

EUSOBI YOUNG CLUB

MEET THE EXPERTS 3 TOP TIPS

AI IN BREAST IMAGING

Fiona Gilbert

1. Before embarking on an AI project make sure you understand how a reliable AI tool is created and tested.
2. Ensure that the TVT acronym is followed – Train, Validate, Test and that the test is undertaken on a new unseen dataset ideally from a different source or timepoint.
3. Think about whether or not an AI tool will make a clinical impact before deciding to work with that particular tool.

BREAST RADIOLOGISTS: ONLY BREAST OR ROOM FOR OTHER EXPERTISE?

Oshi Abeyaakon

1. Always look for new opportunities where-ever you may be in your career. Everything comes and goes - both good and bad times in your career. Opportunities are there in both.
2. In the uncertainties of a covid world - don't give up because the ideal situation does not work out. Make good with what you get and have and look for small wins that add up at the end of the day. Be creative. Also develop a life outside medicine.
3. Ask for help and advice along the way. In our breast imaging community there are many people you can ask. Seek the opinions of others and then choose with your own intuition and intelligence.

BREAST RADIOLOGIST: MORE THAN AN IMAGE READER

Jonathan James

1. Radiologists need to ensure breast surgery is used for treatment not for diagnosis, so radiologists should aim for a 100% pre-operative diagnosis rate for all cancers cases
2. Increase the use of Vacuum Assisted Excision to manage B3 lesions (lesions of uncertain malignant potential)
3. Radiologists need to improve communications skills with patients and other members of the multidisciplinary team as our role is to lead on all matters relating to breast diagnosis

THE FUTURE OF BREAST IMAGING

Lucia Grana

1. Do not forget that we are doctors. Try to be always updated and actively participate in multidisciplinary committees.
2. Image-guided percutaneous treatment of breast cancer is the near future; therefore, we must be ready to do it and to introduce it in our Breast Units.
3. Try to proof the clinical utility of imaging biomarkers with your research projects. Work closely with the nuclear medicine physicians if you have the opportunity.

THE FUTURE OF BREAST IMAGING

Gul Esen

1. Embrace artificial intelligence, as it can help us (radiologists) very much in our clinical practice and also will help to establish imaging parameters as biomarkers in the future.
2. Be a part of a multidisciplinary team, as it can make work much more meaningful as well as successful
3. If you choose breast imaging be competent in all imaging methods and interventional procedures.

HOW TO CHOOSE YOUR RESEARCH PROJECT IN BREAST IMAGING

Andrew Evans

1. pick a topic which is clinically important
2. find a unique selling point
3. avoid a me-too study

HOW TO CHOOSE YOUR RESEARCH PROJECT IN BREAST IMAGING

Doris Leithner

1. Be in close contact with clinicians to benefit from their perspective and develop clinically relevant projects.
2. Start with smaller, retrospective projects and choose topics according to the resources of your institution to learn the basics of research.
3. In research, persistence is key - this is a marathon, not a sprint.

RESEARCH IN BREAST IMAGING

Pascal Baltzer

1. Carefully assess clinical needs - don't do pure academic research that does not have a clinical application, it's difficult to publish and likely won't last.
2. Carefully assess your resources - don't start e.g. the NAC monitoring project when you don't have the patients and can't build a relationship with referring physicians
3. Prepare before getting started (2 tips in one!): assess the literature of your topic beforehand and team up with others. Worst thing to do is fight alone without preparation.

RESEARCH IN BREAST IMAGING

Matthias Dietzel

1. Always have in mind: 50% of successful research is related to scientific aspects. 50% is related to logistics, soft skills, managements etc.
2. Successful research is like running a small business: Constantly double check your management and communications strategy during the project
3. Adapt your scientific endeavour to what is currently doable on the operational level. And if something is not possible (yet), do not worry. There is always a next project waiting for you, because research in breast imaging is a never-ending story and always great fun

AS RESIDENT & RESEARCHER

Mirjam Wielema

1. Get in touch with the researchers in your hospital or a hospital close by if you would like to do research. Everybody is waiting for help of enthusiastic colleagues.
2. Be present at relevant conferences and EYC meetings to get to know colleagues from all over the world, who might have just the right advice/motivating words for you in your career/ life journey.
3. Believe in yourself and dare to ask questions.

BREAST SCREENING: PAST, PRESENT AND THE FUTURE

Nisha Sharma

1. Embrace innovation and ensure that you play an active role in how this will be implemented within your service
2. Audit of individual and team performance is really important to identify educational needs and training within your unit.
3. Where possible always try to do a combination of screening and symptomatic work as this will enhance your interpretative skills when reporting mammograms

BREAST SCREENING: PAST, PRESENT AND THE FUTURE

Ruud Pijnappel

1. Screening requests a different mindset in comparison to Clinical breast radiology: only recall cases that are really suspicious.
2. Train your skills for breast screening (limited information one modality available)
3. Evaluate your own data. (recall, true positives, false negatives and interval cancers)