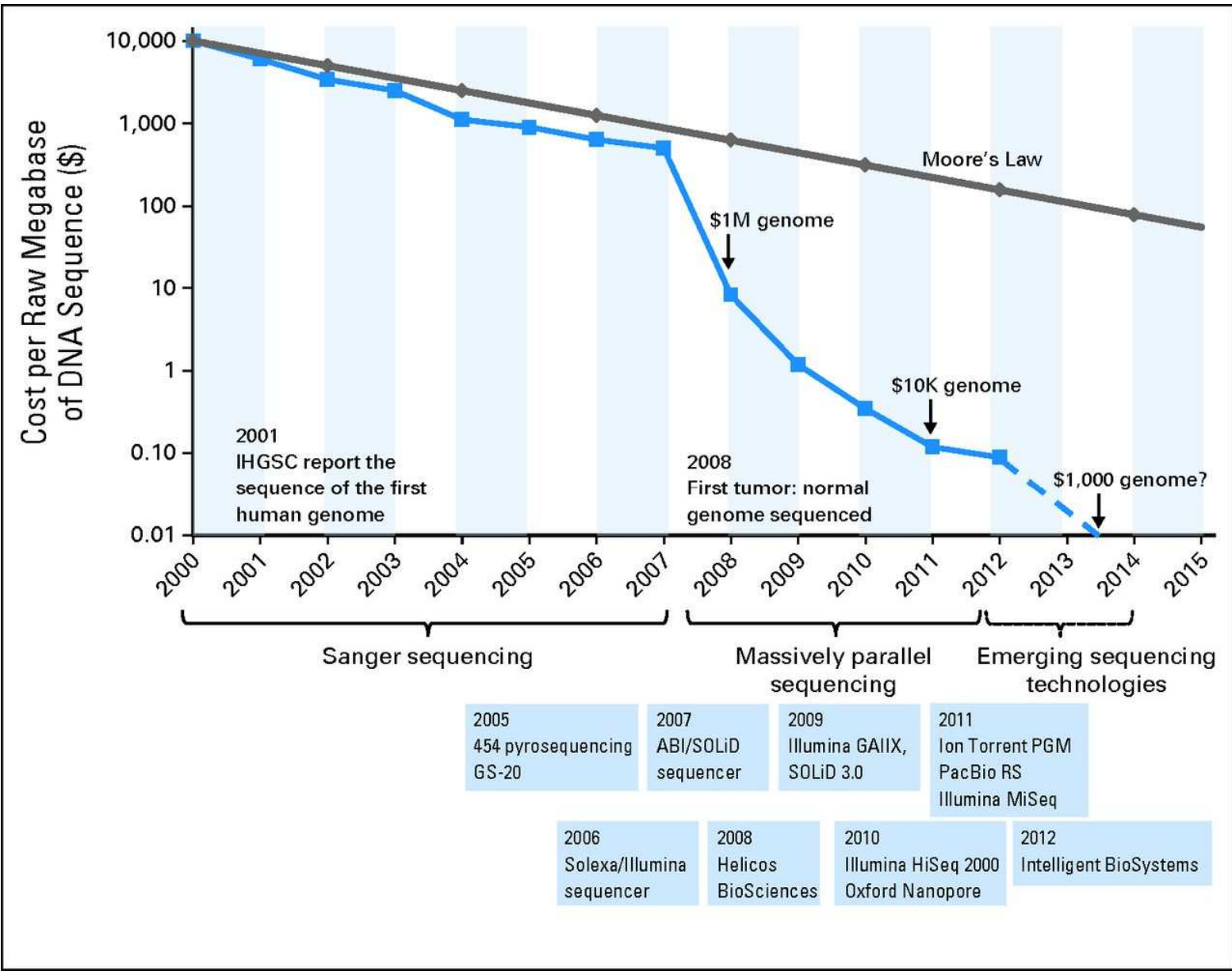


High Throughput Technologies: Determinants of the Immune Response to Cancer

Moderators:

Katherine L. Nathanson, MD
Perelman School of Medicine at the University of
Pennsylvania

Paul Robbins, PhD
National Institutes of Health



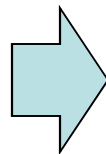
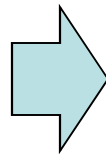
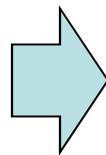
Merging of distinct disciplines to ask critical questions in immunotherapy

Cancer Immunology

Inherited Genetics

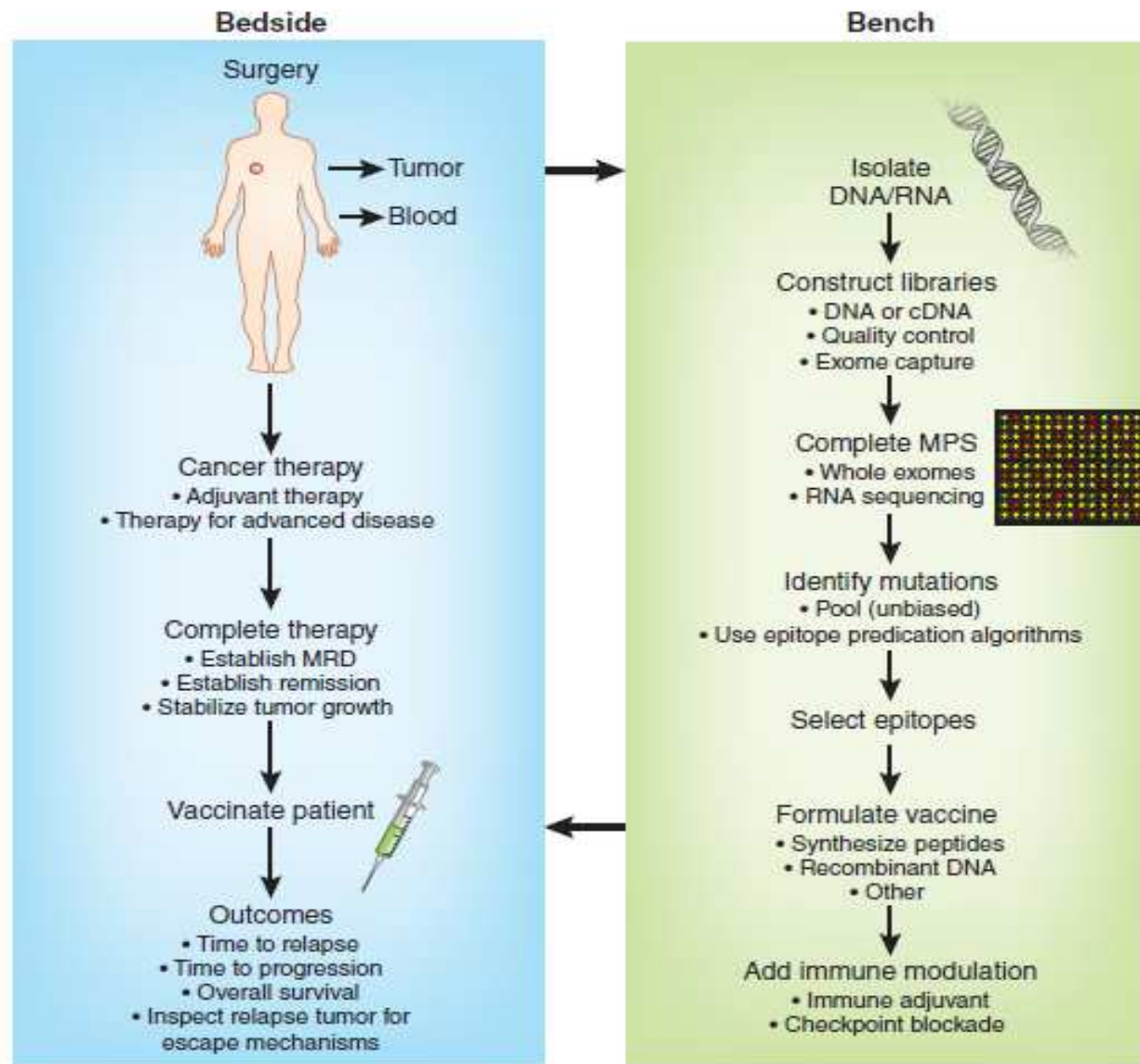
Somatic Genetics

Proteomics



- Can we identify inherited predictors of response and adverse events?
- Is the presence and burden of mutated proteins in the tumor predictive of response?
- Can single cell proteomics be used to predict therapeutic outcomes?

Integration of high throughput technologies into immunotherapy



Talks

- Use of high throughput sequencing to identify mutated tumor antigens
 - Paul Robbins, NIH/NCI
- Inherited genetic response
 - Kevin Brown, NIH/NCI
- Single cell functional analysis provides insight into cancer patients responses
 - James Heath, Cal Tech
- T-cell receptor diversity evaluation to predict response to ipilimumab in metastatic melanoma
 - Michael Postow, MSKCC