

# CICI:TCR:Transitioning Differentially Private Federated Learning to Enable Collaborative, Intelligent, Fair Skin Disease Diagnostics on Medical Imaging Cyberinfrastructure

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- Research Objective: Transitioning Differentially-private Federated Learning (DP-FL) to Medical Imaging Cyberinfrastructure (MICI)

- DP-FL: A carefully-crafted data augmentation technique
- MICI

- Three layers of structures
  - Cross-device DP-FL: cross patient collaboration
  - Vertical DP-FL: physician collaboration
  - Cross-silo DP-FL: hospital wide collaboration

- Four Research Tasks

- Publications:

- MICCAI'2023, ECCV'2024

