## **Prostate Cancer: Introduction**

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#### **Prostate Cancer**

#### Cases/Year\* 217,730 Deaths/Year\* 32,050

#### Prostate Biopsies/Year ~ 1,000,000

\*Estimated U.S. 2010

### **Prostate Biopsy**

Men currently undergo prostate biopsy:

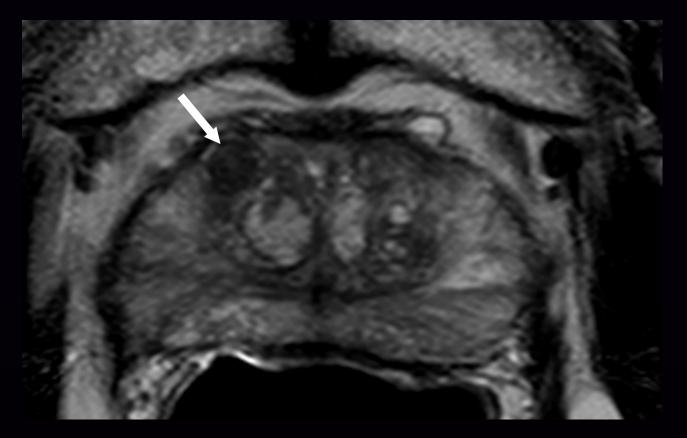
- Elevated PSA (for diagnosis)
- Active Surveillance (for evaluation of grade)
- Focal Therapy (such as cryotherapy)

#### **Clinical Questions for Research**

 Why is prostate cancer the only solid tumor that is diagnosed by randomly sampling the organ in the hopes of hitting the tumor ?

 If organ sparing treatment has been developed for other cancers (breast, kidney, bladder, etc.) why not prostate ?

## **Prostate Biopsy: Elevated PSA**



**Prostate MRI** 

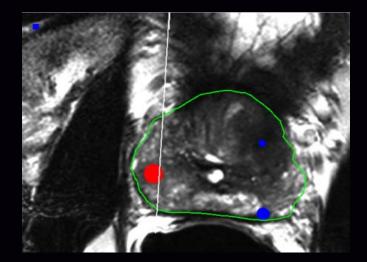
### **Prostate Biopsy: Surveillance**

#### Ultrasound-Guided Fusion Biopsy



#### **Prostate MRI**

# Turn "Focal Therapy" into "Image Guided Therapy"



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#### **Prostate MRI**

Ultrasound-Guided Focal Therapy

## Systemic Therapy: Evaluation of Response/PD

