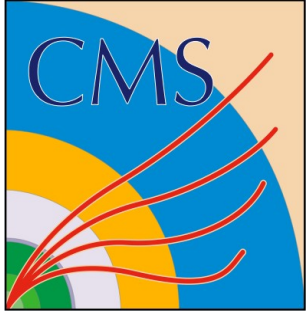
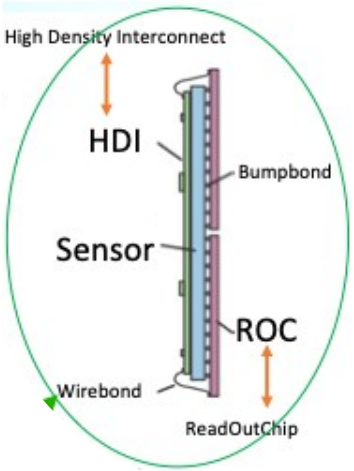


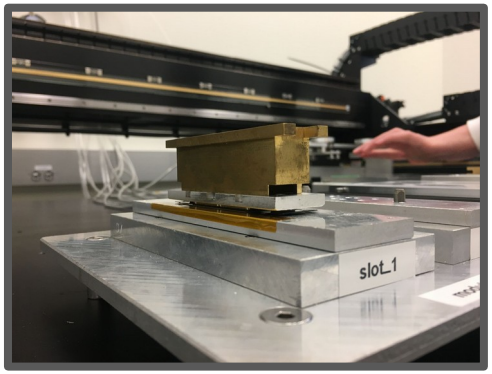

# PHD AT CUA

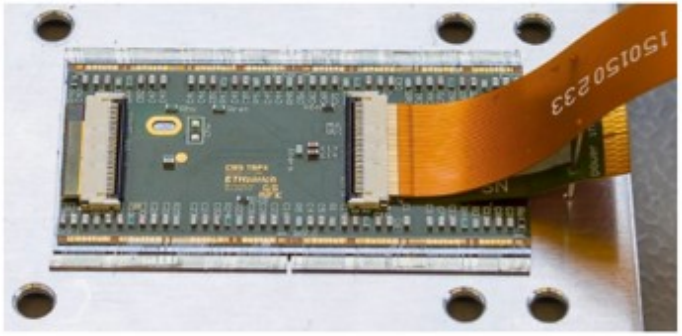
Rachel Bartek

# Phase 2 pixel Modules




- CUA is tasked with making 1/3 of the forwar pixel modules
- We have a class 10,000 clean room on campus in Washington DC
- We are responsible for gluing HDI (in green) to bare module using robotic gantry shown below
- Student will work with Associate Research Professor Rachel Bartek, Professor Aaron Dominguez and Lab Technician Rhea Khatri



# Phd Candidate

- Students will be responsible for completing EPR for CMS authorship
  - *CUA works on tracker material budget along with other projects*
- Developing assembly procedures for forward pixel modules
  - *Using robotic gantry system working with Nebraska and Purdue*
- Physics analysis
  - *Could be variety of topics like dark matter, W' or tri-boson analyses*


# Break down for 6 year program

- Year 1: 30% TA (teacher assistant) 50% classes 20% research (15% lab/ 5% EPR)
- Year 2: 25% TA, 50% classes, 25% research (15% lab, 10% EPR)
- Year 3: 30% EPR, 20% Analysis, 50% lab
- Year 4: 25% EPR, 40% Analysis, 35% lab
- Year 5: 20% EPR, 55% Analysis, 25% lab
- Year 6: 10% EPR, 40% Thesis, 40% Analysis, 10% lab