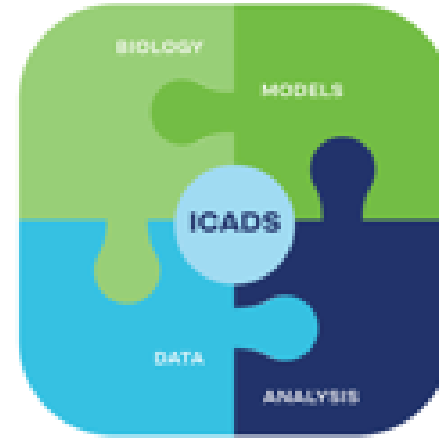


ICADS

Integrated Program in Cancer and Data Science



FAIR Artificial Intelligence/Machine Learning (AI/ML) Course

Part of the T32 Integrated Cancer Data Science Program

Spring 2022

PIs: Doug Cress, Brooke Fridley, Elsa Flores

Co-directors: Issam El Naqa and AC Tan

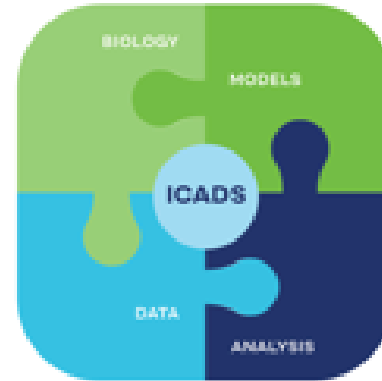
Instructors: Yi Luo, Jamie Teer, Naveena Gorre



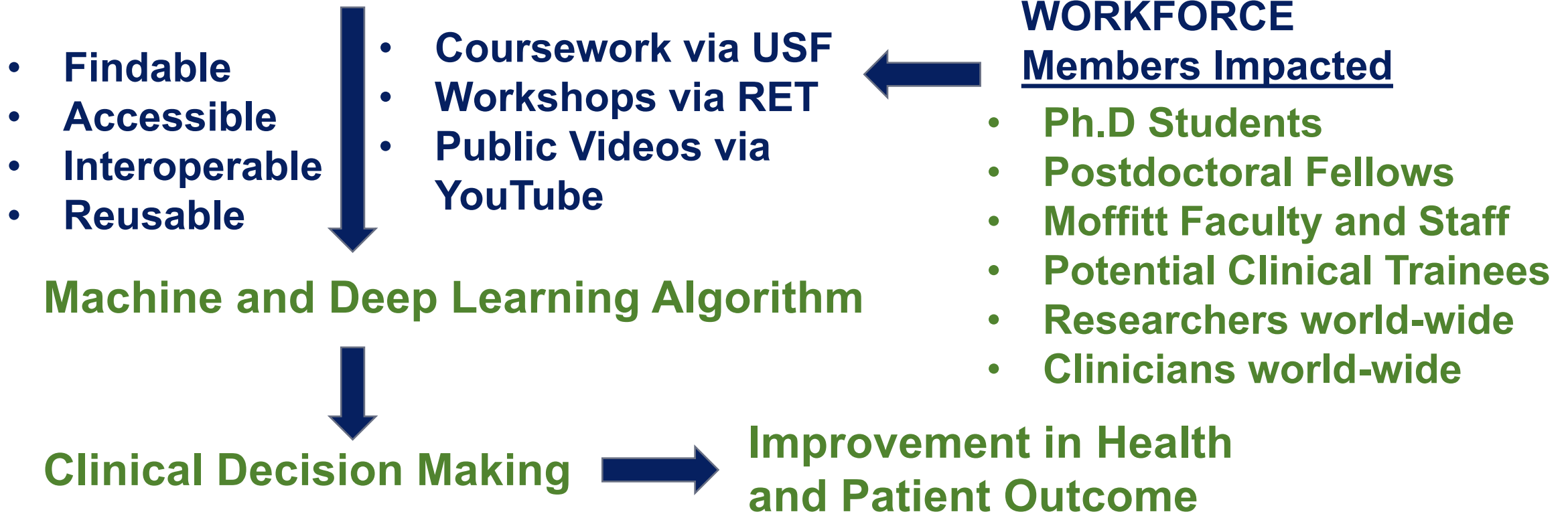


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Integrated Program in Cancer and Data Science



Clinical and Research Data Made AI FAIR



Learning Objectives



- ❖ Complement current T32 program focused on data science in cancer biology with necessary component on AI/ML data readiness
- ❖ Introduction to basic AI/ML concepts
- ❖ Understanding the FAIR (Findable, Accessible, Interoperable, and Reusable) principles
- ❖ Learning the process to achieve data “FAIRification.”
- ❖ Learning about metadata standards (ontologies)
- ❖ AI fairness and health disparity issues

Course Schedule



- 5/02 **Introduction to AI/ML/DL algorithms** (Dr. El Naqa)
- 5/09 **Training requirements for ML** (Dr. El Naqa)
- 5/16 **Methods Assessment, Uncertainty and bias estimation** (Dr. Tan)
- 5/23 **FAIR Principles** (Dr. Teer and Dr. Luo)
- 6/06 **Best practices** (Dr. Teer and Dr. Luo)
- 6/13 **Data resources** (Dr. Tan)
- 6/20 **Hands-on Workshop 1 – Radiomics** (Ms. Gorre and Mr. Carranza)
- 6/27 **Hands-on Workshop 2 – Cancer genomics** (Dr. Tan)



Summary and Feedback

- ❖ 22 registered participants
 - ❖ Including 2 attending MDs
- ❖ Some of the feedback received regarding the course:
 - ❖ Participants rated knowledge of FAIR-AI principles at 5.3/10 prior to participation and 7.7/10 after.
 - ❖ Participants rated the overall training experience at 8.3/10
 - ❖ Participants ranked course communications and logistics at 8.7/10
- ❖ Some of the feedback received regarding the faculty:
 - ❖ Knowledgeable and well-prepared, 9.4/10
 - ❖ Communicated clearly and effectively, 9.3
 - ❖ Provided good (references, resource material), 8.3/10
 - ❖ Presented material at the right pace, 9.0/10
 - ❖ Offered to answer questions and answered them well, 9.3/10



[ICADS FAIR AI lecture videos](#)