

# Physics can be useful !

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DETECT Australia, Pty. Ltd.

Australian Collaboration for Accelerator Sciences



UoM

DETECT

ANSTO

DPE

Efarm

Frontier



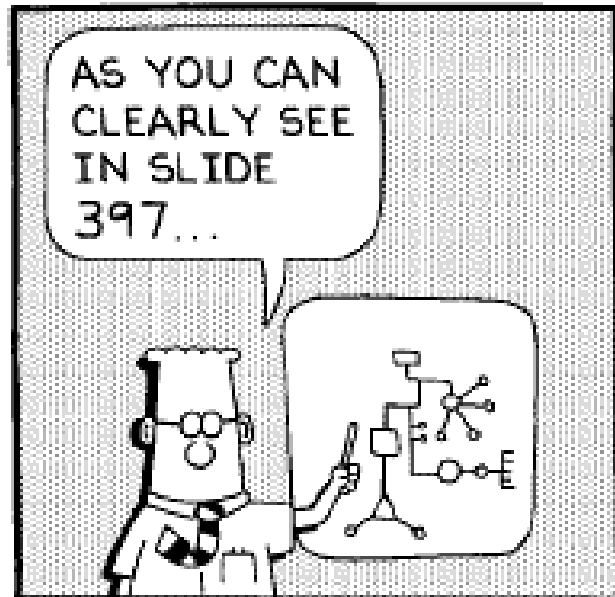
# **Physics Solutions for Industry**

If it's not possible....

If it can't be done...

If someone else has tried.. (and given up !)

# A few case histories..



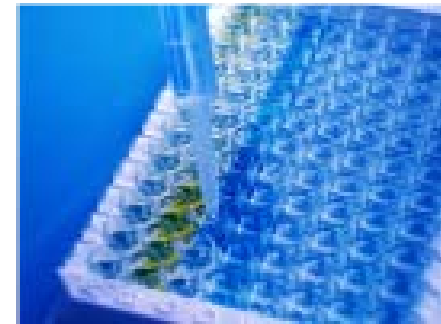
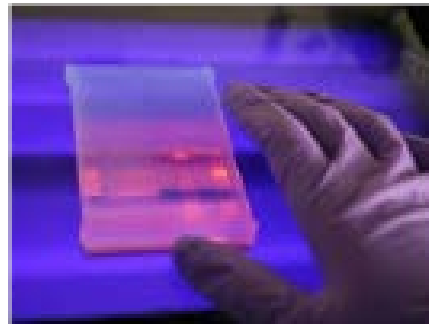
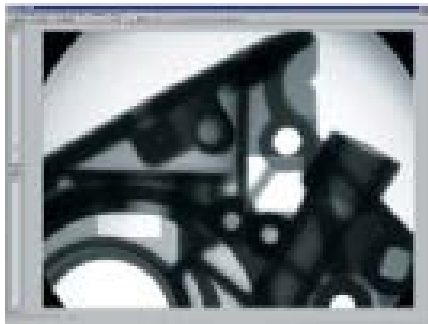
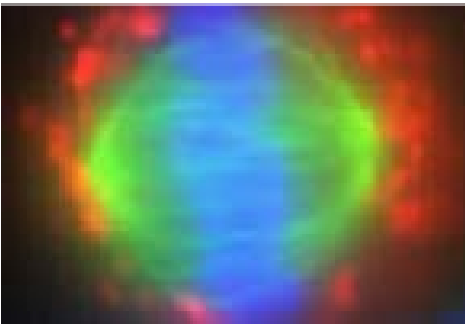
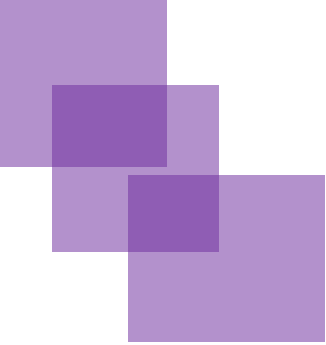
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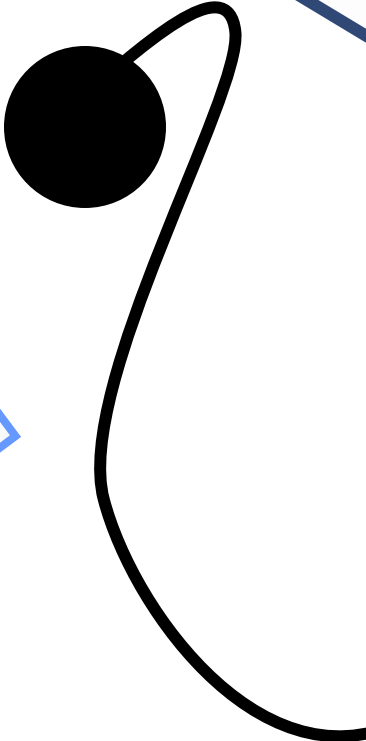
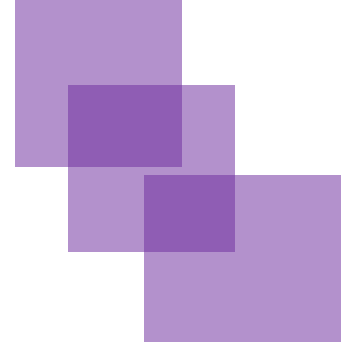


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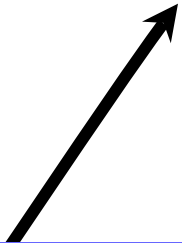
Australian Paper  
PaperLinx  
Australian Defence Industries  
Biomediq DPC  
Australian Synchrotron  
DECTRIS  
Agilent  
DPI Ellinbank, NHIA  
ECO Growers  
Berthold  
Cyclotek

Our research group's core businesses is focused on the latest technologies for radiation detection, X-ray and CT imaging systems for non-destructive testing, and image acquisition.



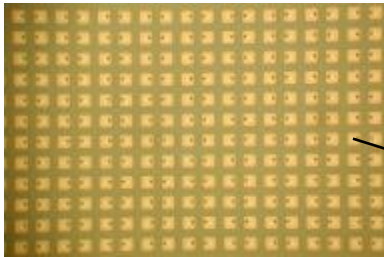
X-ray	Imaging
Microscopic	Imaging
High-Speed	Imaging
Non-invasive	Imaging
Thermal(IR)	Imaging

Other opportunities

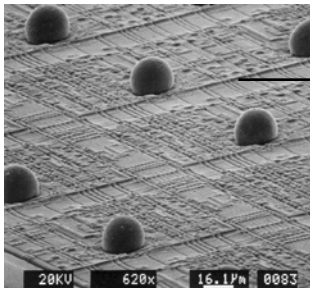


# Hybrid-Pixel Technology

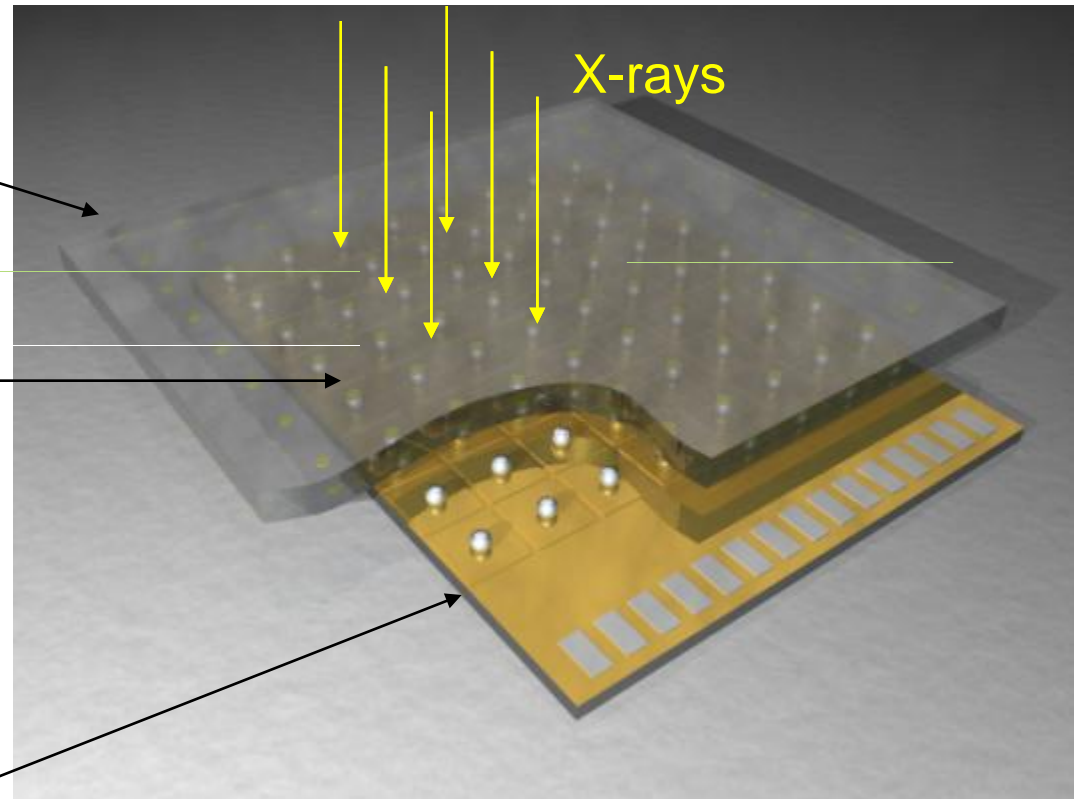
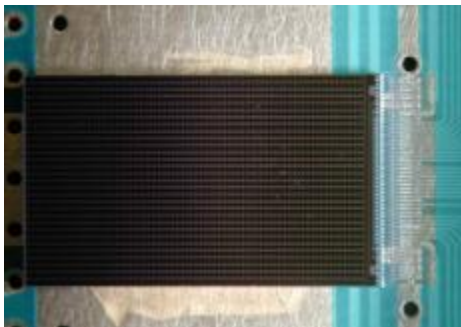
Si-sensor with pixelated pn-diode structure



Indium bump-bonding technology  
18um bumps



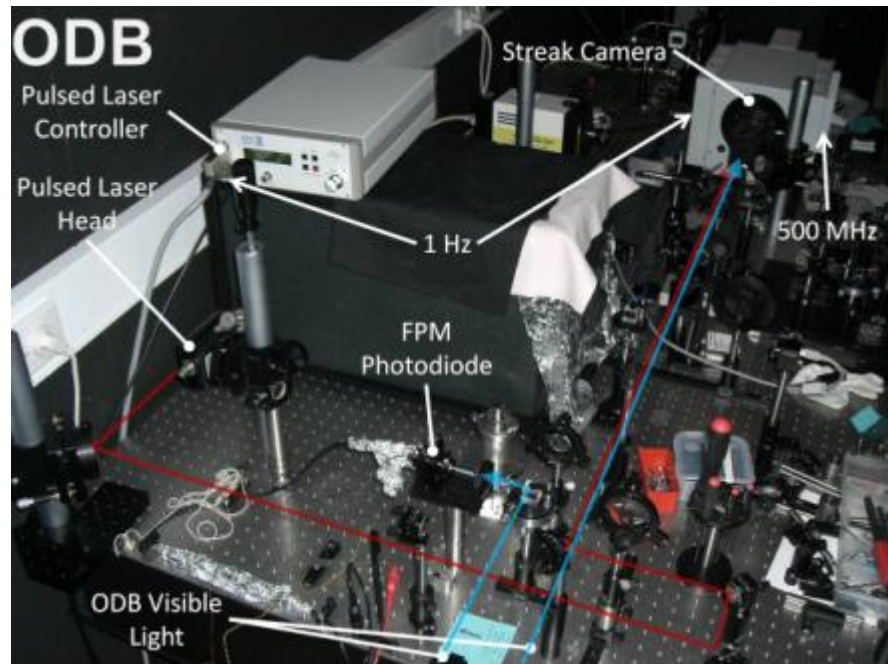
CMOS chip technology



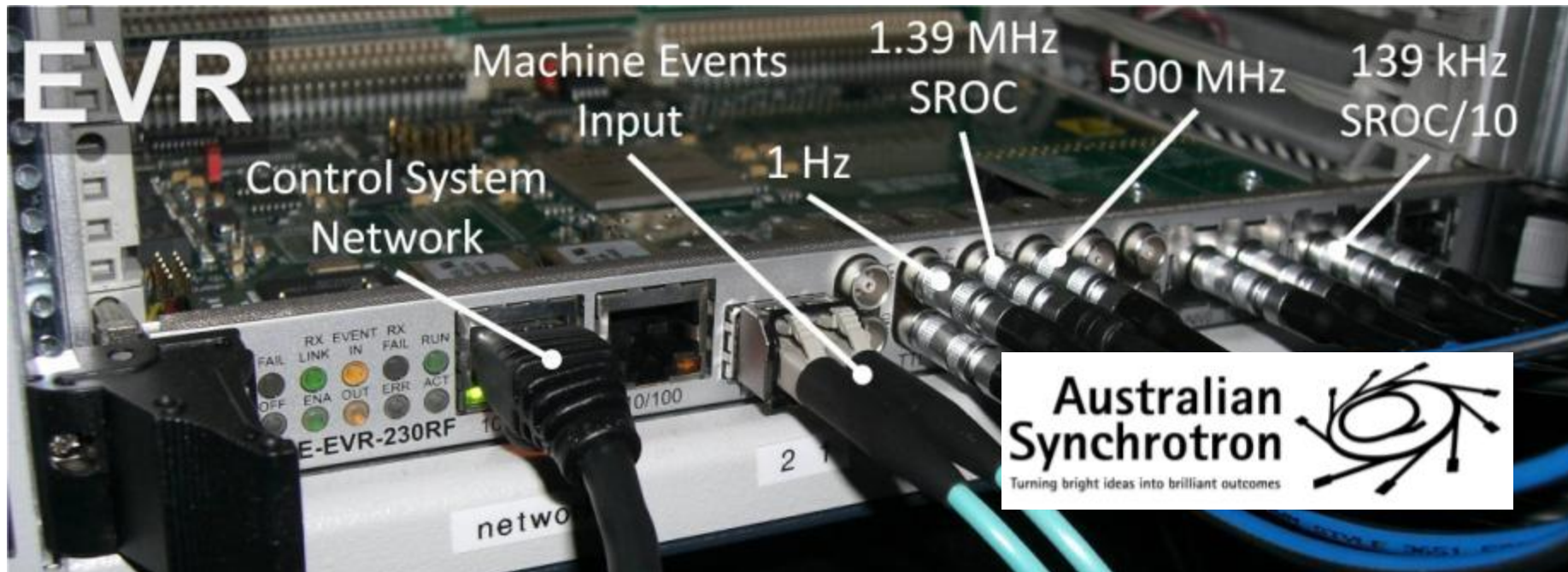
# PILATUS - SAX/WAX



# ODB



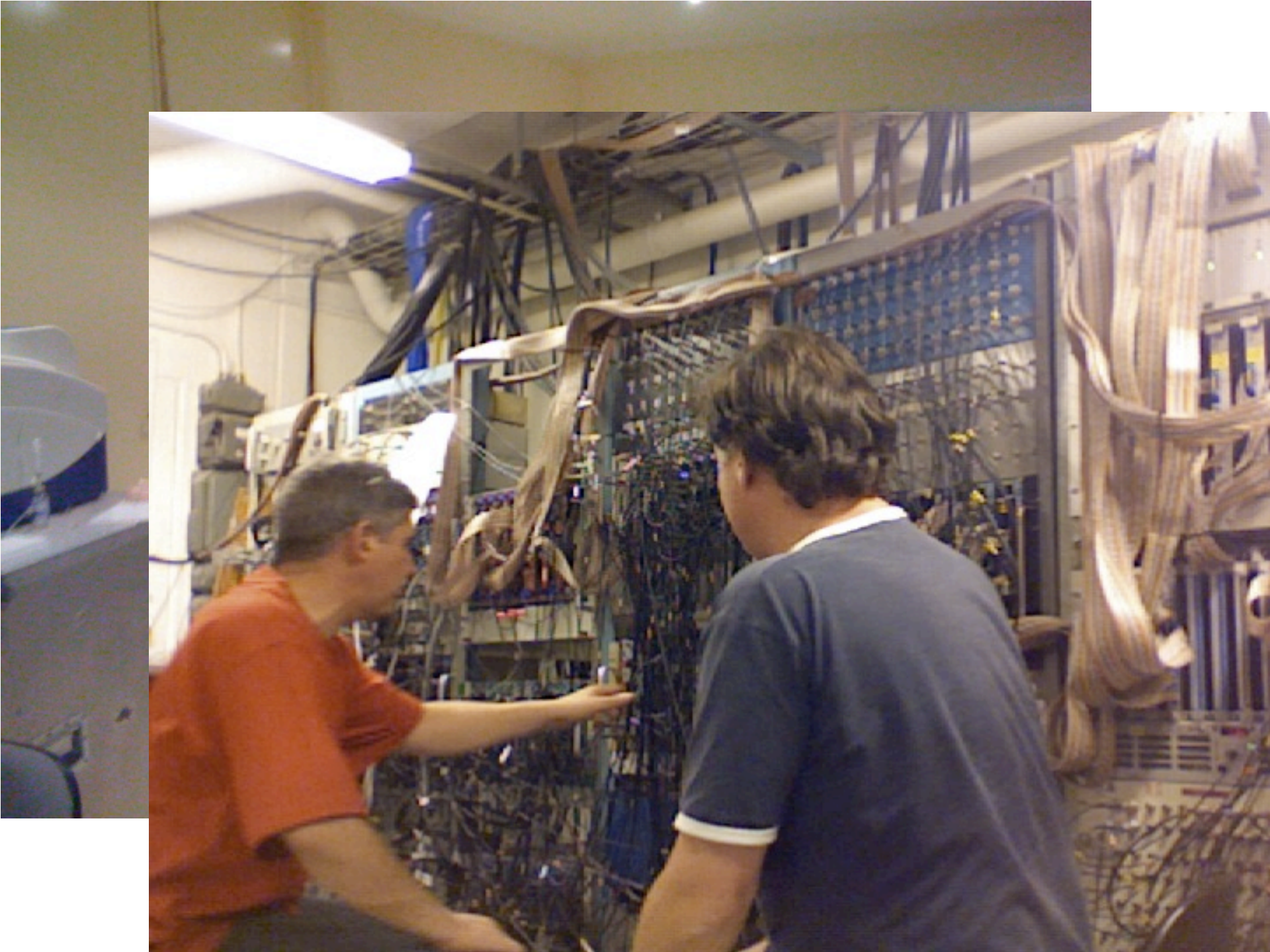
# EVR



Australian  
Synchrotron

Turning bright ideas into brilliant outcomes

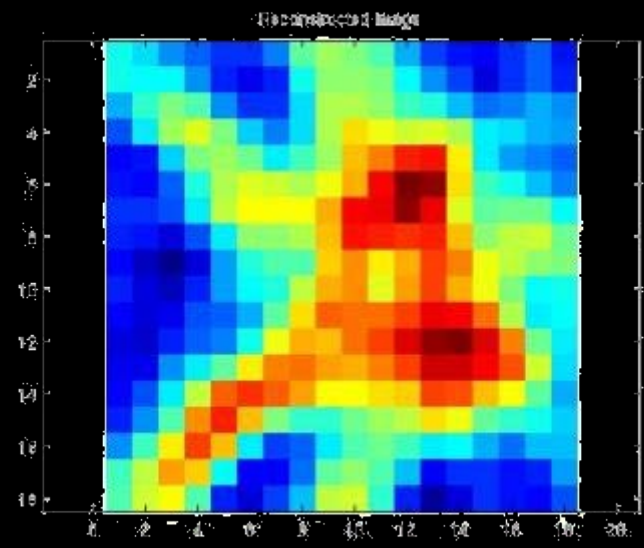
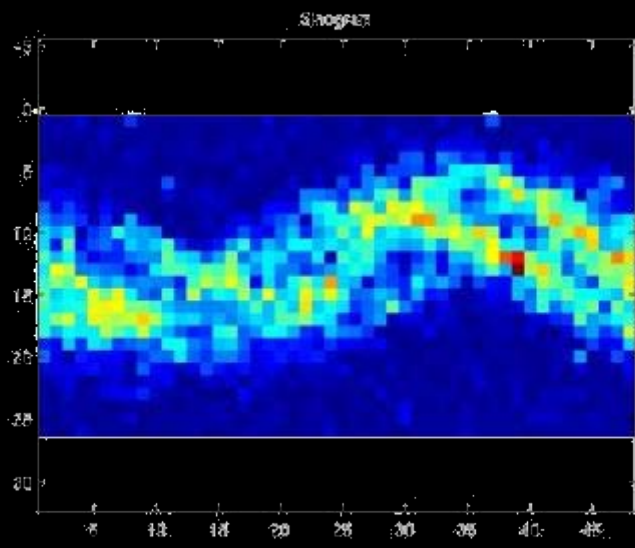
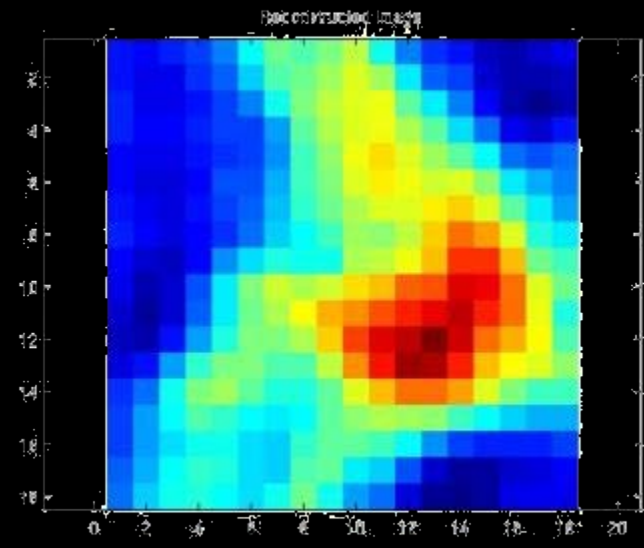
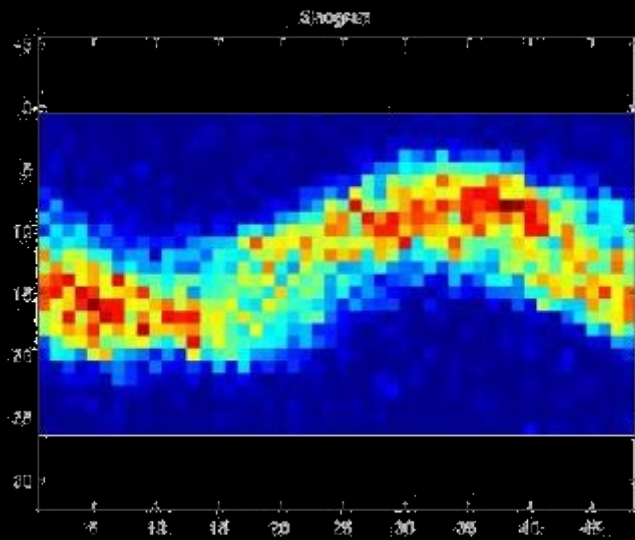




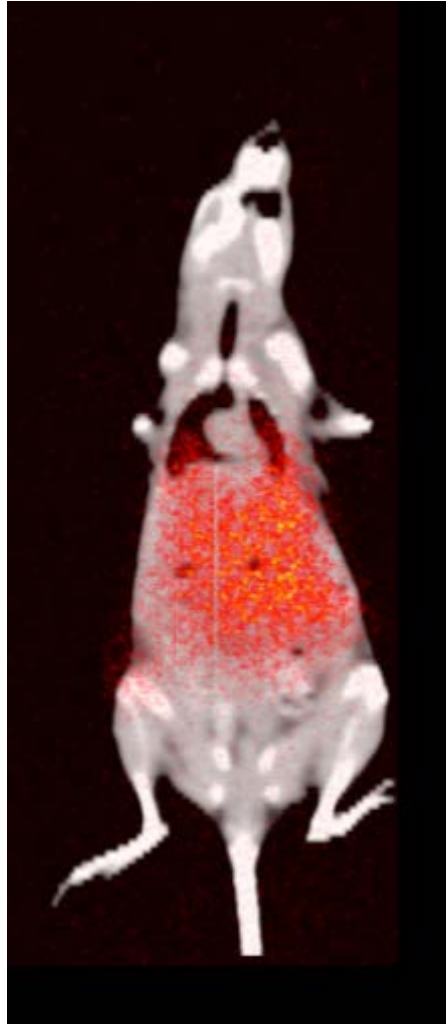
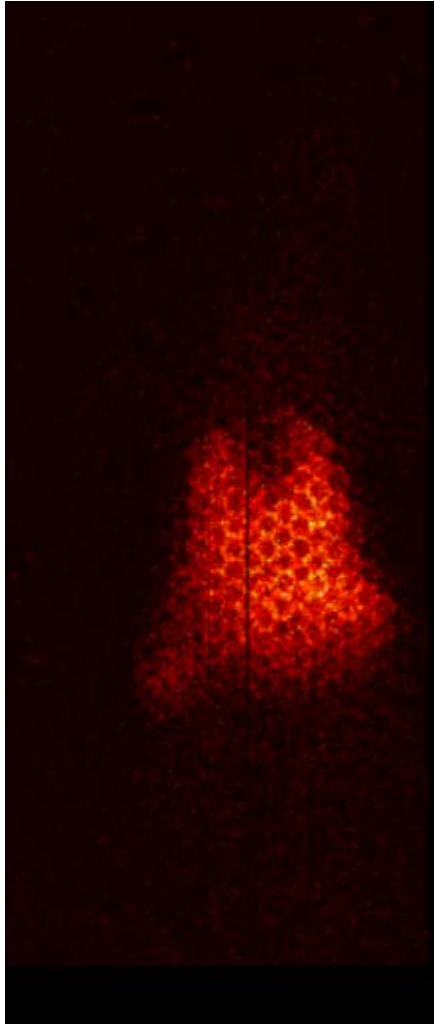


# Mouse-Cam(era)





# Mouse Imaging



# ECO Bananas



The 'Wax Tip Eco-Banana' is both the creation and passion of banana farmers Frank and Dianne Sciacca of Pacific Coast Produce, located near Innisfail, Qld. Frank engaged PSI to develop video analysis software and robotic handling systems to automatically add the red tip to the bananas.





# Ellinbank Milk Meter Project



The Eli Milk was designed in Ellinbank Research Institute by Dr Tim Clark and his team. The PSI team developed software for

- Automated RFID
- Rotary/Herringbone automated feeding and milking
- Early Mastitis detection
- Challenged feeding optimized milk production quantification

Where to from here ?



Thank you....