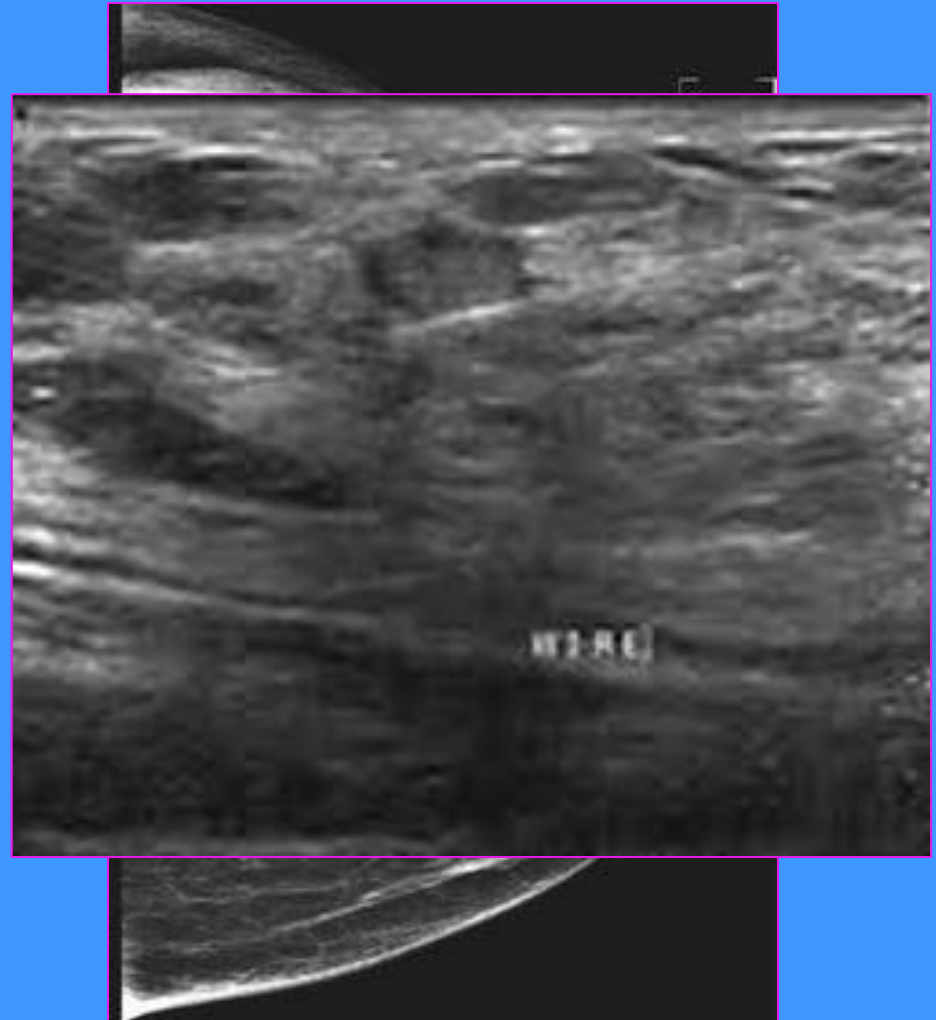
Published online  
10.1148/radiol.2342030897  
Radiology 2005; 234:353–362

# Elastography



# Multimodality diagnostics and intervention

- Mammography
- Ultrasound
- MRI
  
- FNA
- Aspiration
- 14G Core biopsy
- Wire localisations
- Vacuum Biopsy



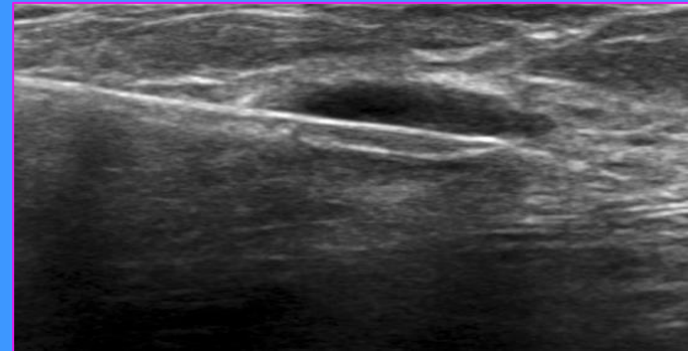
# Vacuum biopsy





# Treating patients

- Aspiration of abscesses/seromas etc
- Vacuum excision of benign lesions eg fibroadenomas, obviating need for GA and surgery.
- Future: VACE of Small Grade 1 cancers.

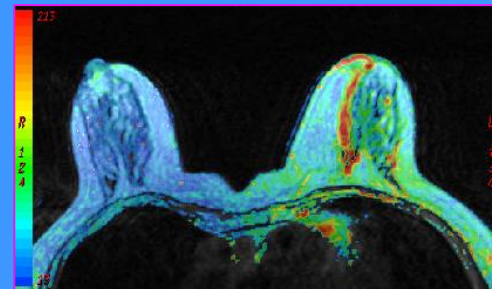


# Flexible working practice

- Very little if no out of hours work.
- Many part time trainees.
- Work/life balance
- Flexibility within subspecialty – clinical and research.
- Combines well with many other subspecialties/general radiology
  
- Consultant jobs available nationally:
  - Demands and work load increasing
  - Impending retirements (national screening programme started in 1988).

# Summary

- A more diverse specialty than meets the eye.
- Rapidly advancing technology
- Patient interaction
- Multimodality diagnostics & intervention
- Patient treatment
- Regular performance feedback
- Flexible working and jobs available.
- BSBR welcomes trainees members. We are a small and friendly community!



# Questions

## NHS Breast Screening Programme (NHSBSP)



YES, I DID HAVE MY MAMMOGRAM  
TODAY... WHY DO YOU ASK?

