

CURRICULUM VITA

Henry J. Neeman, University of Oklahoma

Executive Director of Research Computing, OU Information Technology
Director, OU Supercomputing Center for Education & Research (OSCER)

Associate Professor, Gallogly College of Engineering

Adjunct Associate Professor, School of Computer Science

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PROFESSIONAL PREPARATION

University at Buffalo, State University of New York	Computer Science	B.S.	1987
University at Buffalo, State University of New York	Statistics	B.A.	1987
University at Buffalo, State University of New York	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

12/2019 - present	Executive Director of Research Computing , Information Technology (IT), University of Oklahoma (OU), Norman OK
8/2014 - present	Adjunct Associate Professor , School of Computer Science, OU
10/2012 - present	Associate Professor , Gallogly College of Engineering, OU
8/2001 - present	Director , OU Supercomputing Center for Education & Research (OSCER), OU IT
1/2013 - 12/2019	Assistant Vice President , Information Technology - Research Strategy Advisor, OU
12/2011 - 1/2013	Executive Director of Research Computing & Services , OU IT
1/2000 - 8/2014	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 (NCSA) University of Illinois at Urbana-Champaign (UIUC)
5/1993 - 5/1996	Graduate Research Assistant , NCSA, UIUC
8/1987 - 5/1993	Graduate Research Assistant , Center for Supercomputing Research & Development (CSR/D), UIUC
1/1985 - 8/1987	Undergraduate Researcher/Computer Programmer/Consultant/Teaching Asst Department of Physiology, University at Buffalo, State University of New York

HIGHLIGHTS

- Experience: 30+ years in HPC and related areas, 20+ 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 \$175M as PI, Co-PI, Senior Personnel or Local PI (includes amounts to all participants)
 - As PI: \$5.8M, including 3 NSF Major Research Instrumentation (\$2.1M), NSF EPSCoR RII C2
 - 2nd most successful at MRI funding at OU and 3rd most successful in OK since OSCER founded
 - As Co-PI: \$3M
- Publications in several disciplines: Cyberinfrastructure, Cyberinfrastructure education, Cyberinfrastructure workforce development, virus assembly (biophysics), hydrology, chemical engineering, biomedicine, aerospace engineering, tumor invasion modeling, meteorology, scientific visualization.
- Education Initiatives
 - **“Supercomputing in Plain English”** lecture series: Developed and delivered biennially, so far to a total of over 2000 people at 362 academic and non-academic institutions in 51 US states and territories and 17 other countries.
 - **“Research Computing Facilitators Virtual Residency”** workshops and apprenticeships: 1100+ participants from 400+ institutions in every US state, 4 US territories and 13 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, Software Carpentry.
- OneOklahoma Cyberinfrastructure Initiative (OneOCII): Co-founder/co-lead — OneOCII 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, 13 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 48 non-academic organizations.
- Oklahoma Supercomputing Symposium 2002-21, founder/chair – over 5000 attendees from 319 academic institutions in 47 US states and 4 US territories plus 10 other countries, including 114 academic institutions in 25 EPSCoR jurisdictions, among them 42 Oklahoma institutions; 206 private companies; 51 government agencies; 35 non-governmental organizations.
- External Advisory Committees: Internet2 High Performance and Research Computing Program Advisory Group, National Science Foundation Advisory Committee for 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 (UCO) Computer Science Advisory Board, UCO Center for Research and Education in Interdisciplinary Computation (CREIC).
- Conference Committees (not Program Committees): SC07-11 Education Committee (SC11 Edu Chair, SC10 Edu Deputy Chair); Oklahoma Supercomputing Symposium 2002-16 Conference 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.
- Collaborators (on grants, publications, past 5 years): over 200 at over 50 institutions in 25 US states.

GRANTS

Total External Funding to Date (as PI, Co-PI, Senior Personnel or Local PI): \$177,957,612

(NOTE: Dollar figures are from totals for each entire grant, not specifically credited to me.)

2022-2024: “CC* Compute: OneOklahoma Cyberinfrastructure Initiative Research Accelerator for Machine Learning (OneOCII-RAML)”

PI with Co-PIs David Ebert, Andrew Fagg, Amy McGovern,

Senior Personnel Horst Severini,

Users David Bard, Jeffrey Basara, Heather Bedle, David Bodine, Michael Businelle, Changjie Cai, Steven Cavallo, Samuel Cheng, Boon Leng Cheong, Vanna Chmielewski, Deepak Devegowda, Dimitrios Diochnos, Christian El Amm, Kim Elmore, Song Fang, Jason Furtado, Burkely Gallo, Abhrajit Ganguly, Christian Grant, Phillip Gutierrez, Franklin Hays, Dean Hougen, Cameron Homeyer, Junjun Hu, Samuel Huskey, Ali Imran, David Jahn, Judith James, Javier Jo, Pejman Kazempoor, Yong-Mi Kim, Pierre Emmanuel Kirstetter, Kevin Kloesel, Miroslav Kramar, Chao Lan, Mark Laufersweiler, Karen Leighly, Marcela Loria-Salazar, Anindya Maiti, Brian Matilla, Jonathan McFadden, Greg McFarquhar, Justin Metcalf, Blaine Mooers, Charles Nicholson, Kiel Ortega, Andrew Osborne, Murad Ozaydin, Robert Palmer, Chongle Pan, Tyler Pearson, Yuchen Qiu, Sridhar Radhakrishnan, Talayah Razzaghi, Bobby Reed, Horst Severini, Guofa Shou, Micheal Simpson, Timothy Smith, Nathan Snook, Jagadeesh Sonnad, Harold Stalford, Michael Strauss, John Stupak, FNU Suriamin, Qinggong Tang, Theodore Trafalis, Bin Wang, Hongwu Wang, Wei Wu, Chao Xu, Mark Yeary, Tian-You Yu, Han Yuan, Zhongda Zhang, Bin Zheng, Jizhong Zhou

National Science Foundation: \$400,000

2021-2023: “CyberTraining: Pilot: A Professional Development and Certification Program for Cyberinfrastructure Facilitators”

PI with Co-PIs Dana Brunson (Internet2), Dirk Colbry (Michigan State U),

Senior Personnel H. Al-Azzawi (U New Mexico),

I. Alsmadi (Texas A&M U San Antonio), W. Burke (George Washington U),

S. Cha (Harrisburg U of Science & Technology), P. Clemins (U Vermont),

G. Collier (Rutgers U), E. Colmenares-Diaz (Midwestern State U),

L. DeStefano (Georgia Tech, evaluator), C. Frye (Case Western Reserve U),

S. Gesing (U Notre Dame), J. Gyllinsky (U Rhode Island),

A. Klimaszewski-Patterson (California State U Sacramento), C. Kravit (UCLA),

S. Lathrop (Shodor), E. Lu (USC), M. Milanova (U Arkansas Little Rock),

A. Pazouki (Northwestern U), S. Sammak (U Pittsburgh), A. Schwartz (U Delaware),

H. Severini (OU), J. Tan (Northern Illinois U), S. Wheat (Oral Roberts U),

M. Xie (U Tennessee Chattanooga)

National Science Foundation: \$299,993

GRANTS (continued)

Total External Funding to Date (as PI, Co-PI or Senior Personnel): \$177,957,612

(NOTE: Dollar figures are from totals for each entire grant, not specifically credited to me.)

2020 - 2025: “AI Institute: Artificial Intelligence Institute for Environmental Sciences (AI2ES)”

Senior Personnel with PI Amy McGovern (OU),

Co-PIs I. Ebert-Uphoff (Colorado State U), R. He (North Carolina State U),
C. Thorncroft (U Albany), P. Tissot, (Texas A&M U-Corpus Christi),
Senior Personnel C. Anderson (Colorado State U), E. Barnes (Colorado State U),
N. Bassill (U Albany), A. Bostrom (U Washington), J. Brotzge (U Albany),
K. Caruso (Del Mar College), P. Davis (Del Mar College),
J. Demuth (National Center for Atmospheric Research), D. Diochnos (OU), A. Fagg (OU),
D. Gagne (National Center for Atmospheric Research), C. Homeyer (OU),
S. King (Texas A&M U-Corpus Christi), F. A. Medrano (Texas A&M U-Corpus Christi),
J. Nelson (Del Mar College), M. Rogers (Colorado State U), N. Snook (OU),
M. Starek (Texas A&M University-Corpus Christi), K. Sulia (U Albany)

National Science Foundation: \$19,998,596

2020 - 2023: “CC* Compute: GP-ARGO: The Great Plains Augmented Regional Gateway to the Open Science Grid”

Senior Personnel with PI D. Andresen (Kansas State U), Co-PIs T. Middelkoop (Internet2), Pratul Agarwal (Oklahoma State U), S. Wheat (Oral Roberts U), R. Johnson (U South Dakota),
Senior Personnel D. Weitzel (U Nebraska Lincoln), C. Brown (U Nebraska Lincoln),
K. Brandt (South Dakota State U), J. Deaton (Great Plains Network), H. Severini (U Oklahoma/Open Science Grid council), G. Louthan (U Oklahoma), H. Tran (U Kansas),
H. Yu (U Nebraska Lincoln), L. Tarbox (U Arkansas for Medical Sciences),
N. Hodges (South Dakota School of Mines & Technology), Dukka KC (Wichita State U),
M. Bond (Southeast Missouri State U), K. Gruhn (U South Dakota), R. Epperson (U Kansas), D. Howard (U Missouri Columbia), K. Hutson (Kansas State U)

National Science Foundation: \$356,518

2019 - 2023: “RII Track-2 FEC: Marshalling Diverse Big Data Streams to Understand Complexity of Tick-borne Diseases in the Southern Great Plains”

Senior Personnel with PI A. T. Peterson (U Kansas), Co-PIs F. B. Agosto (U Kansas),
S. Little (Oklahoma State U), R. Raghavan (Kansas State U), X. Xiao (OU),
Senior Personnel J. Basara (OU), R. Brennan (U Central Oklahoma),
A. Ghosh (Pittsburg State U), R. Jabrzemski (OU), A. Khalighifar (U Kansas)

National Science Foundation: \$3,921,229

2018 - 2021: “MRI: Acquisition of a Regional Resource for Long-term Archiving of Large Scale Research Data Collections”

PI with Co-PIs L. Bartley, K. Dresback, A. McGovern, H. Severini,
Senior Personnel M. Laufersweiler (all at OU)

National Science Foundation: \$967,755

2016 - 2022: “XSEDE 2.0: Integrating, Enabling and Enhancing National Cyberinfrastructure with Expanding Community Involvement”

Local PI @ OU with PI J. Towns (U Illinois at Urbana-Champaign); Co-PIs K. Gaither (U Texas Austin), R. Roskies (Pittsburgh Supercomputing Center), N. Wilkins-Diehr (San Diego Supercomputer Center); Senior Personnel D. Hart (National Center for Atmospheric Research), D. Lifka (Cornell U), G. Peterson (National Institute for Computational Sciences, U Tennessee Knoxville)

National Science Foundation: \$131,836,772

GRANTS (continued)

Total External Funding to Date (as PI, Co-PI or Senior Personnel): \$177,957,612

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2016 - 2019: “RCN: Advancing Research and Education Through a National Network of Campus Research Computing Infrastructures - The CaRC Consortium”

Co-PI with PI J. Bottum (Clemson U), Co-PIs N. Tsinoremas, M. Livny

National Science Foundation: \$748,490

2016 - 2022: “Cyberinfrastructure Leadership Academy”

PI with Co-PIs D. Atkin (Clemson U), J. Bottum (Clemson U), D. Brunson (Oklahoma State U), Stephen Wolff (Internet2)

National Science Foundation: \$49,300

2016: “XSEDE: eXtreme Science and Engineering Discovery Environment (supplement)”

Local PI at OU with PI J. Towns (UIUC), Co-PIs K. Gaither (U Texas Austin), R. Roskies (Pittsburgh Supercomputing Center), N. Wilkins-Diehr (San Diego Supercomputer Center), Senior Personnel D. Hart (National Center for Atmospheric Research), D. Lifka (Cornell U), G. Peterson (U Tennessee)

National Science Foundation, \$3,728,775 (total)

2016: “EAGER: Fact-Gathering and Planning for a National-Scale Cyberpractitioner Program”

Senior Personnel with PI S. Wolff (Internet2), J. Bottum (Clemson U), D. Atkins (Clemson U)

National Science Foundation, \$41,500

2014 - 2016: “CC*IIE Engineer: A Model for Advanced Cyberinfrastructure Research and Education Facilitators”

PI with Co-PIs K. Brewster, A. McGovern, H. Severini, T. Yu, Senior Personnel M. Atiquzzaman, G. Creager, B. George, Z. Gray, S. Radhakrishnan, P. Skubic, M. Strauss, X. Xiao, M. Xue (all at OU)

National Science Foundation, \$400,000

2013 - 2015: “CC-NIE Integration: OneOklahoma Friction Free Network”

PI with Co-PIs D. Brunson (Oklahoma State U), J. Deaton (OneNet), S. Radhakrishnan (OU), Senior Personnel K. Brewster (OU), M. Elshahed (OSU), F. Fondjo Fotou (Langston U), Z. Gray (OU), P. Hoyt (OSU), G. Louthan (TSC), H. Severini (OU), P. Skubic (OU), J. Snow (Langston U), M. Strauss (OU), X. Xiao (OU), M. Xue (OU), T. Yu (OU)

National Science Foundation, \$499,961

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

GRANTS (continued)

Total External Funding to Date (as PI, Co-PI or Senior Personnel): \$177,957,612

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2010 - 2012 (no cost extension to 2013): “Oklahoma Optical Initiative”

PI with Co-PIs D. Brunson (Oklahoma State U), J. Deaton (OneNet), Senior Personnel J. He (Samuel Roberts Noble Foundation), R. T. Baldrige (SRNF, succeeded J. He), 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, \$5,999,999 (\$2,999,999 to Oklahoma)
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

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

GRANTS (continued)

Total External Funding to Date (as PI, Co-PI or Senior Personnel): \$177,957,612

(NOTE: Dollar figures are from totals for each entire grant, not specifically credited to me.)

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, Outreach, Training and Workforce Development

1. Sandra Gesing, Julie Ma, Henry Neeman, Laura Christopherson, Dirk Colbry, Maureen Dougherty, James Griffioen, Susan Tussy, Alycia Crall, John Goodhue, Rafael Ferreira da Silva, Kyle Chard and Marisa Brazil, 2023: “Community of Communities: A Working Group Enhancing Interactions Between Organizations and Projects Supporting RC Professionals.” *Proc. Gateways2023*, to appear.
2. J. Cutcher-Gershenfeld, T. Middelkoop, D. Brunson, T. Cheatham, J. Fosso Tande, D. Jennewein, T. Battelle, J. Ma, L. A. Michael, H. Neeman and P. Schmitz, 2023: “Professionalization of Research Computing and Data: An Expanded Agenda.” In *Practice and Experience in Advanced Research Computing (PEARC '23)*, July 23-27, 2023, Portland, OR, USA. ACM, New York, NY, USA. DOI: [10.1145/3569951.3593610](https://doi.org/10.1145/3569951.3593610). **Best Paper, Workforce Development, Training, Diversity, and Education Track, Full Non-Student category.**
3. H. Neeman, L. Rivera, L. DeStefano, H. Al-Azzawi, D. Brunson, P. J. Clemins, D. Colbry, C. Frye, S. Gesing, J. V. Gyllinsky, A. Klimaszewski-Patterson, A. Phataralaoha, T. Price, M. Tanash and D. Voss, 2021: “An Evaluation of Cyberinfrastructure Facilitators Skills Training in the Virtual Residency Program.” *Proc. PEARC'21*, article 53. DOI: [10.1145/3437359.3465560](https://doi.org/10.1145/3437359.3465560).
4. H. Neeman, D. Akin, H. Al-Azzawi, K. L. Brandt, J. Brooks Kieffer, D. Brunson, D. Colbry, S. Gesing, A. Klimaszewski-Patterson, C. Mizumoto, J. A. Pine-Thomas, A. Z. Schwartz, H. Severini, D. Voss and M. Tanash, 2020: “Cyberinfrastructure Facilitation Skills Training via the Virtual Residency Program.” *Proc. PEARC'20*, 421-428. DOI: [10.1145/3311790.3396629](https://doi.org/10.1145/3311790.3396629).
5. S. P. Calhoun, D. Akin, B. Zimmerman and H. Neeman, 2019: “Large Scale Research Data Archiving: Training for an Inconvenient Technology.” *Journal of Computational Science*, 36, article 100523 (available online 2016). DOI: [10.1016/j.jocs.2016.07.005](https://doi.org/10.1016/j.jocs.2016.07.005).
6. H. Neeman, H. M. Al-Azzawi, D. Brunson, W. Burke, D. Colbry, J. T. Falgout, J. W. Ferguson, S. Gesing, J. Gyllinsky, C. S. Simmons, J. L. Simms, M. Tanash, D. Voss, J. Wells and S. Yockel, 2019: “Cultivating the Cyberinfrastructure Workforce via an Intermediate/Advanced Virtual Residency Workshop.” *Proc. PEARC'19*, article 79. DOI: [10.1145/3332186.3332204](https://doi.org/10.1145/3332186.3332204).
7. N. Berente, S. Ahalt, J. Bottum, D. Brunson, J. Cutcher-Gershenfeld, J. Howison, J. L. King, H. Neeman, J. Towns, N. Wilkins-Diehr and S. Winter, 2019: “The Professionalization of Cyberinfrastructure Personnel?” *Proc. PEARC'19*, article 87. DOI: [10.1145/3332186.3332225](https://doi.org/10.1145/3332186.3332225). **Best Paper, Workforce Development and Diversity Track.**
8. M. Brazil, D. Brunson, A. Culich, L. DeStefano, D. Jennewein, T. Jolley, T. Middelkoop, H. Neeman, L. Rivera, J. Smith and J. Wernert, 2019: “Campus Champions: Building and Sustaining a Thriving Community of Practice Around Research Computing and Data.” *Proc. PEARC'19*, article 78. [10.1145/3332186.3332200](https://doi.org/10.1145/3332186.3332200).
9. H. Neeman, H. M. Al-Azzawi, A. Bergstrom, Z. K. Braiterman, D. Brunson, D. Colbry, E. Colmenares, A. N. Fuller, S. Gesing, M. Kalyvaki, C. Mizumoto, J. Park, A. Z. Schwartz, J. L. Simms and R. Vania, 2018: “Progress Update on the Development and Implementation of the Advanced Cyberinfrastructure Research & Education Facilitators Virtual Residency Program.” *Proc. PEARC'18*, paper 71. DOI: [10.1145/3219104.3219117](https://doi.org/10.1145/3219104.3219117).
10. D. Akin, M. Belgin, T. A. Bouvet, N. C. Bright, S. Harrell, B. Haymore, M. Jennings, R. Knepper, D. LaPine, F. C. Liu, A. Maji, H. Neeman, R. Reynolds, A. H. Sherman, M. Showerman, J. Tillotson, J. Towns, G. Turner and B. Zimmerman, 2017: “Linux Clusters Institute Workshops: Building the HPC and Research Computing Systems Professionals Workforce.” *HPCSYSPROS'17: Proc. HPC Systems Professionals Workshop 2017*, article 4. DOI: [10.1145/3155105.3155108](https://doi.org/10.1145/3155105.3155108).
11. H. Neeman, A. Bergstrom, D. Brunson, C. Ganote, Z. Gray, B. Guilfoos, R. Kalescky, E. Lemley, B. G. Moore, S. K. Ramadugu, A. Romanella, J. Rush, A. H. Sherman, B. Stengel and D. Voss, 2016: “The Advanced Cyberinfrastructure Research and Education Facilitators Virtual Residency: Toward a National Cyberinfrastructure Workforce.” *Proc. XSEDE'16*, article 57. DOI: [10.1145/2949550.2949584](https://doi.org/10.1145/2949550.2949584).

PUBLICATIONS (cont'd)

HPC Education, Outreach, Training and Workforce Development (cont'd)

12. C. Carley, B. McKinney, L. Sells, C. Zhao and H. Neeman, 2013: "Using a Shared, Remote Cluster for Teaching HPC." *Proc. IEEE CLUSTER 2013*. DOI: [10.1109/CLUSTER.2013.6702630](https://doi.org/10.1109/CLUSTER.2013.6702630).
13. 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'10*, article 7. DOI: [10.1145/1838574.1838581](https://doi.org/10.1145/1838574.1838581).
- Best Paper: Education, Outreach & Training Track.**
14. H. Neeman, H. Severini, D. Wu and K. Kantardjieff, 2010: "Teaching High Performance Computing via Videoconferencing." *ACM Inroads*, 1 (1), 67-71. DOI: [10.1145/1721933.1721954](https://doi.org/10.1145/1721933.1721954).
15. H. Neeman, H. Severini, D. Wu and K. Kantardjieff, 2008: "Teaching Supercomputing via Videoconferencing." *Proc. TeraGrid 2008*. **Best Paper: Education, Outreach & Training Track.**
16. H. Neeman, H. Severini and D. Wu, 2008: "Supercomputing in Plain English: Teaching Cyberinfrastructure to Computing Novices." *inroads: SIGCSE Bulletin*, 40 (2), 27-30. DOI: [10.1145/1383602.1383628](https://doi.org/10.1145/1383602.1383628).
17. 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. DOI: [10.1145/1189136.1189172](https://doi.org/10.1145/1189136.1189172).
18. 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*. DOI: [10.1.1.329.6450](https://doi.org/10.1.1.329.6450).

HPC, Visualization and Other Computing

1. G. E. Monaco, D. F. McMullen, G. Huntoon, J. Leasure, D. Swanson, H. Neeman, J. Blake and K. Adams, 2016: "The Role of Regional Organizations in Improving Access to the National Computational Infrastructure: A Report to the National Science Foundation: Final Report." DOI: [10.13140/RG.2.1.4023.9603](https://doi.org/10.13140/RG.2.1.4023.9603).
2. D. Brunson, D. Akin, P. Alderman, G. Creager, J. Deaton, G. Dumancas, J. Evert, C. Fennell, F. Fondjo, D. Gentis, J. Hale, P. Hoyt, E. Lemley, E. Linde, G. Louthan, P. Mehta, M. Morris, J. Schafer, H. Severini, J. Snow, N. Xiong, H. Neeman, 2015: "The OneOklahoma Cyberinfrastructure Initiative: A Model for Multi-Institutional Collaboration." National Science Foundation Workshop on The Role of Regional Organizations in Improving Access to National Cyberinfrastructure, white paper. <https://hdl.handle.net/11244/34794>
3. H. Neeman, K. Adams, J. Alexander, D. Brunson, S. P. Calhoun, J. Deaton, F. Fondjo Fotou, K. Frinkle, Z. Gray, E. Lemley, G. Louthan, G. Monaco, M. Morris, J. Snow and B. Zimmerman, 2015: "On Fostering a Culture of Research Cyberinfrastructure Grant Proposals within a Community of Service Providers in an EPSCoR State." *Proc. XSEDE'15*, article 19. DOI: [10.1145/2792745.2792764](https://doi.org/10.1145/2792745.2792764).
4. H. Neeman, D. Akin, J. Alexander, D. Brunson, S. P. Calhoun, J. Deaton, F. Fondjo Fotou, B. George, D. Gentis, Z. Gray, E. Huebsch, G. Louthan, M. Runion, J. Snow and B. Zimmerman, 2014: "The OneOklahoma Friction Free Network: Towards a Multi-Institutional Science DMZ in an EPSCoR State." *Proc. XSEDE'14*, article 49. DOI: [10.1145/2616498.2616542](https://doi.org/10.1145/2616498.2616542).
5. S. P. Calhoun, D. Akin, J. Alexander, B. Zimmerman, F. Keller, B. George and H. Neeman, 2014: "The Oklahoma PetaStore: A Business Model for Big Data on a Small Budget." *Proc. XSEDE'14*, article 48. DOI: [10.1145/2616498.2616548](https://doi.org/10.1145/2616498.2616548).
6. M. Keesee, Y. Zhang, S. Cox, M. Mouser, C. Chavez, S. Wall, A. Goode, J. Deaton, S. Maheshwari, B. Emery, L. Merrill, S. McVey, V. Mohr, L. Sardi, H. Neeman, J. Alexander, B. George, Z. Gray and D. S. Brunson, 2014: "Digital Oklahoma: Harnessing the Speed of Light." Oklahoma Broadband Initiative technical report. DOI: [10.13140/RG.2.1.2293.4881](https://doi.org/10.13140/RG.2.1.2293.4881).
7. J. B. Bottum, R. Marinshaw, H. Neeman, J. Pepin, J. B. von Oehsen, 2013: "The Condo of Condos." *Proc. XSEDE'13*, article 62 (extended abstract). DOI: [10.1145/2484762.2484775](https://doi.org/10.1145/2484762.2484775).

PUBLICATIONS (cont'd)

HPC, Visualization and Other Computing (cont'd)

8. H. Neeman, D. Brunson, J. Deaton, Z. Gray, E. Huebsch, D. Gents and D. Horton, 2013: "The Oklahoma Cyberinfrastructure Initiative." *Proc. XSEDE'13*, article 70.
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9. 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*, 873-4.
DOI: [10.1109/NSSMIC.2008.4774533](https://doi.org/10.1109/NSSMIC.2008.4774533).
10. D. Weber and H. Neeman, 2006: "Experiences in Optimizing a Numerical Weather Prediction Model: An Exercise in Futility?" *Proc. 7th LCI Intl. Conference on Clusters: The HPC Revolution 2006*.
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11. 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. DOI: [10.1504/IJCAT.2005.006802](https://doi.org/10.1504/IJCAT.2005.006802).
12. 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. DOI: [10.1007/978-1-4612-1252-2_2](https://doi.org/10.1007/978-1-4612-1252-2_2).
13. 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. [Abstract](#). [PDF](#). <https://hdl.handle.net/2142/21220>
14. 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.
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15. H. Neeman, 1990: "A Decomposition Algorithm for Visualizing Irregular Grids." *Computer Graphics*, 24:5 (Proc. San Diego Workshop on Volume Visualization), 49-56.
DOI: [10.1145/99308.99320](https://doi.org/10.1145/99308.99320).
16. 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.
DOI: [10.1145/329129.329139](https://doi.org/10.1145/329129.329139).
17. H. Neeman and A. Tuchman, 1989: "Simulation Time Animation System." Center for Supercomputing Research and Development Technical Report 859. [Google](#).

Other Engineering

1. 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. DOI: [10.1115/FEDSM-ICNMM2010-31026](https://doi.org/10.1115/FEDSM-ICNMM2010-31026).
2. 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 FEDSM2009-78517,501-6. DOI: [10.1115/FEDSM2009-78517](https://doi.org/10.1115/FEDSM2009-78517).
3. 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. DOI: [10.1115/FEDSM2009-78532](https://doi.org/10.1115/FEDSM2009-78532).
4. 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. DOI: [10.1115/FEDSM2008-55181](https://doi.org/10.1115/FEDSM2008-55181).
5. 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. DOI: [10.1115/FEDSM2007-37278](https://doi.org/10.1115/FEDSM2007-37278).

PUBLICATIONS (cont'd)

Other Engineering (cont'd)

6. 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. DOI: [10.1115/FEDSM2007-37268](https://doi.org/10.1115/FEDSM2007-37268).
7. 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. DOI: [10.2514/6.2006-1619](https://doi.org/10.2514/6.2006-1619).
8. 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*. DOI: [10.2514/6.2005-1940](https://doi.org/10.2514/6.2005-1940).
9. 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. DOI: [10.1080/00986440490464200](https://doi.org/10.1080/00986440490464200).
10. S. Subramaniam, 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*. DOI: [10.2514/6.2004-4445](https://doi.org/10.2514/6.2004-4445).
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*. Proceedings ISBN: [8888412182](https://doi.org/10.1002/9781118000000).
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12. H.-W. Lao, H. Neeman and D. Papavassiliou, 2001: "Stochastic Prediction of Porous Medium Properties." *Computational Technologies for Fluid/Thermal/Chemical Systems with Industrial Applications, The 2001 ASME Pressure Vessels and Piping Conference*, PVP-Vol 424-2, 185-195, Atlanta GA. <http://www.gbv.de/dms/tib-ub-hannover/334010039.pdf>
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*. DOI: [10.1117/12.434861](https://doi.org/10.1117/12.434861).
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. DOI: [10.1016/j.bpj.2010.06.030](https://doi.org/10.1016/j.bpj.2010.06.030).
2. 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. PMID: [2311366](https://pubmed.ncbi.nlm.nih.gov/2311366/). DOI: [10.1016/0169-2607\(90\)90028-8](https://doi.org/10.1016/0169-2607(90)90028-8).
3. 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

- Cyberinfrastructure Facilitators Virtual Residency
 - Hosted workshops at OU and co-instructed: Introductory 2015-17, Intermediate/Advanced 2018, Introductory/Intermediate 2019, Intermediate/Advanced 2020, Introductory/Intermediate/Advanced 2021, Introductory 2022, Introductory 2023 (pending)
 - Co-instructed but not hosted: University of California Research Facilitators workshop 2017 (speaker/panelist 2018)
 - Leading Grant Proposal Writing Apprenticeship (2017-2021), Paper Writing Apprenticeship (2018-present), Paper Writing Apprenticeship (2021-present)
- Cyberinfrastructure Leadership Academy: NSF-funded workshop series for helping emerging/institutional CI leaders become national CI leaders (Feb 2019, March 2022).
- National Computational Science Institute/SC07-SC11 conference Education Program workshops Parallel Programming & Cluster Computing workshops (introductory level except as noted)
 - 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)
 - Co-instructed but not hosted: summer 2009 at Kean University, at Louisiana State University; summer 2006 at Houston Community College
 - Co-instructed since SC07 conference Education/HPC Educators Program
 - SC07, SC08, SC10 (Education Deputy Chair), SC11 (Education Chair), SC12, SC13
- Blue Waters Undergraduate Petascale Institute workshops
 - Co-instructed but not hosted: summer 2011; summer 2010
- Linux Clusters Institute workshops
 - Hosted at OU (but not co-instructed): May 2019, May 2023 (pending)
 - Hosted at OU and co-instructed: May 2015, Feb 2007, June 2005
 - Co-instructed but not hosted: Aug 2014, Feb 2005
- OU CS 1313 Computer Programming for Non-majors: Spring 2000 - Spring 2001, Spring 2002 - Fall 2004, Fall 2005 - Fall 2007, Spring 2009 - Fall 2010, Spring 2013 - Fall 2020, Fall 2021, Fall 2022, Fall 2023 (pending)
- OU CS 2413 Data Structures: Summer 2000
- OU ChE 5480 (team taught, combination of Nanotechnology and HPC): Fall 2003, Summer 2005
- “Supercomputing in Plain English” 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, Spring 2015, Spring 2018
 - Over 2000 participants from 352 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
- Introductory Unix Workshops: taught for OU Student Chapter of ACM (fall 1999), for CAPS Research Experience for Undergraduates program (summer 1999)

GRADUATE SUPERVISION

1. Anthony Burrow, PhD committee, OU Physics & Astronomy, Spring 2021 - present
2. Justin Reynolds, PhD committee, OU Computer Science, Fall 2020 - present
3. Tomer Burg, PhD committee, OU Meteorology, Spring 2020 - present
4. Adrien Badre, PhD committee, OU Computer Science, Spring 2017 - Spring 2023
5. Christopher Riedel, PhD committee, OU Meteorology, Summer 2016 - Spring 2020
6. Jin Yang, PhD committee, OU Physics & Astronomy, Summer 2019 - Fall 2019
7. Chao Zhang, PhD committee, OU Physics & Astronomy, Summer 2018 - Fall 2018
8. Aniteja Kota, graduate independent study, OU Computer Science, Spring 2016
9. Yujia Qin, MS committee, OU Microbiology & Plant Biology, Fall 2012 - Spring 2014
10. Arne Schwettmann, PhD committee (informal), OU Physics & Astronomy, Fall 2005 - Spring 2012
11. Roman Voronov, PhD committee, OU Chemical, Biological & Materials Engineering, Summer 2008 - Spring 2010
12. Samuel Solomon, graduate independent study, OU Computer Science, Spring - Summer 2005
13. Pankaj Agrawal, graduate independent study, OU Computer Science, Fall 2003 - Summer 2004
14. Suresh Marru, graduate research assistant and MS committee, OU Center for Analysis & Prediction of Storms and OU Electrical & Computer Engineering, 1/2001 - 5/2004
15. R. Jason Lynn, MS committee, OU Computer Science, 2/2001 - 5/2002

UNDERGRADUATE SUPERVISION

1. Sébastien Bordes, undergraduate intern, University de Limoges, Spring/Summer 2015
2. Gregoire Astruc, undergraduate intern, University de Clermont-Ferrand, Spring/Summer 2008
3. Chris Belgy, undergraduate intern, University de Clermont-Ferrand, Spring/Summer 2008
4. Gregory Mialon, undergraduate intern, University de Clermont-Ferrand, Spring/Summer 2008
5. Guillaume Jeandillou, undergraduate intern, University de Limoges, Spring/Summer 2008
6. Damien Trouillaud, undergraduate intern, University de Limoges, Spring/Summer 2008
7. Vincent Bialoux, undergraduate intern, University de Limoges, Spring/Summer 2007
8. Florent Devillechabrol, undergraduate intern, University de Limoges, Spring/Summer 2007
9. Damien Nestelhut, undergraduate intern, University de Clermont-Ferrand, Spring/Summer 2007
10. Romain Paris, undergraduate intern, University de Clermont-Ferrand, Spring/Summer 2007
11. Jean-Baptiste Perez, undergraduate intern, University de Clermont-Ferrand, Spring/Summer 2007
12. Francois Segaud, undergraduate intern, University de Limoges, Spring/Summer 2007
13. Arnaud Auroux, undergraduate intern, Université de Clermont-Ferrand, Spring/Summer 2006
14. Michael Bessard, undergraduate intern, Université de Clermont-Ferrand, Spring/Summer 2006
15. Thomas Chavanis, undergraduate intern, Université de Clermont-Ferrand, Spring/Summer 2006
16. Anthony Dubey, undergraduate intern, Université de Clermont-Ferrand, Spring/Summer 2006
17. Melanie Garnier, undergraduate intern, Université de Limoges, Spring/Summer 2006
18. Anthony Laroulandie, undergraduate intern, Université de Limoges, Spring/Summer 2006
19. Simon Le Parc, undergraduate intern, Université de Limoges, Spring - Summer 2006
20. Xavier Marguin, undergraduate intern, University de Clermont-Ferrand, Spring/Summer 2006
21. Florian Masson, undergraduate intern, Université de Clermont-Ferrand, Spring/Summer 2006
22. Baptiste Rousset, undergraduate intern, Université de Clermont-Ferrand, Spring/Summer 2006
23. Claire Rouveyrol, undergraduate intern, Université de Clermont-Ferrand, Spring/Summer 2006
24. Virginie Trottet, undergraduate intern, Université de Clermont-Ferrand, Spring/Summer 2006
25. Clement Vayer, undergraduate intern, University de Clermont-Ferrand, Spring/Summer 2006
26. Xing Wang, undergraduate independent study, Computer Science, Summer 2005
27. Jean-Baptiste Diogon, undergraduate intern, Université d'Auvergne, Spring/Summer 2005
28. Thibault Pouget, undergraduate intern, Université de Limoges, Spring/Summer 2005
29. Guilhem Urroz, undergraduate intern, Université de Limoges, Spring/Summer 2005
30. Jason Lacy, undergraduate intern, Library & Information Studies, Spring 2005
31. David LaFleur, undergraduate intern, Library & Information Studies, Spring 2005
32. Clinton Mosley, undergraduate intern, Library & Information Studies, Fall 2004

UNDERGRADUATE SUPERVISION (continued)

33. Roy Simon, undergraduate intern, Library & Information Studies, Fall 2003
34. Lyal Grissom, undergraduate employee, OSCER, 9/2001 - 10/2002
35. Dale Simpson, undergraduate employee, Chemical, Biological & Materials Engr, 9/2000 - 5/2002
36. James Clark, undergraduate employee, Computer Science, 6/2001 - 8/2001
37. Joshua Shuller, undergraduate employee, CAPS, 1/2001 - 8/2001
38. Joseph Garfield, undergraduate employee, CAPS, 9/1999 - 1/2001, 6/2001 - 8/2001
39. Kenneth Teague, independent study, CAPS/Computer Science, Spring 1999

PROFESSIONAL ACTIVITIES

Conference Activities

- Conference Chair, Oklahoma Supercomputing Symposium 2023, Norman OK
<http://www.oscer.ou.edu/Symposium2023/>
- Conference Chair, Oklahoma Supercomputing Symposium 2022, Norman OK
<http://www.oscer.ou.edu/Symposium2022/>
- Conference Chair, Oklahoma Supercomputing Symposium 2021, Norman OK
<http://symposium2021.oscer.ou.edu/>
- Conference Chair, Oklahoma Supercomputing Symposium 2020, Virtual Event
<http://symposium2020.oscer.ou.edu/>
- Conference Chair, Oklahoma Supercomputing Symposium 2019, Norman OK
<http://symposium2019.oscer.ou.edu/>
- Conference Chair, Oklahoma Supercomputing Symposium 2018, Norman OK
<http://symposium2018.oscer.ou.edu/>
- SC17, 2017, Denver CO
 - Co-organizer, SC17 4th Workshop on Best Practices for HPC Training, Mon Nov 13 2017
 - Co-organizer, SC17 2nd Workshop on HPC Systems Professionals, Mon Nov 13 2017
- Conference Chair, Oklahoma Supercomputing Symposium 2017, Norman OK
<http://symposium2017.oscer.ou.edu/>
- SC16, 2016, Austin TX
 - Co-organizer, SC16 3rd Workshop on Best Practices for HPC Training, Mon Nov 14 2016
 - Co-organizer, SC16 1st Workshop on HPC Systems Professionals, Mon Nov 14 2016
 - Program Committee, EduHPC-16: SC16 Workshop on Education for High-Performance Computing
 - Co-organizer/moderator, SC16 panel, “HPC Workforce Development: How Do We Find Them, Recruit Them, and Teach Them to Be Today's Practitioners and Tomorrow's Leaders?”
<http://sc16.supercomputing.org/>
- Conference Chair, Oklahoma Supercomputing Symposium 2016, Norman OK
<http://symposium2016.oscer.ou.edu/>
- Program Committee, XSEDE 2016, July 17-21 2016
<http://www.xsede.org/xsede16>
- Program Committee, Sixth NSF/TCPP Workshop on Parallel and Distributed Computing Education (EduPar-16), in conjunction with the 29th IEEE International Parallel & Distributed Processing Symposium, May 25-29 2016, Hyderabad, India
- Program Committee, Workshop on Monitoring and Analysis for High Performance Computing Systems Plus Applications (HPCMASPA 2016), in conjunction with 30th IEEE International Parallel & Distributed Processing Symposium (IPDPS 2016), May 23-27, Chicago IL
<https://sites.google.com/site/hpcmaspa2016/>
- SC15, 2015, Austin TX
 - Co-organizer, SC15 Second Workshop on Best Practices for HPC Training, Mon Nov 16
http://sc15.supercomputing.org/schedule/event_detail?evid=wksp133
 - Program Committee, SC15 Workshop, EduHPC-15
<http://cs.gsu.edu/~tcpp/curriculum/?q=edupdhpc>
- Conference Chair, Oklahoma Supercomputing Symposium 2015, Norman OK
<http://symposium2015.oscer.ou.edu/>
- Program Committee, Workshop on Monitoring and Analysis for High Performance Computing Systems Plus Applications (HPCMASPA 2015), in conjunction with IEEE Cluster 2015, Sep 8-11, Chicago IL
<https://sites.google.com/site/hpcmaspa2015/>
- Program Committee, XSEDE 2015, July 26-30 2015, St. Louis MO
<http://www.xsede.org/xsede15>

PROFESSIONAL ACTIVITIES (continued)

Conference Activities (continued)

- Program Committee, Fifth NSF/TCPP Workshop on Parallel and Distributed Computing Education (EduPar-15), in conjunction with the 29th IEEE International Parallel & Distributed Processing Symposium, May 25-29 2015, Hyderabad, India
<http://cs.gsu.edu/~tcpp/curriculum/?q=edupar>
- Workshops at SC14, 2014, New Orleans LA
 - Co-organizer and speaker, SC14 Workshop on Best Practices for HPC Training
http://sc14.supercomputing.org/schedule/event_detail?evid=wksp143
 - Program Committee, SC14 Workshop, EduHPC-14
http://cs.gsu.edu/~tcpp/curriculum/?q=EduHPC-14-technical_program
- Conference Chair, Oklahoma Supercomputing Symposium 2014, Norman OK
<http://symposium2014.oscer.ou.edu/>
- Program Committee, Workshop on Monitoring and Analysis for High Performance Computing Systems Plus Applications (HPCMASPA 2014), in conjunction with IEEE Cluster 2014, Madrid Spain
<https://sites.google.com/site/hpcmaspa2014/>
- Program Committee, XSEDE 2014, Atlanta GA
<http://www.xsede.org/xsede14/>
- Program Committee, Fourth NSF/TCPP Workshop on Parallel and Distributed Computing Education (EduPar-14), Phoenix AZ
<http://cs.gsu.edu/~tcpp/curriculum/?q=edupar>
- Program Committee, Society for Information Technology and Teacher Education 24th International Conference (SITE2014), Jacksonville FL
<http://site.aace.org/conf/>
- Conference Chair, Oklahoma Supercomputing Symposium 2013, Norman OK
<http://symposium2013.oscer.ou.edu/>
- Education, Outreach, and Training (EOT) Papers Chair and Program Committee, IEEE Cluster 2013, Indianapolis IN
<https://pti.iu.edu/ieecluster-2013/>
- Posters Track Co-Chair and Program Committee, 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/>
- Program Committee, XSEDE 2012, Chicago IL
<https://www.xsede.org/xsede12>
- Program Committee, 9th International Conference on Parallel Processing and Applied Mathematics (PPAM11), Workshop on Scalable Computing in Distributed Systems/Workshop on Large Scale Computations on Grids), Torun Poland
<http://www.ppam.pl/>
- 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/>

PROFESSIONAL ACTIVITIES (continued)

Conference Activities (continued)

- 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/>
- Conference Committee member, 9th LCI International Conference on High-Performance Clustered Computing, 2008, Urbana IL
<http://www.linuxclustersinstitute.org/conferences/>
- Planning Committee member, Great Plains Network Annual Meeting 2008
http://collaboration.greatplains.net/wiki/index.php/Annual_Meeting:2008
- 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 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/>

PROFESSIONAL ACTIVITIES (continued)

Conference Activities (continued)

- 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

PROFESSIONAL ACTIVITIES (continued)

Advisory Committees

- 2013-present: University of Central Oklahoma Center for Research and Education in Interdisciplinary Computation (CREIC)
- 2012-present: University of Central Oklahoma Computer Science Advisory Board
- 2013-2017: National Science Foundation Advisory Committee for Cyberinfrastructure (original term 2013-2015, extended through 2017)
<https://www.nsf.gov/cise/aci/advisory.jsp>
- 2013-2016: Samuel Roberts Noble Foundation Non-Resident Fellow
- 2014: Internet2 High Performance and Research Computing Program Advisory Group
<http://www.internet2.edu/news/detail/6039/>
- 2012-13: Pawnee Nation College, Technical Advisory Council
- 2010-12: ID/NM/NV NSF EPSCoR RII Track-2 External Advisory Committee
- 2009-11: National Science Foundation Advisory Committee for Cyberinfrastructure, Task Force on Cyberlearning and Workforce Development
http://www.nsf.gov/od/oci/taskforces/TaskForceReport_Learning.pdf
- 2008: Samuel Roberts Noble Foundation External Advisory Committee (chair)
- 2007: Arkansas Cyberinfrastructure External Advisory Committee

Professional Organization Memberships

- Association for Computing Machinery (includes SIGHPC)
- IEEE Computer Society
- Society for Industrial & Applied Mathematics

Proposal Reviewing

- National Science Foundation Review Panels: spring 2004, spring 2005, fall 2005, spring 2007, fall 2007, spring 2008, spring 2009, spring 2011, spring 2012, summer 2012, fall 2012, summer 2013, summer 2014, fall 2014, spring 2015, spring 2016, fall 2016, spring 2018, fall 2018, spring 2019, fall 2019, fall 2020, spring 2021, fall 2021, spring 2022, summer 2023
- Various other proposal review panels and ad hoc proposal reviews

HONORS & AWARDS

- **PEARC'23 Best Paper, Workforce Development, Training, Diversity, and Education Track, Full Non-Student category:** J. Cutcher-Gershenfeld, T. Middelkoop, D. Brunson, T. Cheatham, J. Fosso Tande, D. Jennewein, T. Battelle, J. Ma, L. A. Michael, H. Neeman and P. Schmitz, 2023: "Professionalization of Research Computing and Data: An Expanded Agenda." In *Practice and Experience in Advanced Research Computing (PEARC '23)*, July 23-27, 2023, Portland, OR, USA. ACM, New York, NY, USA. DOI: [10.1145/3569951.3593610](https://doi.org/10.1145/3569951.3593610)
- **PEARC'19 Best Paper, Workforce Development and Diversity Track:** N. Berente, S. Ahalt, J. Bottum, D. Brunson, J. Cutcher-Gershenfeld, J. Howison, J. L. King, H. Neeman, J. Towns, N. Wilkins-Diehr and S. Winter, 2019: "The Professionalization of Cyberinfrastructure Personnel?" *Proc. PEARC'19*, article 87. DOI: [10.1145/3332186.3332225](https://doi.org/10.1145/3332186.3332225).
- **IEEE Cluster 2013 Best Technical Poster:** P. Calhoun, D. Akin, J. Alexander, B. Zimmerman, B. George and H. Neeman, "The Oklahoma PetaStore: Big Data on a Small Budget."
- **TeraGrid 2010 Best Paper: Education, Outreach, Training:** 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*.
- **TeraGrid 2008 Best Paper: Education, Outreach, Training:** H. Neeman, H. Severini, D. Wu and K. Kantardjieff, 2008: "Teaching Supercomputing via Videoconferencing." *Proc. TeraGrid 2008*.
- **HPCwire.com "People to Watch 2006"**