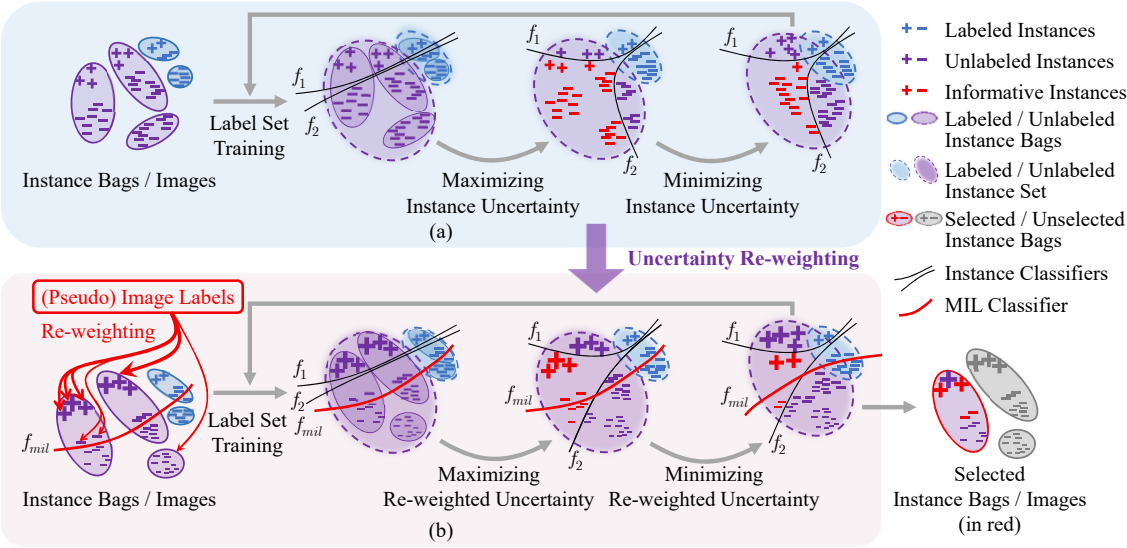
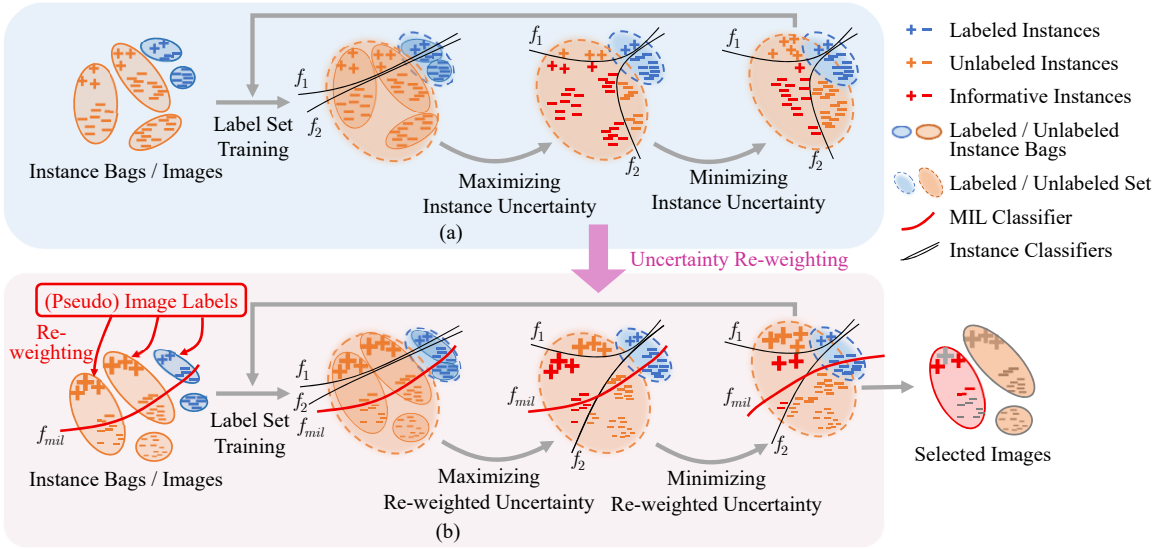
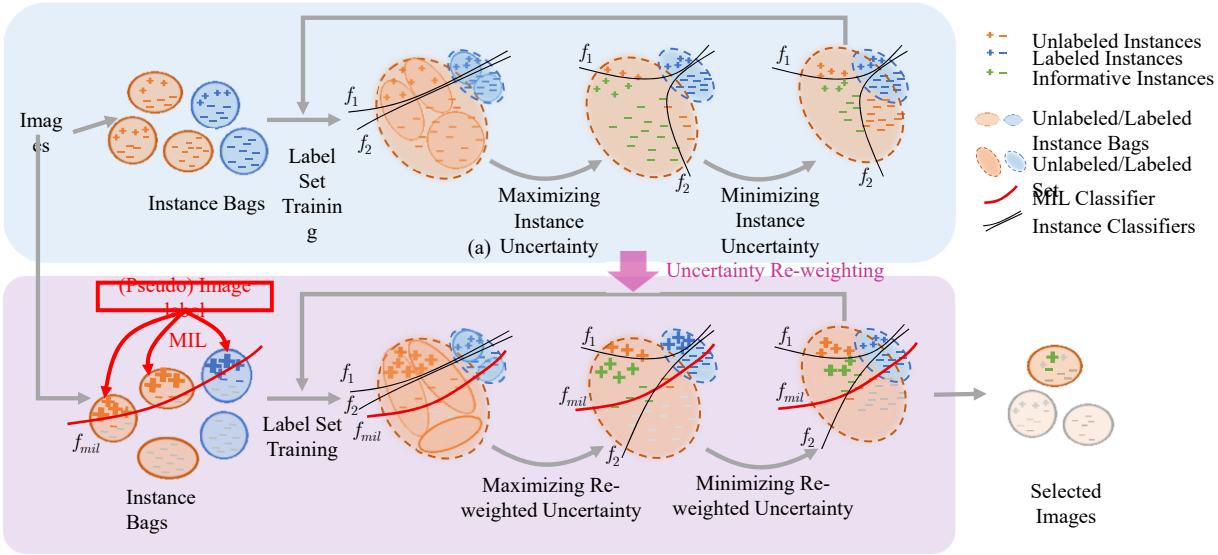
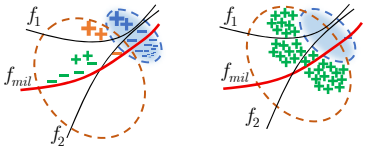

Instance Bags / Images
Label Set Training
f_1
f_2
Maximizing Instance Uncertainty
Minimizing Instance Uncertainty
(a)
Uncertainty Re-weighting
(Pseudo) Image Labels
Re-weighting
f_{mil}
Maximizing Re-weighted Uncertainty
Minimizing Re-weighted Uncertainty
(b)
Selected Instance Bags / Images (in red)
Labeled Instances
Unlabeled Instances
Informative Instances
Labeled / Unlabeled Instance Bags
Labeled / Unlabeled Instance Set
Selected / Unselected Instance Bags
Instance Classifiers
MIL Classifier


Instance Bags / Images
Label Set Training
f_1
f_2
Maximizing Instance Uncertainty
Minimizing Instance Uncertainty
(a)
Uncertainty Re-weighting
(Pseudo) Image Labels
Re-weighting
f_{mil}
Instance Bags / Images
Label Set Training
Maximizing Re-weighted Uncertainty
Minimizing Re-weighted Uncertainty
(b)
Selected Images
Labeled Instances
Unlabeled Instances
Informative Instances
Labeled / Unlabeled Instance Bags
Labeled / Unlabeled Set
MIL Classifier
Instance Classifiers


Imag
es
Instance Bags
Label
Set
Trainin
g
Maximizing
Instance
Uncertainty
(a)
Minimizing
Instance
Uncertainty
Uncertainty Re-weighting
(Pseudo) Image
label
MIL
Instance
Bags
Label Set
Training
Maximizing Re-
weighted Uncertainty
Minimizing Re-
weighted Uncertainty
Selected
Images
Unlabeled Instances
Labeled Instances
Informative Instances
Unlabeled/Labeled
Instance Bags
Unlabeled/Labeled
Set
MIL Classifier
Instance Classifiers

(a)


f_1
f_{mil}
f_2
f_1
f_{mil}
f_2