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BS in Physics (Aristotle University of Thessaloniki) PhD in Biomedical Engineering (Duke University) 1993 - 2011 Duke University Medical Center 2011 – now Oak Ridge National Laboratory

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Research Interests







Medical Imaging

- x-ray
- CT
- MR, etc

Text Informatics

- pathology reports
- radiology reports
- biomedical literature
- social media

Scalable Data-Driven Discovery

- heterogeneous data analysis
- non-traditional data sources (environmental / weather / socioeconomic)



General Comments

• Cost of data storage vs. cost of data analysis

- $_{\circ}\,$ The cost of moving data is as important
- Collocating data and compute is the most cost-effective model

• Incentive for sharing vs. risk of privacy

Data is the currency of the 21st century – no clear incentive for sharing
The cost of privacy breach is high - is deidentification sufficient?
Who owns patient data and the derivatives?

• We need a neutral entity for proper stewardship of data / metadata /algorithms

- Sustainable infrastructure to democratize innovation
- Scalable solutions to support the continuum of scientific discovery and clinical translation

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