NSF/IUCRC CAC PROJECT

MONITORING, VISUALIZING, AND PREDICTING HEALTH STATUS OF HPC CENTERS

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Advisors:

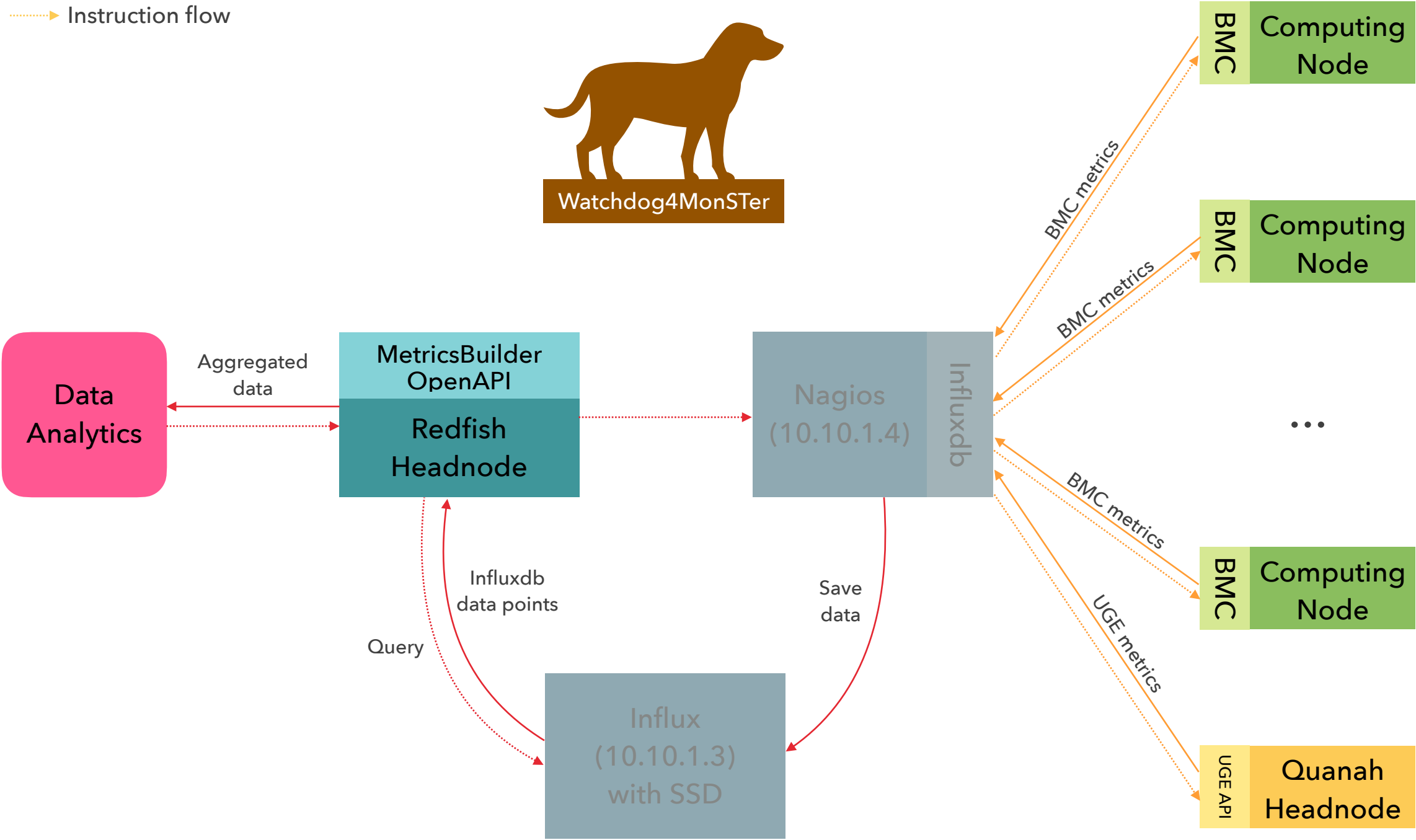Mr. Jon Hass, SW Architect, Dell Inc.

Dr. Alan Sill, Managing Director, HPCC, TTU

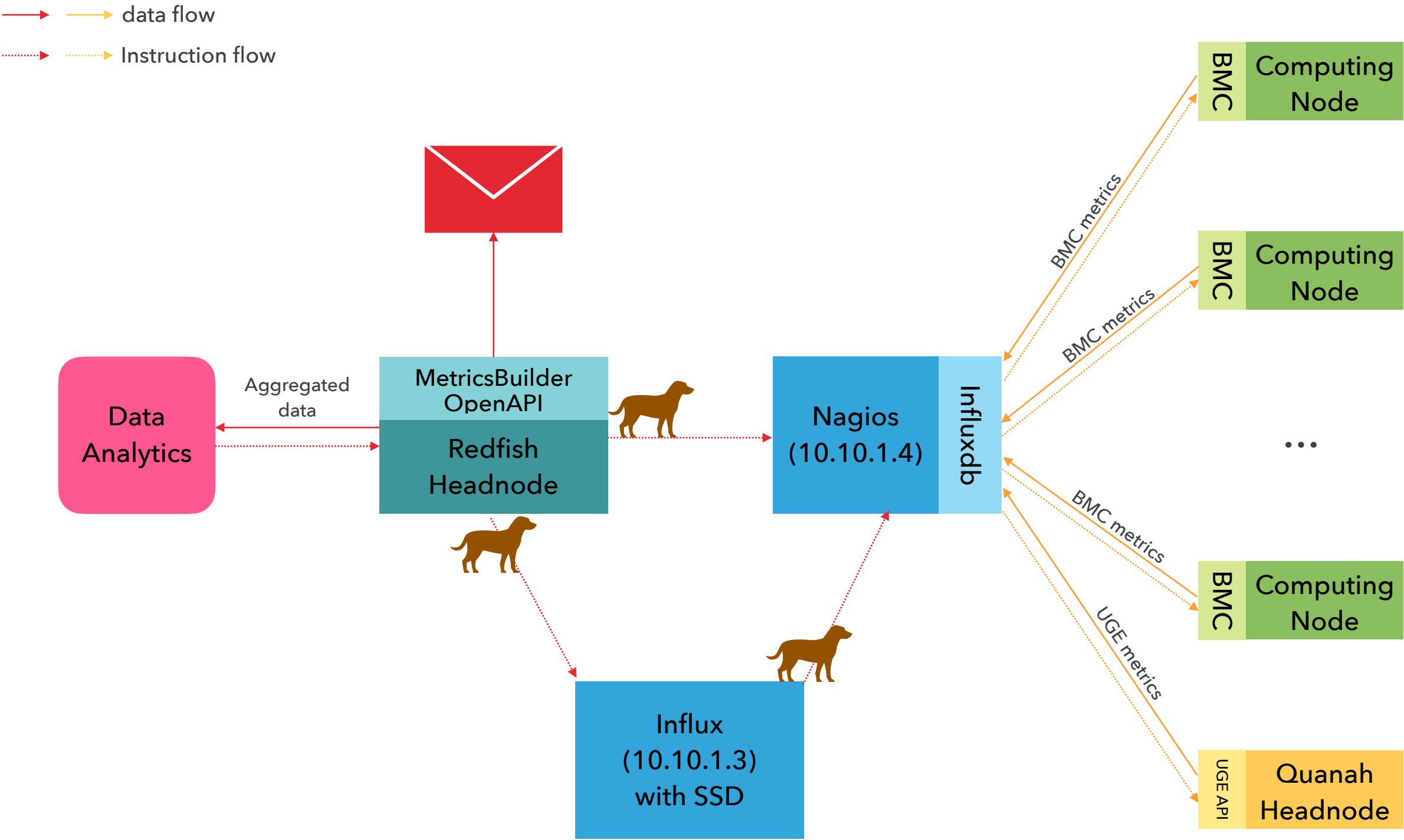Dr. Yong Chen, Associate Professor, CS Dept, TTU

Dr. Tommy Dang, Assistant Professor, CS Dept, TTU

MONITORING ARCHITECTURE

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data flow

Instruction flow

Data Analytics

Aggregated data

MetricsBuilder OpenAPI

Redfish Headnode

Nagios (10.10.1.4)

Influxdb

BMC | Computing Node

BMC | Computing Node

BMC metrics

BMC metrics

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BMC | Computing Node

BMC metrics

Influx (10.10.1.3) with SSD

UGE metrics

UGE API | Quanah Headnode

DEMO

QUESTIONS?/COMMENTS?