Dr. Scott A. Klasky

Current:

Title: Hobbes: OS and Runtime Support for Application Composition (Collaboration)

Award No:

Amount: \$450,000

Location: Oak Ridge National Laboratory **Sponsor:** Department of Energy ASCR **Award Period:** 02/07/2014 - 09/30/2016

Person-Person Months: Years 1-3: No salary support

P.I.: Ron Brightwell , Sandia **Award Period**: 7/1/13 – 6/30/16 **Person-Person Months:** 0.2

This project will deploy, and prototype an exascale Operating System. The relevance to the proposed

work: The project uses ADIOS to compose applications.

Title: Runtime System for I/O staging in support of voluminous in-situ processing of extreme

scale data:

Award Number: DE-FOA-0001043

Amount: \$858,000

Location: Oak Ridge National Laboratory **Sponsor:** Department of Energy ASCR

P.I.: Scott Klasky

Award Period: 08/01/13 - 09/30/16

Person-Person Months: 3.0

The relevance to the proposed work: The project uses ADIOS to evaluate different runtime engines

for I/O optimizations.

Project Name: Scalable Data Analysis and Visualization

Amount: \$2,403,000

Award Number: DE-FOA-0000589

Location: Oak Ridge National Laboratory **Sponsor:** Department of Energy ASCR

P.I.: Arie Shoshani, LBNL

Award Period: 03/01/12 – 09/30/16

Person-Person Months: 2.0

The relevance to the proposed work: The project uses ADIOS to optimize the I/O performance of

SciDAC applications and INCITE applications.

Title: EPSI: Edge Physics Simulation

Amount: \$2,000

Location: Oak Ridge National Laboratory **Sponsor:** Department of Energy ASCR **P.I.**: Choong-Seock Chang, PPPL **Award Period**: 6/1/12 - 1/30/17

Person-Person Months: 1.0

The relevance to the proposed work: The project uses ADIOS to enhance the I/O of the XGC1 simulation and to couple codes together.

Title: ExaCT Center for Exascale Simulation of Combustion in Turbulence Co-design Center

Amount: \$2,5000

Location: Oak Ridge National Laboratory **Sponsor:** Department of Energy ASCR **Award Period:** 6/1/2011 – 6/30/2016

Person-Person Months: 1.0

The relevance to the proposed work: The project looks at the combustion codes and creates skeletons to codesign the I/O layer for the combustion simulations evaluating the trade-offs for recomputing vs. storing and retrieving combustion data.

Title: International Collaboration Framework for Extreme Scale Experiments (ICEE)

Amount: \$570,000

Award Number: DE-FOA-0000695
Location: Oak Ridge National Laboratory
Sponsor: Department of Energy ASCR

Award Period: 8/1/12 – 9/30/15 **Person-Person Months: 1.0**

The relevance to the proposed work: The project uses ADIOS to stream data adaptively from fusion

experiments and simulations to other resources.

Title: Tools to Analyze Morphology and Spatially Mapped Molecular Data

Award No: 1U24CA180924-01A1

Amount: \$ 2,015,673

Location: Oak Ridge National Laboratory

Sponsor: NIH

P.I.: Joel Saltz, Stony Brook University **Award Period**: 7/31/14 – 5/31/17 **Person-Person Months:** 1.6

Relevance to the proposed project: High performance computing tools for high-throughput and pipelined processing of analysis workflows on data from imaging experiments and tools for high performance databases of imaging data from experiments and analysis results data.

Title: Project Name: Network for ab initio many-body methods

Amount: \$ 2,166,000

Location: Oak Ridge National Laboratory **Sponsor:** Department of Energy, BES **Award Period:** 10/1/12 - 9/30/18 **Person-Person Months:** 1.2

The relevance to the proposed work: This project optimizes the I/O and workflow for the QMCPack

simulation.

Title: Project Name: Oak Ridge Leadership Class Facility (PI/ Project Manager: Buddy Bland)

Amount: > \$100,000,000

Location: Oak Ridge National Laboratory **Sponsor:** Department of Energy, ASCR **Award Period:** 10/1/10 - 9/30/18

Person-Person Months: 1.0

The relevance to the proposed work: We work with OLCF customers to optimize their I/O and

workflows.

Pending:

Title: SI2-SSI: Collaborative Research: Sustaining ADIOS as a Community Software

Framework for Scientific Data Management

Amount: \$1,109,755

Location: Georgia Institute of Technology

Sponsor: NSF

Award Period: 01/01/2016 – 12/31/2018 **Person-Person Months:** no salary support

The relevance to the proposed work: This project is mean to create new customers for ADIOS who

are heavy NSF users, including: relativity, disaster management, and biomedical.

Title: Dynamic Distributed Data-centric Resource Management

Amount: \$1,350,000

Location: Oak Ridge National Laboratory

Sponsor: Department of Energy ASCR and OFES

Award Period: 9/1/15 – 9/30/18 Person-Person Months: 1.0

This project.

Title: Science-driven Data Management for multi-tiered storage

Amount: \$1,650,000

Location: Oak Ridge National Laboratory **Sponsor:** Department of Energy ASCR **Award Period:** 9/1/15 – 9/30/18

Person-Person Months: 1.0

The relevance to the proposed work: This work will focus on creating a new multi-tier storage layer.