

Research Data Integration Group



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End-to-end research data integration to build disease data resources of biobanks



FUTURE: FUunctional precision medicine and T

We need...

Biomarkers to predict patient *response* or *resistance* to treatments

Novel therapeutics effective for patients who do not respond to existing options

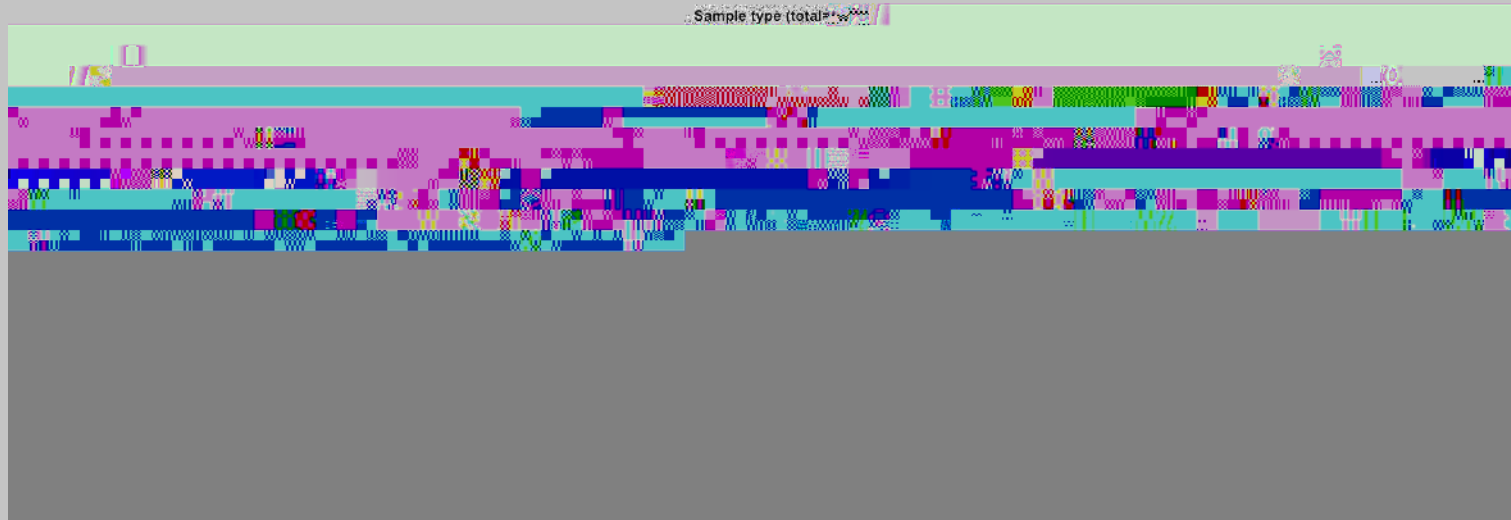
We use...

A functional precision oncology approach with multimodal data analysis and integration

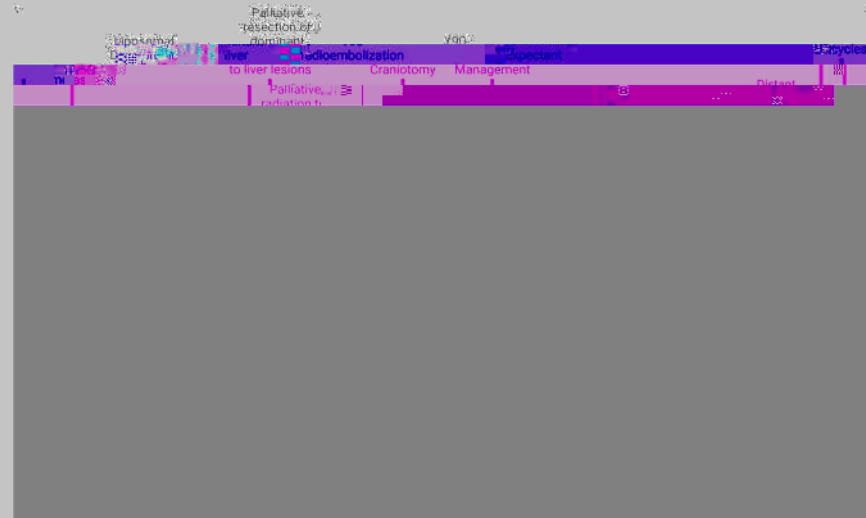
From 2009 to 2019, the number of precision medicine papers published in the top 10 journals increased from 1,000 to 10,000.

“Rare” Cancer Functional Precision Oncology with Multimodal

Growing data resource

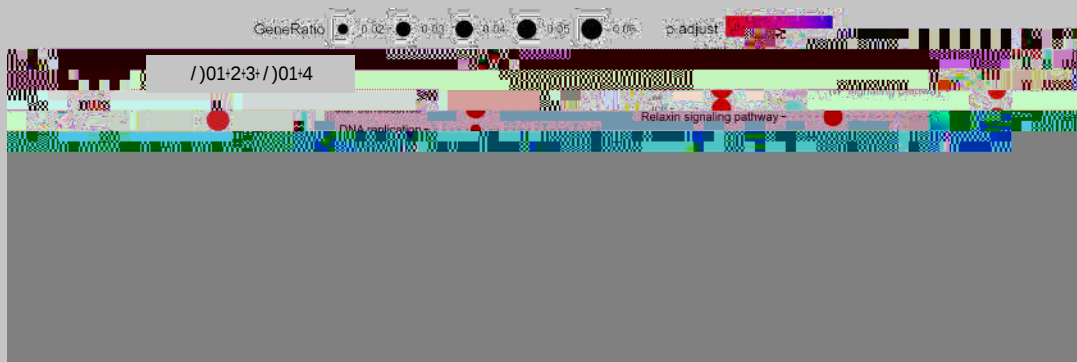
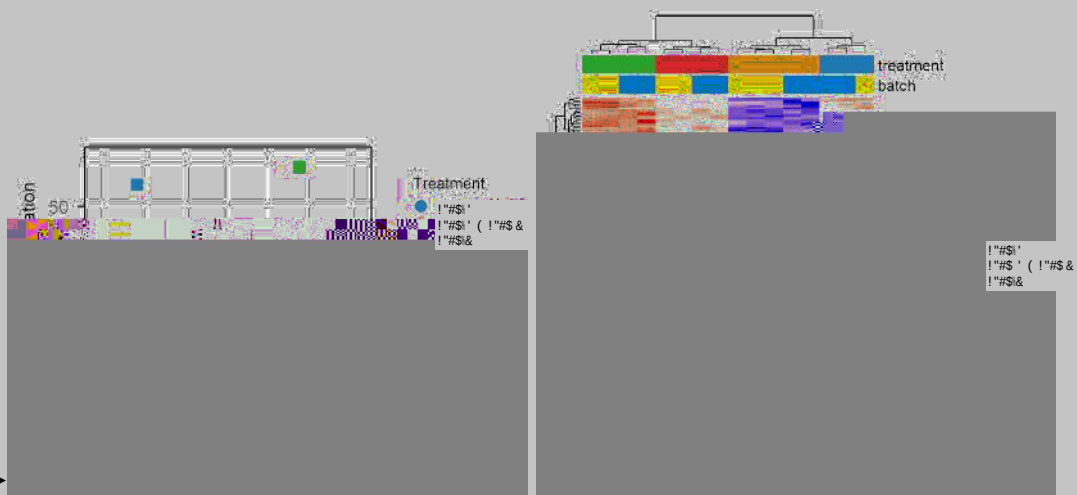
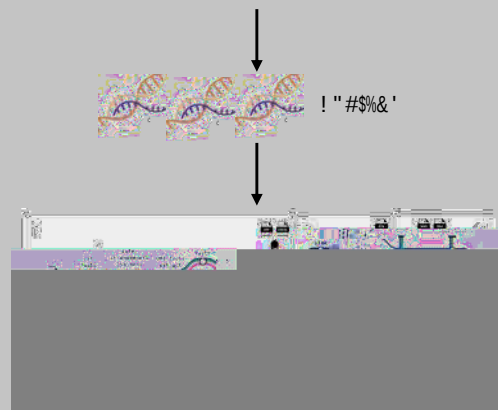


FPM shows promise as a N-of-1 treatment approach (trial)



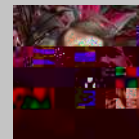
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Future

1. Structural/functional predictions of cancer mutations



SEBASTIAN MAURER-STROH



CHANDRA VERMA



DANIEL TAN (NCCS)

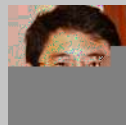
2. Cancer Omics Platform



PATRICK TAN

TAM WAI LEONG

3. Brain-Body Initiative



HAN WEIPING



MICHAEL MEANEY

4. Non-alcoholic fatty liver disease



NG HUCK HUI



THANK YOU

www.a-star.edu.sg