CURRICULUM VITA
Henry J. Neeman, University of Oklahoma
Assistant Vice President, Information Technology - Research Strategy Advisor
Associate Professor, College of Engineering
Adjunct Faculty, School of Computer Science
Director, OU Supercomputing Center for Education & Research (OSCER)
Four Partners Place Suite 1000, 301 David L. Boren Blvd., Norman OK 73019
405-325-5386, 405-325-7181 (fax), hneeman@ou.edu
http://hneeman.oscer.ou.edu/

PROFESSIONAL PREPARATION

State University of New York at Buffalo	Computer Science	B.S.	1987
State University of New York at Buffalo	Statistics	B.A.	1987
State University of New York at Buffalo	Mathematics	minor	1987
University of Illinois at Urbana-Champaign	Computer Science	M.S.	1990

Thesis advisors: Dennis Gannon, Donald Hearn

University of Illinois at Urbana-Champaign	Computer Science	Ph.D.	1996

Dissertation advisors: Michael L. Norman (dissertation director), Michael Heath (committee chair)
Dissertation committee members: Dennis Gannon, Donald Hearn, Faisal Saeed, Paul Saylor

University of Illinois at Urbana-Champaign	Postdoctoral Research Associate	1996-98

Advisor: Michael L. Norman

APPOINTMENTS

1/2013 - present **Assistant Vice President**, Information Technology - Research Strategy Advisor
10/2012 - present **Associate Professor,** College of Engineering, University of Oklahoma, Norman OK
12/2011 - 1/2013 **Executive Director of Research Computing & Services**
  OU Information Technology, University of Oklahoma, Norman OK
8/2001 - present **Director**, OU Supercomputing Center for Education & Research (OSCER)
  OU Information Technology, University of Oklahoma, Norman OK
1/2000 – present **Adjunct Assistant Professor,** School of Computer Science, OU
8/1998 – 6/2007 **Research Scientist,** Center for Analysis & Prediction of Storms, OU
5/1996 - 8/1998 **Postdoctoral Research Associate**
  National Center for Supercomputing Applications
  University of Illinois at Urbana-Champaign (UIUC)
5/1993 - 5/1996 **Graduate Research Assistant**
  National Center for Supercomputing Applications
  University of Illinois at Urbana-Champaign (UIUC)
8/1987 - 5/1993 **Graduate Research Assistant**
  Center for Supercomputing Research & Development
  University of Illinois at Urbana-Champaign (UIUC)
1/1985 - 8/1987 **Undergraduate Researcher/Computer Programmer/Consultant/Teaching Asst**
  Department of Physiology, State University of New York at Buffalo

HIGHLIGHTS

- Experience: 25+ years in HPC and related areas, 11 years as HPC center director
- Graduate research at national supercomputing centers
  - PhD and Postdoctoral research at the National Center for Supercomputing Applications, University of Illinois at Urbana-Champaign (UIUC)
  - MS thesis research at the Center for Supercomputing Research & Development, UIUC
- Grants: Over $38M as PI, Co-PI, Senior Personnel
  - As PI: $3.1M, including 2 NSF Major Research Instrumentation ($1.1M), NSF EPSCoR RII C2
    - Most successful at MRI funding at OU and 2nd most successful in Oklahoma since 2001 (i.e., since OSCER was founded)
  - As Co-PI: $1.8M, including NSF PetaScale Applications ($1.2M)
  - As Senior Personnel: $33.8M, including NSF EPSCoR RII Track-1 ($24M), Track-2 ($6M)
- Publications in several disciplines: HPC, HPC education, virus assembly (biophysics), hydrology, chemical engineering, biomedicine, aerospace engineering, tumor invasion modeling, meteorology, scientific visualization.
  - Awarded **"Best Paper: Education, Outreach, Training"** (with co-authors) at TeraGrid2008 and TeraGrid2010 conferences.
- Education Initiatives
  - **"Supercomputing in Plain English"** lecture series: Developed and delivered biennially, so far to a total of over 1500 people at 229 academic and non-academic institutions in 46 US states and territories and 10 other countries.
  - Frequent teaching for OU's School of Computer Science.
- Faculty/Staff Development: Co-taught and hosted faculty workshops on parallel computing sponsored by, and materials adopted by, the National Computational Science Institute, the Linux Clusters Institute and the SC supercomputing conference series; hosted workshops for the Virtual School for Computational Science & Engineering.
- Oklahoma Cyberinfrastructure Initiative (OCII): Co-founder/co-lead — OCII has been providing to Oklahoma institutions and organizations several kinds of service (resources, dissemination, education, faculty/staff development, outreach, proposal support, technology, workforce development) to 3 PhD granting universities, 20 non-PhD-granting colleges and universities, 10 community colleges, 12 career techs, 2 high schools and 2 school systems – includes 8 minority serving institutions (Historically Black University, 3 Native American Serving Non-Tribal Institutions, 3 Tribal Colleges, 1 other MS) and every public university in the state, plus 47 non-academic organizations.
- Oklahoma Supercomputing Symposium 2002-12, founder/chair—over 2500 attendees from 101 academic institutions in 27 US states and territories, including 61 academic institutions in 14 EPSCoR jurisdictions, among them 36 Oklahoma institutions; 119 private companies; 35 government agencies; 17 non-governmental organizations.
- External Advisory Committees: National Science Foundation Advisory Council on Cyberinfrastructure, National Science Foundation Office of Cyberinfrastructure Task Force on Cyberlearning and Workforce Development, Arkansas Cyberinfrastructure External Advisory Committee, Samuel Roberts Noble Foundation External Advisory Committee (chair), ID/NM/NV NSF EPSCoR RII Track-2 External Advisory Committee, Pawnee Nation College Technical Advisory Council, University of Central Oklahoma Computer Science Advisory Board.
- Conference Committees: SC07-11 Education Committee (SC11 Education Chair, SC10 Education Deputy Chair); Oklahoma Supercomputing Symposium 2002-13 Program Chair; XSEDE'13; IEEE Cluster 2013; Linux Clusters Institute conference 2003-10 (2007 Chair); Great Plains Network Annual Meeting 2008; From Computational Biophysics to Systems Biology 2013
- "People to Watch 2006" (HPCwire.com)
- Collaborators (on grants and publications, past 5 years): over 200 from over 50 institutions in 25 US states.

GRANTS
Total External Funding to Date (as PI, Co-PI or Senior Personnel): $38,821,094
(NOTE: Dollar figures are totals for the entire grant, not specifically credited to me.)

2013 - 2018: "Adapting Socio-ecological Systems to Increased Climate Variability"
   Senior Personnel with PI James Wicksted (Oklahoma State U), Co-PI A. Knoedler (OU), Senior Personnel J. Brotzge, D. Carlson, J. Friedman, A. Goodin, H. Jenkins-Smith, G. Krutz, Y. Luo, H. McCarthy, R. McPherson, R. Puls, C. Silva, P. Spicer, X. Xiao (all of OU), T. Boyer, D. Brunson, J. Campiche, B. Caniglia, R. Dunlap, D. Engle, S. Fuhlendorf, T. Ochsner, M. Payton, D. Shideler, D. Wilson, C. Zou (all of OSU), R. Bonett, H. Wells (both of U Tulsa), J. Biermacher (Samuel Roberts Noble Foundation)
   National Science Foundation, $20,000,000
   Oklahoma State Regents for Higher Education, $4,000,000
2012: "Oklahoma Supercomputing Symposium 2012"
   PI; Oklahoma EPSCoR, $5,000
2011: "Oklahoma Supercomputing Symposium 2011"
   PI; Oklahoma EPSCoR, $5,000
2010 - 2013: "MRI: Acquisition of Extensible Petascale Storage for Data Intensive Research"
   PI with Co-PIs M. Jensen, M. Strauss, X. Xiao, M. Xue, Senior Personnel E. Baron, K. Dresback, R. Kolar, A. McGovern, R. Palmer, D. Papavassiliou, H. Severini, P. Skubic, T. Trafalis, M. Wenger, R. Wheeler (Duquesne U)
   National Science Foundation, $792,925
2010 - 2012 (no cost extension to 2013): "Oklahoma Optical Initiative"
   PI with Co-PIs J. Deaton (OneNet), D. Brunson (Oklahoma State U), Senior Personnel J. He (Samuel Roberts Noble Foundation), D. Schoenefeld (U Tulsa), J. Snow (Langston U), M. Strauss (OU), X. Xiao (OU), M. Xue (OU)
   National Science Foundation, $1,176,470
2010: "Oklahoma Supercomputing Symposium 2010"
   PI; Oklahoma EPSCoR, $5,000
2009 - 2013: "Enabling Petascale Ensemble-Based Data Assimilation for the Numerical Analysis and Prediction of High-Impact Weather"
   Co-PI with PI M. Xue (OU), Co-PIs X. Wang (OU), R. Barnes (OU), X. Li (Oklahoma State U), Senior Personnel S. Sanielevici (Pittsburgh Supercomputing Center)
   National Science Foundation, $1,200,002
2009 - 2012: "A cyberCommons for Ecological Forecasting,
   Senior Personnel with PI P. Risser, Co-PIs Y. Li, X. Xiang, L. Gruenwald, M. Palmer (Oklahoma State U), Senior Personnel J. Kelly, S. Lakshmivarahan, A. McGovern, C. Weaver
   National Science Foundation, $2,999,999
   Oklahoma State Regents for Higher Education, $100,000
2009 - 2010: "NSF Workshop High Performance Computing Center Sustainability"
   Co-PI with PI S. Ahalt (Ohio Supercomputer Center), Co-PIs A. Apon (U. Arkansas), D. Lifka (Cornell U)
   National Science Foundation, $49,613
2009: "Oklahoma Supercomputing Symposium 2009"
   PI; Oklahoma EPSCoR, $5,000
2008: "Oklahoma Supercomputing Symposium 2008"
   PI; Oklahoma EPSCoR, $5,000
2008: "Outer Boundary Forcing for Texas Coastal Models"
   Co-PI with R. Kolar (PI), K. Dresback (Co-PI)
   Texas Water Development Board, $20,000

Total External Funding to Date (as PI, Co-PI or Senior Personnel): **$38,821,094**
(NOTE: Dollar figures are totals for the entire grant, not specifically credited to me.)

2007 - 2012: "Assembling the Eutelost Tree of Life – Addressing the Major Unresolved Problem in
Vertebrate Phylogeny"
Senior Personnel with R. Broughton (PI); Co-PIs E. Wiley (U Kansas), A. Lopez (U Florida), T.
Grande (U Loyola-Chicago), L. Smith (Field Museum), K. Carpenter (Old Dominion U), J. Diamond
(U Nebraska-Lincoln); Senior Personnel D. Hough (OU)
National Science Foundation, $3,000,000 ($653,801 to OU)
2007 - 2010: "Challenges in Understanding Tornadogenesis and Associated Phenomena"
Senior Personnel with J. Straka (PI), K. Kanak (Co-PI), Davies-Jones (Co-PI)
National Science Foundation, $854,171
2007: "Oklahoma Supercomputing Symposium 2007"
PI; Oklahoma EPSCoR, $5,000
2006 – 2010: "CI-TEAM: Cyberinfrastructure Education for Bioinformatics and Beyond"
PI with Co-PIs B. Roe, H. Severini, D. Wu
National Science Foundation, $249,974
2006: "Oklahoma Supercomputing Symposium 2006"
PI; Oklahoma EPSCoR, $5,000
2005 - 2007: "SGER: Cyberinfrastructure for Distributed Rapid Response to National Emergencies"
PI with Co-PI H. Severini
National Science Foundation Small Grant for Exploratory Research, $132,371
2005: "Oklahoma Supercomputing Symposium 2005"
PI; Oklahoma EPSCoR, $5,000 plus $7,500 OU cost share
2004 - 2005: "Cross-Disciplinary and Statewide Curriculum for Preparatory Medical Physics Education"
Co-PI with T. Johnson (PI), D.H. Wu, B.K. Abbott
OU Faculty Senate Development Award, $2,500
2004: "Oklahoma Supercomputing Symposium 2004"
PI; Oklahoma EPSCoR, $14,000
2003 - 2006: "MRI: Acquisition of an Itanium Cluster for Grid Computing"
PI with K. Droegemeier, K. Mish, D. Papavassiliou, P. Skubic, J. Snow, A. Striz, D. Weber
National Science Foundation, $340,000 plus $164,000 OU cost share
2003: "Oklahoma Supercomputing Symposium 2003"
PI; Oklahoma EPSCoR, $14,000 plus $2,500 OU cost share
2002 - 2006: "Integration of High Performance Computing in Nanotechnology: A Combined Research in
Curricular Development"
PI with Co-PIs L. Lee, J. Mullen, G. Newman (originally Co-PI, promoted to PI on Lee's retirement)
National Science Foundation, $399,998
2000 - 2003: "Adaptation of the Advanced Regional Prediction System to the Environmental Hydrology
Workbench"
Co-PI with PI D. Weber, Co-PIs B. Vieux, K. Droegemeier
National Center for Supercomputing Applications, $310,000
2000 - 2003: "Integrated, Scalable MBS [Model-Based Simulation] for Flow Through Porous Media"
Co-PI with PI D. Papavassiliou (PI) and Co-PI M. Zaman
National Science Foundation, $150,071
2000 - 2001: "Predictions of Atmospheric Dispersion of Chemical and Biological Contaminants in the
Urban Canopy"
Co-PI with J. Antonio and S. Lakshmivarahan,
Department of Defense, $75,000
  (Note that this was part of a larger project; PI Prof. Alan Graham, Texas Tech U)

PUBLICATIONS
HPC Education
1. C. Carley, B. McKinney, L. Sells, C. Zhao and H. Neeman, 2013: "Using a Shared, Remote Cluster for Teaching HPC." *Proc. IEEE Cluster 2013*, to appear.
2. H. Neeman, D. Brunson, J. Deaton, Z. Gray, E. Huebsch, D. Gentis and D. Horton, 2013: "The Oklahoma Cyberinfrastructure Initiative." *Proc. XSEDE 2013*.
3. A. Fitz Gibbon, P. Gray, D. A. Joiner, T. Murphy, H. Neeman, R. M. Panoff, C. Peck and S. Thompson, 2010: "Teaching High Performance Computing to Undergraduate Faculty and Undergraduate Students." *Proc. TeraGrid 2010*. <u>Best Paper: Education, Outreach & Training Track.</u>
4. H. Neeman, H. Severini, D. Wu and K. Kantardjieff, 2010: "Teaching High Performance Computing via Videoconferencing." *ACM Inroads*, 1(1), 67-71.
5. H. Neeman, H. Severini, D. Wu and K. Kantardjieff, 2008: "Teaching Supercomputing via Videoconferencing." *Proc. TeraGrid 2008*. <u>Best Paper: Education, Outreach & Training Track.</u>
6. H. Neeman, H. Severini and D. Wu, 2008: "Supercomputing in Plain English: Teaching Cyberinfrastructure to Computing Novices." *inroads: SIGCSE Bulletin*, 40 (2), 27-30.
7. H. Neeman, L. Lee, J. Mullen and G. Newman, 2006: "Analogies for Teaching Parallel Computing to Inexperienced Programmers." *inroads: SIGCSE Bulletin*, 38 (4), 64-67.
8. H. Neeman, J. Mullen, L. Lee and G. Newman, 2002: "Supercomputing in Plain English: Teaching High Performance Computing to Inexperienced Programmers." *Proc. 3rd LCI International Conference on Linux Clusters: The HPC Revolution 2002*.

HPC, Visualization and Other Computing
1. Z. Cui, B.E. Vieux, H. Neeman and F. Moreda, 2005: "Parallelization of a Distributed Hydrologic Model." *International Journal of Computer Applications in Technology*, Special Issue on Applications for High-Performance Systems, 22 (1), 42-52.
2. H. Severini, H. Neeman, C. Franklin, J. Alexander, and Sumanth J.V., 2008: "Implementing Linux-Enabled Condor in Windows Computer Labs." *Proc. 2008 Nuclear Science Symposium*.
3. D. Weber and H. Neeman, 2006: "Experiences in Optimizing a Numerical Weather Prediction Model: An Exercise in Futility?" *Proc. 7th LCI International Conf. on Clusters: The HPC Revolution 2006*.
4. H. Neeman, 2000: "HAMR: The Hierarchical Adaptive Mesh Refinement System." In *Structured Adaptive Mesh Refinement (SAMR) Grid Methods*, S. B. Baden, N.P. Chrisochoides, D.B. Gannon and M.L. Norman, eds. New York: Springer-Verlag, 19-51.
5. H. Neeman, 1996: "Autonomous Hierarchical Adaptive Mesh Refinement for Multiscale Simulations." Ph.D. dissertation, University of Illinois at Urbana-Champaign, advisors Michael L. Norman and Michael Heath.
6. H. Neeman, 1990: "Visualization Techniques for Three Dimensional Flow Fields." M.S. thesis, University of Illinois at Urbana-Champaign. Advisors Dennis Gannon and Donald Hearn.
7. H. Neeman, 1990: "A Decomposition Algorithm for Visualizing Irregular Grids." *Computer Graphics*, 24:5 (Proc. San Diego Workshop on Volume Visualization), 49-56.
8. P. Shirley and H. Neeman, 1989: "Volume Visualization at the Center for Supercomputing Research and Development." *Proc. Chapel Hill Workshop on Volume Visualization*, 17-20.
9. H. Neeman and A. Tuchman, 1989: "Simulation Time Animation System." Center for Supercomputing Research and Development Technical Report 859.

Other Engineering

1. H.-W. Lao, H.J. Neeman and D.V. Papavassiliou, 2004: "A Pore Network Model for the Calculation of Non-Darcy Flow Coefficients in Fluid Flow through Porous Media." *Chemical Engineering Communications*, 191 (10), 1285-1322.
2. C. C. Kiser, T. A. Handy, E. C. Lemley, D. V. Papavassiliou and H. J. Neeman, 2010: "Reynolds Number Dependence for Laminar Flow Loss Coefficients in Tee and Wye Junctions." *Proc. ASME 2010 3rd Joint US-European Fluids Engineering Summer Meeting and 8th International Conference on Nanochannels, Microchannels, and Minichannels (FEDSM2010-ICNMM2010)*, FEDSM-ICNMM2010-31026.
3. T. Handy, E.C. Lemley, D.V. Papavassiliou and H.J. Neeman, 2009: "Loss Coefficients in Microelbows." *Proc. FEDSM2009 ASME Fluids Engineering Division Summer Meeting*, paper FEDSM2009-78517.
4. T. Handy, E.C. Lemley, D.V. Papavassiliou and H.J. Neeman, 2009: "Laminar Entrance Length in Microtubes." *Proc. FEDSM2009 ASME Fluids Engineering Division Summer Meeting*, paper FEDSM2009-78532.
5. T.A. Handy, E.C. Lemley, D.V. Papavassiliou and H.J. Neeman, 2008: "Simulations to Determine Laminar Loss Coefficients for Flow in Circular Ducts with Arbitrary Planar Bifurcation Geometries." *Proc. FEDSM2008 6th ASME Fluids Engineering Summer Conference*, paper FEDSM2008-55181.
6. E.C. Lemley, D.V. Papavassiliou and H.J. Neeman, 2007: "Non-Darcy Flow Pore Network Simulation: Development and Validation of a 3D Model." *Proc. FEDSM2007 5th Joint ASME/JSME Fluids Engineering Conference*, paper FEDSM2007-37278.
7. E.C. Lemley, D.V. Papavassiliou and H.J. Neeman, 2007: "Simulations to Determine Laminar Loss Coefficients in Arbitrary Planar Dividing Flow Geometries." *Proc. FEDSM2007 5th Joint ASME/JSME Fluids Engineering Conference*, paper FEDSM2007-37268.
8. A.G. Striz, B. Kennedy, Z. Siddique and H. Neeman, 2006: "A Roadmap for Moderate Fidelity Conceptual Design with Multilevel Analysis and MDO." *Proc. 47th AIAA/ASME/ASCE/AHS/ASC Structures, Structural Dynamics, and Materials Conference*, 1 - 4 May 2006, Newport RI, AIAA 2006-1619.
9. C. Byun, G.P. Guruswamy, A.L. Huizenga, H.J. Neeman, A.G. Striz, 2005: "High Fidelity Dynamic Analysis of Launch Vehicles on Single-Image Supercomputers." *Proc. 46th AIAA/ASME/ASCE/AHS/ASC Structures, Structural Dynamics and Materials Conference*.
10. S. Subramaniyam, H.J. Neeman and A.G. Striz, 2004: "Domain Decomposition in Displacement Based Multi-Level Structural Optimization." *Proc. 10th AIAA/ISSMO Multidisciplinary Analysis and Optimization Conference*.
11. B.A. Houshmand, H.J. Neeman, and A.G. Striz, 2003: "Displacement Based Multilevel Structural Optimization and High Performance Computing." *Proc. World Congress of Structural and Multidisciplinary Optimization 5*.
12. H.-W. Lao, H. Neeman and D. Papavassiliou, 2001: "Stochastic Estimation of Porous Medium Properties." *Proc. 3rd International Conference on Computational Technologies for Fluid/Thermal/Chemical Systems with Industrial Applications*.
13. H. Neeman, H.-W. Lao, D. Simpson and D. Papavassiliou, 2001: "Multiscale Characterization of Porous Media Properties for Hydrocarbon Reservoir Simulation." *Proc. SPIE Conference on Commercial Applications for High-Performance Computing*.
14. H.-W. Lao, H. Neeman and D. V. Papavassiliou, 2001: "Development of a Random Pore Network Simulation for the Estimation of Reservoir Rock Properties, Part I: The Two-Dimensional Case." *Rock Mechanics Institute Research Memorandum Number IAP/III-01-01*, University of Oklahoma.

Bioscience/Health Science
1. P. Moisant, H. Neeman and A. Zlotnick, 2010: "Exploring the Paths of (Virus) Assembly." *Biophysical Journal*, 99 (5), 1350-1357.
2. T. Ashley, D. Wu, R. Watkins, H. Neeman and B. Howard, 2010: "Modeling Tumor Invasion: Assessing Erlang for the Modeling of Molecular/Cellular Dynamics." *Proc. Trends in Functional Programming 2010*, paper 27.
3. W. McCall, O. Plesh, B. Bishop and H. Neeman, 1990: "Analysis of Jaw Movements and Masticatory Muscle Activity." *Computer Methods and Programs in Biomedicine*, 31, 19-32.
4. R.L. Neeman, H.J. Neeman and M. Neeman, 1988: "Application of Orthokinetic Orthoses in Habilitation of a Person with Upper Extremity Incoordination Secondary to Spastic Quadriplegia Due to Cerebral Palsy." *Canadian Journal of Rehabilitation*, 1 (3), 145-154.

Other
1. T. Murphy and H. Neeman, 2003: "1089 and All That: A Journey into Mathematics." *Read This! The MAA Online Book Review*, Mathematical Association of America
http://mathdl.maa.org/mathDL/19/?pa=reviews&sa=viewBook&bookId=68076

TEACHING EXPERIENCE

- <u>National Computational Science Institute/SC07-SC11 conference Education Program</u> workshops Parallel Programming & Cluster Computing workshops (introductory level except as noted)
  - o Hosted at OU and co-instructed: 7 weeklong, 6 daylong
    summer 2012; fall 2011 (in conjunction with the Oklahoma Supercomputing Symposium 2011); summer 2011 (intermediate level), fall 2010 (in conjunction with the Oklahoma Supercomputing Symposium 2010); summer 2010 (intermediate level); fall 2009 (in conjunction with the Oklahoma Supercomputing Symposium 2009); summer 2009; fall 2008 (in conjunction with the Oklahoma Supercomputing Symposium 2008); summer 2008; fall 2007 (in conjunction with the Oklahoma Supercomputing Symposium 2007); summer 2005; summer 2004; fall 2003 (in conjunction with the Oklahoma Supercomputing Symposium 2003)
  - o Co-instructed but not hosted: summer 2009 at Kean University, at Louisiana State University; summer 2006 at Houston Community College
  - o Co-instructed since SC07 conference Education/HPC Educators Program
    - SC07, SC08, SC10 (Education Deputy Chair), SC11 (Education Chair), SC12, SC13
- <u>Blue Waters Undergraduate Petascale Institute</u> workshops
  - o Co-instructed but not hosted: summer 2011; summer 2010
- <u>Linux Clusters Institute</u> workshops
  - o Hosted at OU and co-instructed: Feb 2007, June 2005
  - o Co-instructed but not hosted: Feb 2005
- <u>OU CS 1313 Computer Programming for Non-majors</u>: Spring 2000, Fall 2000, Spring 2001, Spring 2002, Fall 2002, Spring 2003, Fall 2003, Spring 2004, Fall 2004, Fall 2005, Spring 2006, Fall 2006 Spring 2007, Fall 2007, Spring 2009, Fall 2010, Spring 2013
- <u>OU CS 2413 Data Structures</u>: Summer 2000
- <u>OU ChE 5480 (combination of Nanotechnology and HPC)</u>: Fall 2003, Summer 2005
- <u>"Supercomputing in Plain English"</u> workshop series: taught to mixed audience of undergraduate students, graduate students, faculty, staff and non-academic professionals: Fall 2001, Fall 2002, Fall 2004, Fall 2007, Spring 2009, Spring 2011, Spring 2013 (scheduled)
  - o Over 1500 participants from 248 institutions and organizations in 47 US states and territories plus 10 other countries
    - 178 academic institutions in 46 US states and territories plus Argentina, Brazil, China, Mexico, Pakistan and Poland, including 15 institutions in OK and 50 institutions in 22 other EPSCoR jurisdictions
    - 29 government agencies (US federal and state, foreign) in 14 US states plus India, Italy, Mexico and Switzerland
    - 26 commercial firms in 12 US states and territories plus India
    - 15 non-governmental in 8 US states and territories plus Norway
- <u>Introductory Unix Workshops</u>: taught for OU Student Chapter of ACM (fall 1999), for CAPS Research Experience for Undergraduates program (summer 1999)

GRADUATE SUPERVISION

1. Yujia Qin, PhD committee, Microbiology & Plant Biology, Fall 2012 - present
2. Arne Schwettmann, PhD committee (informal), Physics & Astronomy, Fall 2005 - Spring 2012
3. Roman Voronov, PhD committee, Chemical, Biological & Materials Engineering, Summer 2008 - Spring 2010
4. Samuel Solomon, graduate independent study, Computer Science, Spring - Summer 2005
5. Pankaj Agrawal, graduate independent study, Computer Science, Fall 2003 - Summer 2004
6. Suresh Marru, graduate research assistant and MS committee, Center for Analysis & Prediction of Storms and Electrical & Computer Engineering, Jan 2001 - May 2004
7. R. Jason Lynn, MS committee, Computer Science, Feb 2001 - May 2002

UNDERGRADUATE SUPERVISION

1. Gregoire Astruc, undergraduate intern, University de Clermont-Ferrand, Spring/Summer 2008
2. Chris Belgy, undergraduate intern, University de Clermont-Ferrand, Spring/Summer 2008
3. Gregory Mialon, undergraduate intern, University de Clermont-Ferrand, Spring/Summer 2008
4. Guillaume Jeandillou, undergraduate intern, University de Limoges, Spring/Summer 2008
5. Damien Trouillaud, undergraduate intern, University de Limoges, Spring/Summer 2008
6. Vincent Bialoux, undergraduate intern, University de Limoges, Spring/Summer 2007
7. Florent Devillechabrol, undergraduate intern, University de Limoges, Spring/Summer 2007
8. Damien Nestelhut, undergraduate intern, University de Clermont-Ferrand, Spring/Summer 2007
9. Romain Paris, undergraduate intern, University de Clermont-Ferrand, Spring/Summer 2007
10. Jean-Baptiste Perez, undergraduate intern, University de Clermont-Ferrand, Spring/Summer 2007
11. Francois Segaud, undergraduate intern, University de Limoges, Spring/Summer 2007
12. Arnaud Auroux, undergraduate intern, Universite de Clermont-Ferrand, Spring/Summer 2006
13. Michael Bessard, undergraduate intern, Universite de Clermont-Ferrand, Spring/Summer 2006
14. Thomas Chavanis, undergraduate intern, Universite de Clermont-Ferrand, Spring/Summer 2006
15. Anthony Dubey, undergraduate intern, Universite de Clermont-Ferrand, Spring/Summer 2006
16. Melanie Garnier, undergraduate intern, Universite de Limoges, Spring/Summer 2006
17. Anthony Laroulandie, undergraduate intern, Universite de Limoges, Spring/Summer 2006 Simon Le Parc, undergraduate intern, Universite de Limoges, Spring - Summer 2006
18. Xavier Marguin, undergraduate intern, University de Clermont-Ferrand, Spring/Summer 2006
19. Florian Masson, undergraduate intern, Universite de Clermont-Ferrand, Spring/Summer 2006
20. Baptiste Rousset, undergraduate intern, Universite de Clermont-Ferrand, Spring/Summer 2006
21. Claire Rouveyrol, undergraduate intern, Universite de Clermont-Ferrand, Spring/Summer 2006
22. Virginie Trottet, undergraduate intern, Universite de Clermont-Ferrand, Spring/Summer 2006
23. Clement Vayer, undergraduate intern, University de Clermont-Ferrand, Spring/Summer 2006
24. Xing Wang, undergraduate independent study, Computer Science, Summer 2005
25. Jean-Baptiste Diogon, undergraduate intern, Universite d'Auvergne, Spring/Summer 2005
26. Thibault Pouget, undergraduate intern, Universite de Limoges, Spring/Summer 2005
27. Guilhem Urroz, undergraduate intern, Universite de Limoges, Spring/Summer 2005
28. Jason Lacy, undergraduate intern, Library & Information Studies, Spring 2005
29. David LaFleur, undergraduate intern, Library & Information Studies, Spring 2005
30. Clinton Mosley, undergraduate intern, Library & Information Studies, Fall 2004
31. Roy Simon, undergraduate intern, Library & Information Studies, Fall 2003
32. Lyal Grissom, undergraduate employee, OSCER, Sep 2001 - Oct 2002
33. Dale Simpson, undergraduate employee, Chemical, Biological & Materials Engineering, Sep 2000 - May 2002
34. James Clark, undergraduate employee, Computer Science, June 2001 - Aug 2001
35. Joshua Shuller, undergraduate employee, CAPS, Jan 2001 - Aug 2001
36. Joseph Garfield, undergraduate employee, CAPS, Sep 1999 - Jan 2001, Jun - Aug 2001
37. Kenneth Teague, independent study, CAPS/Computer Science, Spring 1999

PROFESSIONAL ACTIVITIES
Conference Activities
- Conference Chair, Oklahoma Supercomputing Symposium 2013, Norman OK
  http://symposium2013.oscer.ou.edu/
- Education, Outreach, and Training (EOT) Papers Chair, IEEE Cluster 2013, Indianapolis IN
  https://pti.iu.edu/ieeecluster-2013/
- Posters Track Co-Chair, XSEDE 2013, San Diego CA
  https://www.xsede.org/xsede13
- Conference Committee, From Computational Biophysics to Systems Biology 2013, Norman OK
- Conference Chair, Oklahoma Supercomputing Symposium 2012, Norman OK
  http://symposium2012.oscer.ou.edu/
- Education Chair, The International Conference for High Performance Computing, Networking, Storage, and Analysis (SC11), Seattle WA
  http://sc11.supercomputing.org/
- Conference Chair, Oklahoma Supercomputing Symposium 2011, Norman OK
  http://symposium2011.oscer.ou.edu/
- Education Deputy Chair, The International Conference for High Performance Computing,
- Networking, Storage, and Analysis (SC10), New Orleans LA
  http://sc10.supercomputing.org/
- Conference Chair, Oklahoma Supercomputing Symposium 2010, Norman OK
  http://symposium2010.oscer.ou.edu/
- Awards Chair, 11th LCI International Conference on High-Performance Clustered Computing, 2010, Pittsburgh PA
  http://www.linuxclustersinstitute.org/conferences/
- Education Committee member, workshops co-chair, SC09 Education Program, Portland OR
- http://sc09.supercomputing.org/
- Conference Chair, Oklahoma Supercomputing Symposium 2009, Norman OK
  http://symposium2009.oscer.ou.edu/
- Technical Presentations and Technical Briefs Chair, 10th LCI International Conference on High-Performance Clustered Computing, 2009, Boulder CO
  http://www.linuxclustersinstitute.org/conferences/
- Education Committee member, SC08 Education Program, Austin TX
  http://sc08.supercomputing.org/
- Conference Chair, Oklahoma Supercomputing Symposium 2008, Norman OK
  http://symposium2008.oscer.ou.edu/
- Planning Committee member, Great Plains Network Annual Meeting 2008
  http://collaboration.greatplains.net/wiki/index.php/Annual_Meeting:2008
- Conference Committee member, 9th LCI International Conference on High-Performance Clustered Computing, 2008, Urbana IL
  http://www.linuxclustersinstitute.org/conferences/
- Education Committee member, SC07 Education Program, Reno NV
  http://sc07.supercomputing.org/
- Conference Chair, Oklahoma Supercomputing Symposium 2007, Norman OK
  http://symposium2007.oscer.ou.edu/
- Technical Presentations Chair, 8th LCI International Conference on High-Performance Clustered Computing, 2007, South Lake Tahoe CA
  http://www.linuxclustersinstitute.org/conferences/
- Conference Chair, Oklahoma Supercomputing Symposium 2006, Norman OK
  http://symposium2006.oscer.ou.edu/

Conference Activities (continued)

- Conference Chair, 7th LCI International Conference on Linux Clusters: The HPC Revolution 2006, Norman OK
  http://www.linuxclustersinstitute.org/conferences/
- Mini-Symposium Organizer, SIAM Conference on Parallel Processing for Scientific Computing 2006, MS-55 "High Performance Parallel and Cluster Computing Education," San Francisco
  http://www.siam.org/meetings/pp06/
- Conference Chair, Oklahoma Supercomputing Symposium 2005, Norman OK
  http://symposium2005.oscer.ou.edu/
- Program Committee & Steering Committee, 6th LCI International Conference on Linux Clusters: The HPC Revolution 2005, Chapel Hill NC
  http://www.linuxclustersinstitute.org/conferences/
- Program Committee, Collaborative and Learning Applications of Grid Technology and Grid Education (CLAG + Grid.edu) 2005 (part of CCGrid2005), Cardiff UK
  http://research.ac.upc.es/clag/clag2005.htm
- Mini-Symposium Co-organizer with J. Mullen, SIAM Conference on Computational Science & Engineering 2005, MS-30 "High End Computational Science Education," Orlando FL
  http://www.siam.org/meetings/cse05/
- Conference Chair, Oklahoma Supercomputing Symposium 2004, Norman OK
  http://symposium2004.oscer.ou.edu/
- Program Committee, 6th LCI International Conference on Linux Clusters: The HPC Revolution 2004, Austin TX
  http://www.linuxclustersinstitute.org/Linux-HPC-Revolution/
- Program Committee, Grid.Edu 2004 (part of CCGrid2004), Chicago IL
  http://csce.uark.edu/~aapon/grid.edu2004/
- Conference Chair, Oklahoma Supercomputing Symposium 2003, Norman OK
  http://www.oscer.ou.edu/Symposium2003/
- Program Committee, ClusterWorld Conference & Expo 2003, San Jose CA
  http://www.clusterworld.com/
- Conference Chair, OU Supercomputing Symposium 2002, Norman OK
  http://www.oscer.ou.edu/symposium2002_schedule.html

Advisory Committees
National Science Foundation Advisory Committee for Cyberinfrastructure, 2013-present
National Science Foundation Office of Cyberinfrastructure Task Force on Cyberlearning and Workforce Development, 2010
University of Central Oklahoma Computer Science Advisory Board, 2012-present
Pawnee Nation College, Technical Advisory Council, 2012-13
ID/NM/NV NSF EPSCoR RII Track-2 External Advisory Committee, 2010-12
National Science Foundation Advisory Committee for Cyberinfrastructure, Task Force on Cyberlearning and Workforce Development, 2009-11
http://www.nsf.gov/od/oci/taskforces/TaskForceReport_Learning.pdf
Samuel Roberts Noble Foundation External Advisory Committee (chair), 2008
Arkansas Cyberinfrastructure External Advisory Committee, 2007

PROFESSIONAL ACTIVITIES (continued)

Professional Organization Memberships
- Association for Computing Machinery
- IEEE Computer Society
- Society for Industrial & Applied Mathematics

Proposal Reviewing
- National Science Foundation Review Panels: spring 2004, spring 2005, spring 2005 (electronic), fall 2005, spring 2007, fall 2007, spring 2008, spring 2009, spring 2011, spring 2012, summer 2012, fall 2012, summer 2013
- AAAS Michigan Review Panel, spring 2006

HONORS & AWARDS
- HPCwire.com "People to Watch 2006"
  http://www.taborcommunications.com/hpcwire/features/people06/