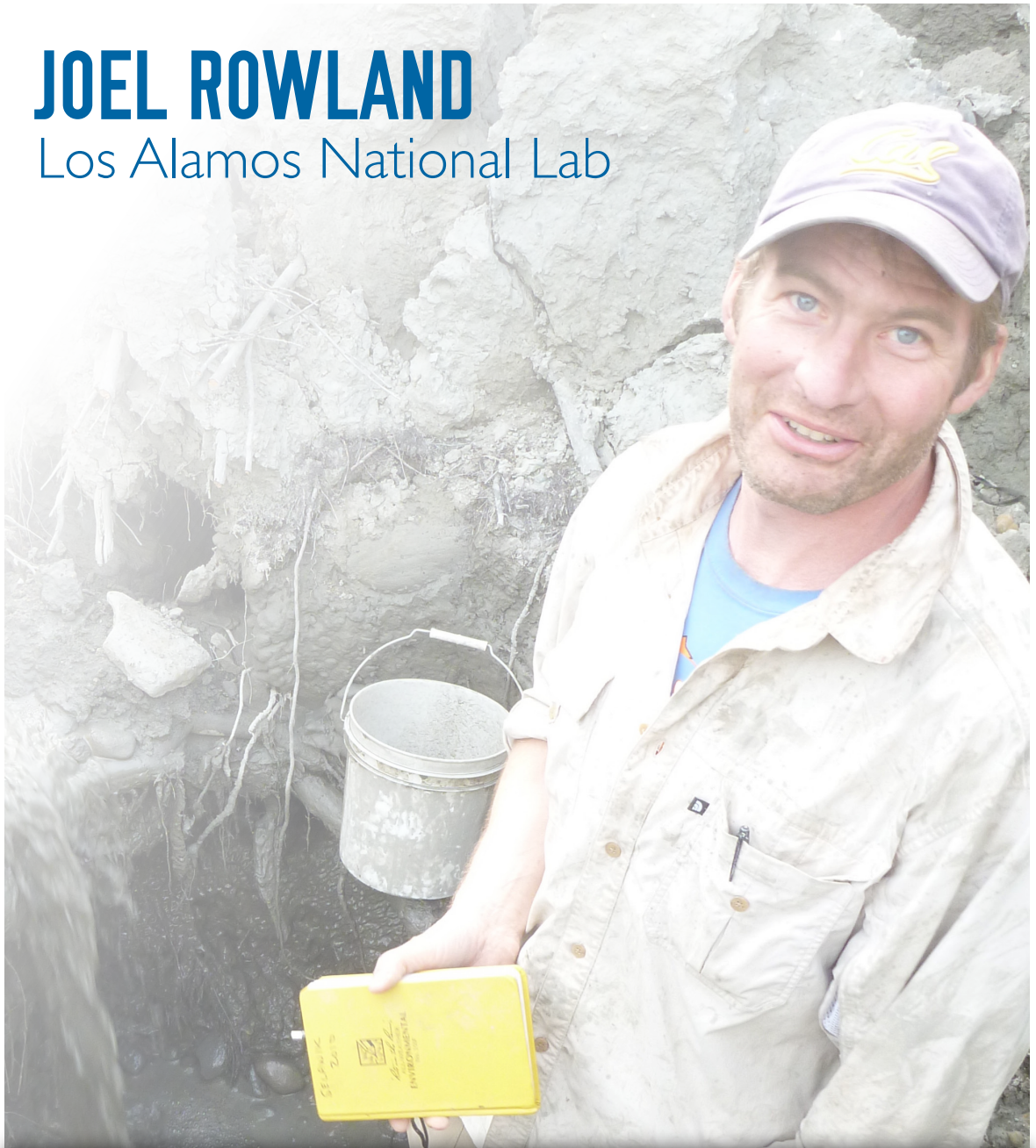


Talk overview:

Through a combination of field studies and a pan-Arctic analysis of satellite imagery we compare erosion rates of permafrost-dominated rivers to rates along rivers in lower-latitudes. From our remote sensing analysis we find that permafrost likely has a strong control on bank erosion rates. Our field observations, however, suggest that this control varies in space and time along individual rivers and across river systems. Using our measurements of floodplain erosion from 10 of 11 largest high-latitude rivers we generated a first-order estimate of the annual flux of floodplain soil organic carbon into rivers due to bank erosion.

JOEL ROWLAND

Los Alamos National Lab



The influence of permafrost on river bank erosion and floodplain carbon flux to Arctic rivers

QUESTIONS Contact
Heather McFarland
hrmcfarland@alaska.edu



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University of Alaska Fairbanks



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