

## Seminar Series



Date: September 9, 2024

**Time:** 2:00 - 3:00 pm

**Location:**Blocker 220 and Zoom

Faculty host:
Dr. Michael Henry,
Director of Experiential
Learning - RELLIS

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**Zoom ID:** 974 9688 4861 **Passcode:** 923446

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## **Dr. Court Corley**

Director - Center for AI at Pacific Northwest National Laboratory (PNNL)

Courtney "Court" Corley is the chief scientist for artificial intelligence (AI) and Director of the Center for AI at PNNL. In this role, he serves as PNNL's AI focal point driving R&D at the frontiers of AI and its application, along with coordinating and aligning the Laboratories AI capability and workforce. He is a leader in the field of data science and biosurveillance, and his current work focuses on deep learning and generative AI methods across the United States Department of Energy and U.S. government missions. Corley currently leads the Generative AI for Science, Energy, and Security and previously co-led the Deep Learning for Scientific Discovery Laboratory Directed Research and Development investment, applying generative AI and deep learning, respectively, across the breadth of PNNL's science and security missions through dozens of efforts.

## Research at the Frontiers of Al for Science, Energy, and Security at Pacific Northwest National Laboratory

Pacific Northwest National Laboratory (PNNL) is at the forefront of advancing artificial intelligence (AI) to address critical challenges in scientific discovery, energy resilience, and national security. This presentation will introduce the Center for AI @ PNNL, research investments, and AI research priorities with the goal of identifying potential collaboration opportunities. The Lab's research priorities are to develop energy-efficient, assured, domain-aligned, augmented, and operationalized AI with a philosophy of integrating novel AI approaches with domain and mission relevant expertise, PNNL is creating solutions that reduce the carbon footprint of AI systems while ensuring their reliability and security in mission-critical applications. The Lab's domain-aligned AI frameworks leverage deep scientific understanding, enhancing the precision and relevance of Al-driven insights (such as through physics informed machine learning and neural operators). Through augmented AI, PNNL is enabling human-AI collaboration that enhances decision-making processes, ensuring that AI systems complement human expertise rather than replace it. Moreover, PNNL's focus on operationalized AI ensures that these advanced systems are not just theoretical but are deployed effectively in real-world scenarios, driving mission impacts.





