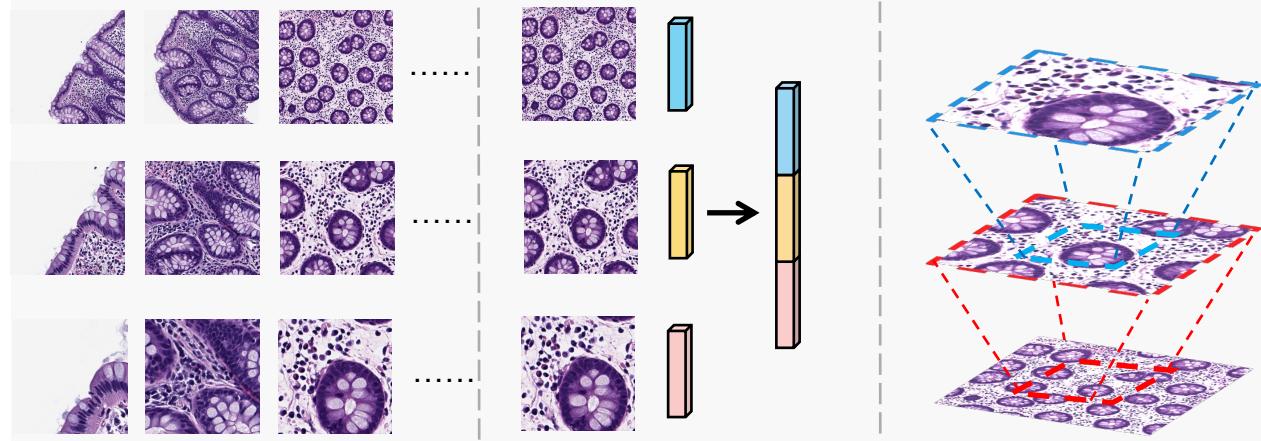


### a. Previous work



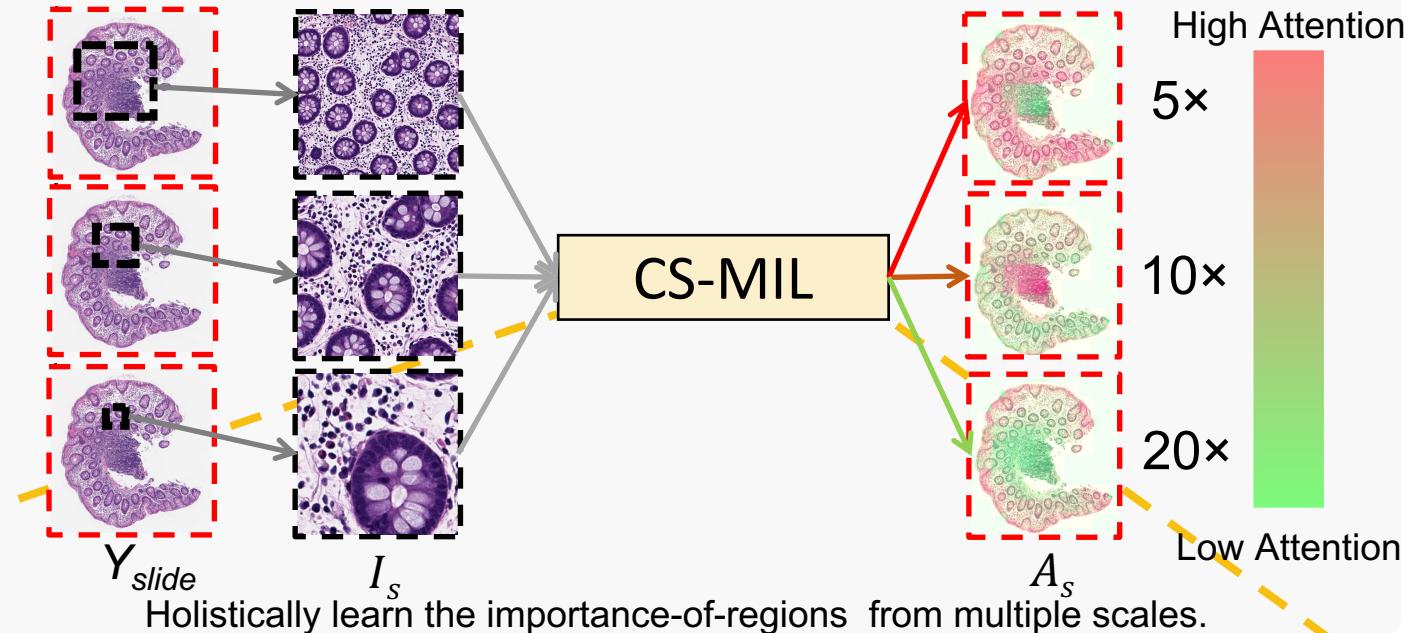
MIL Bag  
Irrelative instances  
(Hashimoto, N. et al.)

Feature concatenations  
(Li, B. et al.)

Hierarchical feature fusion  
(Chen, R. et al.)

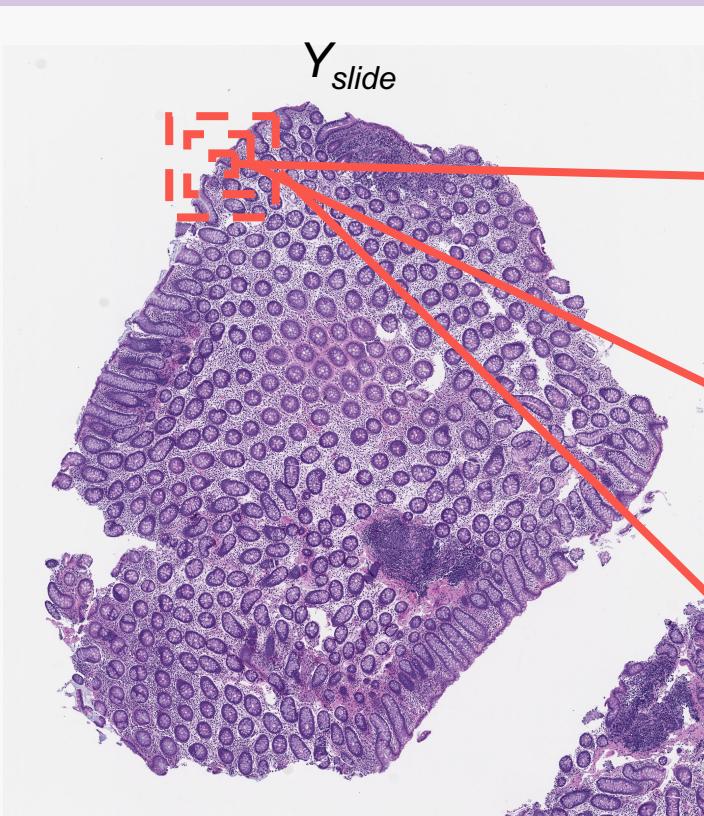
No cross-scale relationship is learned.

### b. Our solution

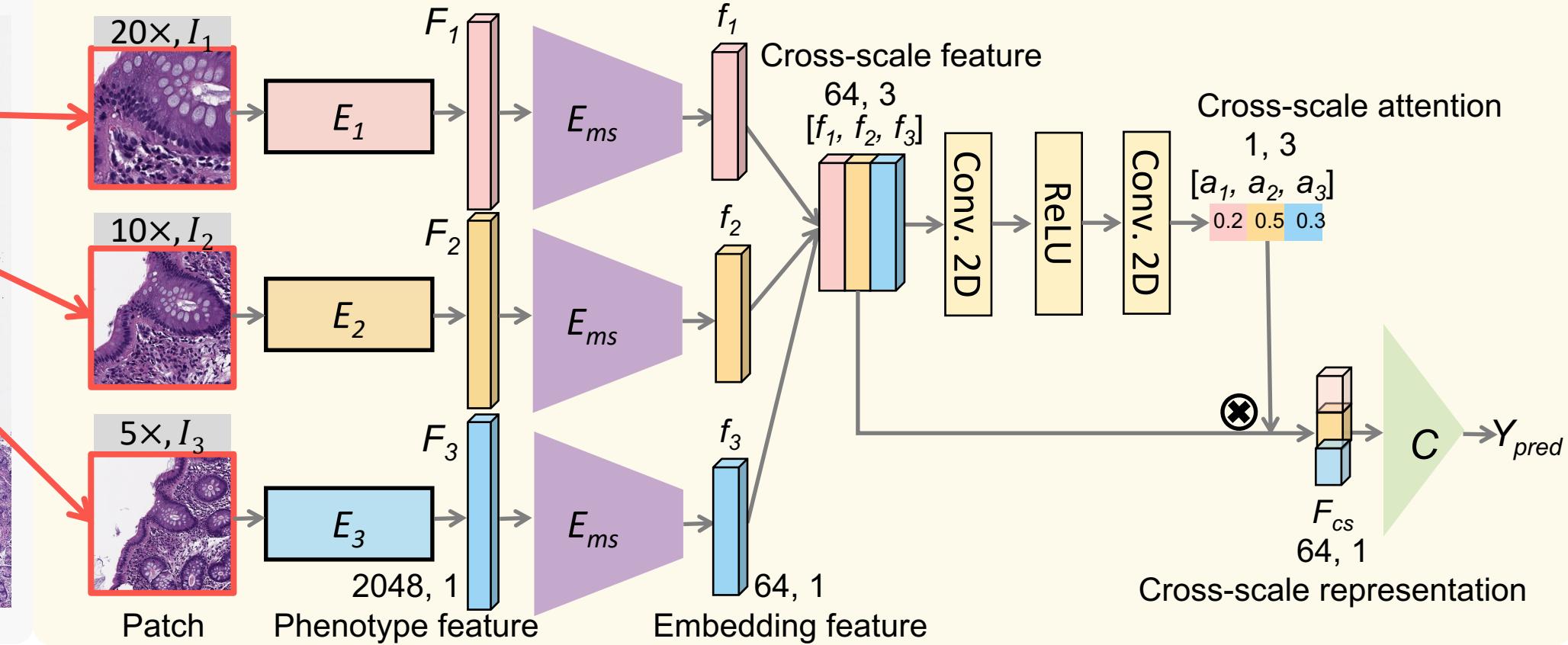


Holistically learn the importance-of-regions  $A_s$  from multiple scales.

### Multi-scale Patches



### c. Cross-scale Multi-instance Learning



Cross-scale representation