Biographical Sketch
DANA S. BRUNSON

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(A) PROFESSIONAL PREPARATION

Oklahoma State University – Stillwater	Mathematics	B.S., 1993
Oklahoma State University – Stillwater	Mathematics	M.S., 1995
University of Texas at Austin	Mathematics	Ph.D., 2005

(B) APPOINTMENTS

2012-present	Director, High Performance Computing Center, Oklahoma State University (OSU)
2011-present	Adjunct Associate Professor, Computer Science, OSU
2010-2011	Adjunct Assistant Professor, Computer Science, OSU
2007-2012	Sr. Systems Engineer, High Performance Computing Center, OSU
2007	Systems Administrator, Mathematics Department, OSU
2007	Lecturer, Mathematics Department, OSU
2003	Faculty Member, Oklahoma School of Science and Mathematics
2000-2003	Graduate Research Assistant, University of Texas at Austin
1997-2000	Assistant Instructor in Mathematics, University of Texas at Austin
1995-1997	Teaching Assistant in Mathematics, University of Texas at Austin
1994	Computer consultant, Rogers and Rogers Insurance, Tulsa, Oklahoma
1993-1995	Teaching Assistant in Mathematics, OSU
1992-1993	Advanced Placement Calculus by Satellite Assistant, OSU
1992-1993	Tutor, Mathematics Learning Resource Center, OSU

(C) PUBLICATIONS

i. Five Most Relevant Publications

1. J. Pummill, D. Brunson and A. Apon, 2010: "Community Funding Models for Computational Resources," position paper, NSF-funded *Workshop on Sustainable Funding and Business Models for Academic Cyberinfrastructure Centers*, Ithaca, NY.
2. T. Arbogast and D. S. Brunson, 2007: "A computational method for approximating a Darcy-Stokes system governing a vuggy porous medium," *Computational Geosciences*, **11**(3).
3. T. Arbogast, D. S. Brunson, S. L. Bryant and J. W. Jennings, 2004: "A preliminary computational investigation of a macro-model for vuggy porous media," in *Proceedings of Computational Methods in Water Resources XV*, C. T. Miller, M. W. Farthing, W. G. Gray, and G. F. Pinder (eds.), Elsevier.

(D) SYNERGISTIC ACTIVITIES

- **Oklahoma Cyberinfrastructure Initiative**: Co-lead with U Oklahoma (OU); provides CI resources to academic institutions statewide. (a) Co-PI on Oklahoma's NSF EPSCoR RII Cyber Connectivity (C2) grant, "Oklahoma Optical Initiative," a collaboration among OU, OSU, OneNet, the Samuel Roberts Noble Foundation, Langston U and U Tulsa, $1,176,470 (Award #1006919). (b) Hosted SC09 and SC11/National Computational Science Institute Education Program weeklong workshop on Computational Chemistry for Chemistry Educators, both co-funded by Oklahoma EPSCoR.
- **Regional Impact**: Presented at 2011 and 2012 Great Plains Network Meeting and member of the Cyberinfrastructure Program Group. Presented and attended training workshops with CI-TRAIN project to transform information technology services for enabling scientific discovery. (http://www.ci-train.org/)
- **Institutional Impact**: (a) PI on OSU's NSF MRI grant, "Acquisition of a High Performance Compute Cluster for Multidisciplinary Research," 9/1/2011 – 8/31/2014, $908,812 (Award #1126330). (b) Conducting weekly HPC help session and rounds at OSU; (c) serving as OSU's XSEDE Campus

Champion and served as panelist for Campus Champions BoF at Teragrid 2010, GPN 2011; (d) OSU Graduate Certificate in Bioinformatics ad hoc committee member. (d) Co-hosted "Bioinformatics of Entangled Genomes" workshop, co-funded by three Provost's Program grants.

- **Dissemination**: Oklahoma Supercomputing Symposium conference co-chair 2011-12, presented 2008-11.
- **Diversity**: Panelist and hands-on booth volunteer for Oklahoma EPSCoR Women in Science Conference, 2011.

(E) COLLABORATORS & OTHER AFFILIATIONS

i. Collaborators and Co-Editors

Oklahoma State U: M. Anderson, Plant &Soil Sciences; B. Balasundaram, Industrial Engineering & Management (IEM); K. Baum, Zoology; S. Bukkapatnam, IEM; P. Canaan, Biochemistry & Molecular Biology (BMB); H.K. Dai, Computer Science (CS); M. Davis, Physiological Sciences; A. Doust, Botany; B. Fathepure, Microbiology & Molecular Genetics; M. Fishbein, Botany; J. Fletcher, Entomology & Plant Pathology (EPP); C. Francisco, Math; C. Greenwood, EPP; Y. Guo, Physics; S. Hartson, BMB; P. Hoyt, BMB; P. Jaiswal, Geology; P. Jeyasingh, Zoology; S. Kak, CS; R. Kaundal, BMB; B. Luttbeg, Zoology; S. Marek, EPP; N. Materer, Chemistry; U. Melcher, BMB; J. Mintmire, Physics; M. Palmer, Botany; N. Rahnavard, Electrical & Computer Engineering (ECEN); K. Scheets, Botany; G. Schoenknecht, Botany; R. Singh, Mechanical & Aerospace Engineering; S. Sohoni, ECEN; J. Steets, Botany; M. Tobler, Zoology; R. Van Den Bussche, Zoology; L. Watson, Botany; A. Wayadande, EPP; J. West, ECEN; G. Wilson, Natural Resource Ecology & Management; J. Wu, Math; X. Xie, Physics; M. Yang, Botany; L. Zhu, Statistics;
Clemson U: A. Apon, Computer Science
Langston U: F. Fondjo, Technology; J. Snow, Mathematics; A. Tadesse, Mathematics.
OneNet: J. Deaton
Samuel Roberts Noble Foundation: J. He, K. Staggs
U Oklahoma: H. Neeman, Information Technology/Computer Science; M. Strauss, Physics & Astronomy; X. Xiao, Botany & Microbiology; M. Xue, Meteorology
U Tulsa: D. Schoenefeld, Computer Science
U Arkansas: J. Pummill, Arkansas High Performance Computing Center.

ii. Graduate Advisors and Postdoctoral Sponsors

Robert J. Myers, M.S. advisor, Oklahoma State University.
Todd Arbogast, Ph.D. advisor, University of Texas at Austin.

iii. Thesis Advisor and Postgraduate-Scholar Sponsor

None