Pathology, Epidemiology, DNA, Informatics and Genetics: A Research Enabling Enterprise What the resource is, how it is used, & opportunities for future use

Mammographic Density

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Resources

- AMDRF ability to collect mammos and measure MD
- AMDTSS ~3,000, DNA for >2,000
- ABCFR ~1,000, DNA for most
- MCCS 4,000 (800 cases), DNA for all
- TAHS MD study 500 with growth measured from 7-15
- Cambridge/Norwich case-control no BMI
- Korean Case-control Studies Samsung, Asan ?DNA
- Hawaiian/Japanese studies
- Vietnam MD study
- lifepool including ASEAN and A-J studies

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How Used

- Genetic and environmental (measured and unmeasured) determinants of MD
- MD as a risk factor (MCCS, ABCFS, AMDTTSS, Korean and other studies)
- MD as a biomarker to assess (early-life) exposures
- New SMARTs Alto Cumulus, Cirro Cumulus, Cirrus
- Inform biological studies
- Insights into variation in risks with population sub-types

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Opportunities for future use

- Cf. with other measures e.g. AutoDensity
- Integration with risk models, including familial risk profile measures (BOADICEA, H score)
- Refinement and implementation of Cirrus into BreastScreen St Vincents
- BreastScreen Victoria studies of screening intervals
- Improve cost-effectiveness of mammographic screening