Silicon Nitride cantilever
- Soft sample imaging
  - Contact mode
  - Tapping in fluid

Silicon tip
- Higher aspect ratio than silicon nitride
  - Provides highest lateral resolution
- Apex sharper than silicon nitride
  - 5 – 12 nm radius of curvature

Prototype developed
- 100um long x 0.4um thick cantilever with gold cantilever coating

Continuing developments
- Reflective coating on cantilever
  - Coatings stress the cantilever and cause it to bend
- Cantilever length & thickness variations
  - different spring constants for various imaging applications
  - 100um x 0.4um, 100um x 0.8um, 200um x 0.4um, & 200um x 0.8um

Process developed at NanoDevices and Stanford University
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