

# Craig A. Stewart, Ph.D.

Curriculum Vitae – May 2012

Office of the Vice President for Information Technology  
and CIO

Indiana University  
2709 E 10<sup>th</sup> Street  
Bloomington IN 47405 USA  
812-855-4240  
stewart@iu.edu or cas@pobox.com  
<https://pti.iu.edu>

## Career Objective

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My career objective is to enable the Research Technologies Division of University Information Technology Services and the Pervasive Technology Institute to deliver useful and innovative services - in support of scientific, scholarly, and artistic accomplishment; education; and economic development - to Indiana University, the State of Indiana, the nation in ways that benefit all of those constituencies and the world as a whole.

## Citizenship

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US

## Education

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Indiana University	Ph.D. in Ecology and Evolutionary Biology	1988
Wittenberg University	B.A. in Mathematics and Biology, <i>magna cum laude</i>	1981

## Current Appointments

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2012 (part-time)	Expert (EE-401), National Science Foundation, Division of Biological Infrastructure
2008-	Executive Director, Pervasive Technology Institute, Indiana University
2007-	Associate Dean for Research Technologies, Office of the CIO and Vice President for Information Technology, Indiana University
2005-	Information Architect; Co-Director, Center for Computational Cytomics; Indiana METACyt Initiative, Indiana University
2008-	Adjunct Professor, School of Informatics, Indiana University
2003-	Adjunct Associate Professor, Department of Medical and Molecular Genetics, Indiana University School of Medicine
2003-	Adjunct Associate Professor, Department of Biology, Indiana University Bloomington

## Previous Appointments

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2005-2007	Associate Vice President for Research and Academic Computing, Office of the CIO and Vice President for Information Technology, Indiana University
2005-2008	Chief Operating Officer, Pervasive Technology Labs, Indiana University
April 2007	Fulbright Senior Scholar, Technische Universität Dresden, Dresden, Germany

- Summer 2003 Visiting faculty member and researcher, High Performance Computing Center (HLRS), University of Stuttgart, Stuttgart, Germany. Taught introduction to computational biology in the Computer Science Department (the first ever offering of this topic at the University of Stuttgart). Engaged in research and development in computational biology grid projects with HLRS researchers.
- 2003-2005 Special Assistant for the Life Sciences, Office of the Vice President for Information Technology/Research, Indiana University
- 1999-2005 Director, Indiana Genomics Initiative Information Technology Core, Indiana University
- 1997-2005 Director for Research and Academic Computing (Computation), Indiana University. Responsible for major new grant-funded initiatives in high performance computing, computational biology, and bioinformatics.
- 1996-1997 Assistant Director for Research Computing Services, University Computing Services (UCS), Indiana University. Responsible for administration of research computing, including high performance computing, virtual reality, mass storage, general research computing, statistical and mathematical computing, Unix workstation support, and humanities computing. Also responsible for Unix and Novell servers delivering administrative computing applications.
- 1995-1996 Manager, Support Center, UCS, Indiana University. Responsible for front line user support via telephone, e-mail, walk-in, and online help systems. Improved and increased usage of online help system (<http://kb.iu.edu/>). Yahoo! Internet Life Magazine identified this as the best online help system in 1997.
- 1991-1995 Director, Center for Statistical and Mathematical Computing, UCS, Indiana University. Responsible for delivery and support of statistical and mathematical software on all UCS computing systems. Responsible for deployment of the Stat/Math Center and the Interdisciplinary Consortium for Statistical Applications; improved statistical and mathematical software offerings on UCS systems; aggressively site licensed stat/math software; implemented highly successful software support model.
- 1986-1991 Manager, Business Computing Facilities, School of Business, Indiana University. Completed networking of Business building; installed new microcomputers for every faculty member (the first School at IU to have a PC for every faculty member); managed maintenance of 400+ microcomputers; installed Novell LAN (4<sup>th</sup> at IU).
- 1985-1986 Applications Programmer, Bloomington Academic Computing Services, Indiana University. Responsibilities included online help systems on CDC, VAX, and Prime systems; staffing the BACS Information Center; advanced consulting on statistical software.
- 1984-1985 Computer Consultant, Bloomington Academic Computing Services, Indiana University. Responsibilities included general computing consulting and advanced statistical consulting.
- 1981-1984 Associate Instructor, Department of Biology, Indiana University. Taught entomology and parasitology labs, and assisted in teaching of biostatistics.

## Publications

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### PEER REVIEWED

- Kallback-Rose, K., K. Seiffert, D. Antolovic, T. Miller, R. Ping and C. Stewart. Conducting K-12 outreach to evoke early interest in IT, science, and advanced technology. In: *Proceedings of 1st Conference of the Extreme Science and Engineering Discovery Environment: Bridging from the eXtreme to the campus and beyond*. (Chicago, Illinois, 2012). ACM. <http://doi.acm.org/10.1145/2335755.2335853> Preprint: <http://hdl.handle.net/2022/14807>
- Kluge, M., S. Simms, T. William, R. Henschel, A. Georgi, C. Meyer, M.S. Mueller, C.A. Stewart, W. Wunsch and W.E. Nagel. "Performance and quality of service of data and video movement over a 100 Gbps testbed (in press)". *Future Generation Computer Systems*, 29(1), 230-240. 2013. <http://dx.doi.org/10.1016/j.future.2012.05.028> Preprint: <http://hdl.handle.net/2022/14620>
- Henschel, R., S. Simms, M. Davy, D. Hancock, S. Michael, T. Johnson, N. Heald, T. William, M. Allen, R. Knepper, K. Seiffert, M.R. Link and C.A. Stewart. Demonstrating Lustre over a 100Gbps Wide Area Network of 3500km (submitted). In: *Proceedings of SC'12*. (Salt Lake City, UT, 2012).
- Arenson, A.D., L.N. Bakhireva, C.D. Chambers, C.A. Deximo, T. Foroud, J.L. Jacobson, S.W. Jacobson, K.L. Jones, S.N. Mattson, P.A. May, E.S. Moore, K. Ogle, E.P. Riley, L.K. Robinson, J. Rogers, A.P. Streissguth, M.C. Tavares, J. Urbanski, Y. Yezerets, R. Surya, C.A. Stewart and W.K. Barnett. "Implementation of a shared data repository and common data dictionary for fetal alcohol spectrum disorders research". *Alcohol*, 44(7-8), 643-647. 2010. <http://dx.doi.org/10.1016/j.alcohol.2009.08.007> or <http://hdl.handle.net/2022/7194>
- Stewart, C.A., S. Simms, B. Plale, M. Link, D. Hancock and G. Fox. What is Cyberinfrastructure? In: *Proceedings of SIGUCCS 2010*. (Norfolk, VA, 24-27 Oct, 2010). <http://portal.acm.org/citation.cfm?doid=1878335.1878347>
- Stewart, C.A., M. Link, D.S. McCaulay, G. Rodgers, G. Turner, D. Hancock, P. Wang, F. Saied, M. Pierce, R. Aiken, M. Mueller, M. Jurenz, M. Lieber, J. Tillotson and B. Plale. "Implementation, performance, and science results from a 30.7 TFLOPS IBM BladeCenter cluster". *Concurrency and Computation: Practice and Experience*, 22(2), 157-174. 2010. <http://dx.doi.org/10.1002/cpe.153>
- Li, H., D. Hart, M. Mueller, U. Markwardt and C.A. Stewart. GeneIndex: An Open Source Parallel Program for Enumerating and Locating Words in a Genome. In: *Proceedings of IJCBS '09. International Joint Conference on Bioinformatics, Systems Biology and Intelligent Computing* (3-5 Aug. 2009). <http://dx.doi.org/10.1109/IJCBS.2009.127>
- Lowe, M., C. Shields, D. Hancock, M. Link, C.A. Stewart and M. Pierce. Gateway Hosting at Indiana University. In: *Proceedings of the TeraGrid 2009 Conference*. (Arlington, VA, 2009). <http://hdl.handle.net/2022/13944>
- Simms, S.C., C.A. Stewart and S.D. McCaulay. Cyberinfrastructure resources for U.S. Scholarship: the TeraGrid. In: *Proceedings of the 36th annual ACM SIGUCCS conference on User services*. (Portland, OR, USA, 2008). ACM. <http://portal.acm.org/citation.cfm?id=1450057>

Catlett, C., W.E. Allcock, P. Andrews, R. Aydt, R. Bair, N. Balac, B. Banister, T. Barker, M. Bartelt, P. Beckman, F. Berman, G. GBertoline, A. Blatecky, J. Boisseau, J. Bottum, S. Brunett, J. Bunn, M. Butler, D. Carver, J. Cobb, T. Cockerill, P.F. Couvares, M. Dahan, D. Diehl, T. Dunning, I. Foster, K. Gaither, D. Gannon, S. Goasguen, M. BGrobe, D. Hart, M. Heinzl, C. Hempel, W. Huntoon, J. Insley, C. Jordan, I. Judson, A. Kamrath, N. Karonis, C. Kesselman, P. Kovatch, L. Lane, S.L. Lathrop, M., D. Lifka, L. Liming, M. Livny, R. Loft, D. Marcusiu, J. Marsteller, S. Martin, D.S. McCaulay, J. McGee, L. McGinnis, M.A. McRobbie, P. Messina, R. Moore, J.P. MNavarro, J. Nichols, M.e. Papka, R. Pennington, G. Pike, J. Pool, R. Reddy, D. Reed, T. TRimovsky, E. Roberts, R. Roskies, S. Sanielevici, J.R. Scott, A. Shankar, M. Sheddon, M. Showerman, D. Simmel, A. Singer, D. Skow, S. Smallen, W.S. Smith, C., R. Stevens, C.A. Stewart, R.B. Stock, N. Stone, J. Towns, T. Urban, M. Vildibill, E. Walker, V. Welch, N. Wilkins-Diehr, R. Williams, L. Winkler, L. Zhao and A. Zimmerman. TeraGrid: Analysis of Organization, System Architecture, and Middleware Enabling New Types of Applications. In: *Advances in Parallel Computing Volume 16, 2008: High Performance Computing and Grids in Action*. L. Grandinetti, ed. IOS Press, Amsterdam, 2008. <http://hdl.handle.net/2022/14524>

Stewart, C.A., M. Mueller, M. Lingwall. 2007. Progress Towards Petascale Applications in Biology: Status in 2006. In: W. Lehner, N. Meyer, A. Streit, C.A. Stewart (eds.). *Euro-Par 2006 Parallel Processing: Workshops: In: CoreGRID 2006, UNICORE Summit 2006, Petascale Computational Biology and Bioinformatics, Dresden, Germany (Lecture Notes in Computer Science)*. Springer-Verlag Berlin Heidelberg. <http://hdl.handle.net/2022/1829>

Arenson A.D., L. Bakhireva, T. Chambers, C. Deximo, T. Foroud, J. Jacobson, S. Jacobson, K.L. Jones, S. Mattson, P. May, E. Moore, K. Ogle, E. Riley, L. Robinson, J. Rogers, A. Streissguth, M. Tavares, J. Urbanski, H. Yezerets, C.A. Stewart. 2007. Implementation of a distributed architecture for managing collection and dissemination of data for fetal alcohol spectrum disorders research. In: W. Dubitzky (eds): *GCCB 2006, LNBI 4360*. Springer-Verlag Berlin Heidelberg. pp. 33-46. <http://hdl.handle.net/2022/1025>

Myron, S.A., M.R. Link, R. Knepper, C.A. Stewart. 2005. PubsOnline: an open source database for managing and delivering bibliographic information. *Proceedings of the 33rd annual ACM SIGUCCS conference on User services*. 6-9 November 2005, Monterey, CA, USA. <http://portal.acm.org/citation.cfm?id=1099492>

Wernert, E.A., M. Boyles, J.N. Huffman, J. Rogers, J.C. Huffman, C.A. Stewart: The john-e-box: fostering innovation, inclusion, and collaboration through accessible advanced visualization. *Proceedings of Richard Tapia Celebration of Diversity in Computing Conference 2005*: 64-67. <http://portal.acm.org/citation.cfm?doid=1095269>

Stewart, C.A. 2004. Bioinformatics: transforming biomedical research and medical care. *Communications of the ACM* 47(11): 31-33. <http://portal.acm.org/citation.cfm?doid=1029496.1029522>

Wang, P., G. Turner, S. Simms, D. Hart, M. Papakhian and C.A. Stewart. One Teraflop Achieved with a Geographically Distributed Linux Cluster. In: *High-Performance Computing*. L.T. Yang and M. Guo, eds., 2006. <http://dx.doi.org/10.1002/0471732710.ch26>

Stewart, C.A. R. Keller, R. Repasky, M. Hess, D. Hart, M. Mueller, R. Sheppard, U. Woessner, M. Aumueller, Huian Li, D.K. Berry, J. Colbourne. 2004. A global grid for analysis of arthropod evolution. pp. 328-337 In: R. Buyya (ed.) *Proceedings: Fifth IEEE/ACM International Workshop on grid computing*. 8 November 2004, Pittsburgh, PA. <http://portal.acm.org/citation.cfm?id=1033261>

- Stewart, C.A., D. Hart, R.W. Sheppard, H. Li, R. Cruise, V. Moskvina, L. Papiez. 2004. Parallel computing in biomedical research and the search for peta-scale biomedical applications. pp. 719-716 In: G.R. Joubert, W.E. Nagel, F.J. Peters, and W.V. Walter (eds). *Parallel computing: software technology, algorithms, architectures & applications*. Advances in Parallel Computing Vol. 13. Elsevier, Oxford. doi:10.1016/S0927-5452(04)80088-1
- Stewart, C.A., D. Hart, R. Repasky, M. Papakhian, A. Shankar, E. Wernert, A.D. Arenson, G. Bernbom. 2003. *Advanced Information Technology Support for Life Sciences Research*. Proceedings of SIGUCCS 2003 Conference, 21-24 September, San Antonio, Texas. <http://portal.acm.org/citation.cfm?id=947472>
- Samuel, J.V., Peebles, C.S., Noguchi, T., Stewart, C.A. 2002. Gauging IT Support Strategies: User needs then and now. Proceedings of SIGUCCS 2002 Conference, November 20-23, Providence, RI., pp. 284-285. <http://portal.acm.org/citation.cfm?id=588646.588723>
- Samuel, J.V., Wilhite, K.J., Stewart, C.A. 2002. Getting More for Less: A Software Distribution Model. Paper presented at the EDUCAUSE Conference, October 1-4, Atlanta, GA. <http://educause.edu/ir/library/pdf/EDU0246a.pdf>
- Peebles, C.S., C.A. Stewart, B.D. Voss, S.B. Workman. 2001. Measuring quality, cost, and value of IT services in higher education. Proceedings of the American Quality Congress, Charlotte, NC, May 2001. <http://hdl.handle.net/2022/426>
- Peebles, C.S., C.A. Stewart, B.D. Voss, S.B. Workman. 2001. Measuring quality, cost, and value of IT services in higher education. Proceedings of EDUCAUSE, Indianapolis, IN, October 2001. <http://hdl.handle.net/2022/425>
- Stewart, C.A., D. Hart, D. K. Berry, G. J. Olsen, E. Wernert, W. Fischer. 2001. Parallel implementation and performance of fastDNAMl - a program for maximum likelihood phylogenetic inference. Proceedings of SC2001, Denver, CO, November 2001. <http://portal.acm.org/citation.cfm?id=582054>
- Stewart, C.A., C.S. Peebles, M. Papakhian, J. Samuel, D. Hart, S. Simms. 2001. High Performance Computing: Delivering Valuable and Valued Services at Colleges and Universities. Proceedings of SIGUCCS, Portland, OR, October 2001. <http://portal.acm.org/citation.cfm?id=500956.501026>
- Stewart, C.A., T.W. Tan, M. Buckhorn, D. Hart, D.K. Berry, L. Zhang, E. Wernert, M. Sakharkar, W. Fischer and D.F. McMullen. Evolutionary biology and computational grids. Paper presented at: *CASCON Workshop on Computational Biology* (Mississauga, Ontario, Canada, 10 Nov, 1999). <http://hdl.handle.net/2022/14008>
- Stewart, C.A., D. Grover, R.D. Vernon. 1998. Changing (almost) everything and keeping (almost) everyone happy. *CAUSE/Effect* 21(3):39-46. <http://net.educause.edu/ir/library/html/cem/cem98/cem9837.html>
- Stewart, C.A., and P.A. McClure. 1993. Diurnal variation in thermal and metabolic parameters of the golden hamster (*Mesocricetus auratus*). *J. Comp. Physiol. B* 63: 234-238. <http://dx.doi.org/10.1007/BF00261670>

Stewart, C.A. 1991. A note on the microdistribution of the Red-Backed Vole, *Clethrionomys gapperi*, in the E.N. Huyck Preserve, New York. *Can. Field-Naturalist* 105:274-275. <http://hdl.handle.net/2022/14019>

Stewart, C.A., J. Owens, and P.A. McClure. 1990. Air flow and convective heat loss from small mammals in laboratory metabolism chambers. *J. Thermal Biol.* 15:313-316. doi:10.1016/0306-4565(90)90018-D

Stewart, C.A. and P.A. McClure. Diurnal variation in minimal thermal conductance of three rodents: The white-footed mouse (*Peromyscus leucopus*), the golden hamster (*Mesocricetus auratus*), and the eastern woodrat (*Neotoma floridana*). J.B. Mercer, ed. *Thermal physiology*. Elsevier Science Publishers B.V. (Biomedical Division). 1989. <http://hdl.handle.net/2022/15226>

Stewart, C.A. 1988. Diurnal variation in minimal thermal conductance of the white-footed mouse (*Peromyscus leucopus*), the golden hamster (*Mesocricetus auratus*), and the eastern woodrat (*Neotoma floridana*). Ph.D. dissertation, Indiana University. <http://hdl.handle.net/2022/13327>

Stewart, C.A. 1988. Diet of the rainbow darter (*Etheostoma caeruleum*) in Rock Run, Clark County, Ohio. *Ohio J. Science* 88: 198-200. <http://hdl.handle.net/2022/13261>

#### WORKSHOP AND TECHNICAL REPORTS (NOT PEER REVIEWED)

Simms, S.C., M.P. Davy, C.B. Hammond, M.R. Link, C.A. Stewart, S. Teige, M.-H. Baik, Y. Mantri, R. Lord, D.F. McMullen, J.C. Huffman, K. Huffman, G. Juckeland, M. Kluge, R. Henschel, H. Brunst, A. Knuepfer, M. Mueller, P.R. Mukund, A. Elble, A. Pasupuleti, R. Bohn, S. Das, J. Stefano, G.G. Pike, D.A. Balog. 2007. *Indiana University's SC|07 Bandwidth Challenge award-winning project: Using the Data Capacitor for Remote Data Collection, Analysis, and Visualization*. Indiana University, Bloomington, IN. <http://hdl.handle.net/2022/14615>

Stewart, C.A., T. Miller, D.Y. Hancock, S. Marru, M. Pierce, M.R. Link, S.C. Simms, K. Seiffert, J. Wernert and J. Bolte. *Indiana University Pervasive Technology Institute – Research Technologies: XSEDE Service Provider and XSEDE subcontract report (PY1: 1 July 2011 to 30 June 2012)*. Indiana University, Bloomington, IN. 2012. <http://hdl.handle.net/2022/14702>

Stewart, C.A., M.R. Link, E. Wernert, W.K. Barnett and T. Miller. *Information technology in support of research, scholarship, and creative activities: A strategic plan for Research Technologies – a division of UITS and a PTI Service & Cyberinfrastructure Center (Revision 1.1)*. (PTI-TR12-007-01), Indiana University, Bloomington, IN. 2012. <http://hdl.handle.net/2022/14596>

Stewart, C.A., M.R. Link, E. Wernert, W.K. Barnett and T. Miller. *Information technology in support of research, scholarship, and creative activities: A strategic plan for Research Technologies – a division of UITS and a PTI Service & Cyberinfrastructure Center*. (PTI-TR12-007), Indiana University, Bloomington, IN. 2012. <http://hdl.handle.net/2022/14596>

Stewart, C.A., R. Knepper, A. Grimshaw, I. Foster, F. Bachmann, D. Lifka, M. Riedel and S. Tuecke. *Campus Bridging Use Case Quality Attribute Scenarios*. 2012. <http://hdl.handle.net/2022/14476>

Stewart, C.A., R. Knepper, A. Grimshaw, I. Foster, F. Bachmann, D. Lifka, M. Riedel and S. Tuecke. *XSEDE Campus Bridging Use Cases*. 2012. <http://hdl.handle.net/2022/14475>

- Miller, T., B. Plale and C.A. Stewart. *Annual report on training, education, and outreach activities of the Indiana University Pervasive Technology Institute and affiliated organizations*. 2012. <http://hdl.handle.net/2022/14132>
- Henschel, R., S.C. Simms, D. Hancock, S. Michael, T. Johnson, N. Heald, T. William, D.K. Berry, M. Allen, R. Knepper, M. Davy, M.R. Link and C.A. Stewart. *Technical Report: Report on Lustre use across an experimental 100Gb network spanning 2,175 mi*. Indiana University. 2012. <http://hdl.handle.net/2022/14137>
- Stewart, C.A.; Link, M.R.; Henschel, R.; Hancock, D.Y.; Li, H. 2012. Technical Report: Benchmarking an HP DL580 cluster at Indiana University (Mason). <http://hdl.handle.net/2022/14078>
- Stewart, C.A., M.R. Link, D.S. McCaulay, R. Henschel, D. Hancock. "Technical Report: Acceptance Test for FutureGrid Cray XT5m at Indiana University (Xray)," Indiana University, Bloomington, IN. PTI Technical Report PTI-TR12-005, Mar 2012. <http://hdl.handle.net/2022/14267>
- Stewart, C.A. and T. Miller. *Economic development by the Indiana University Pervasive Technology Institute, Pervasive Technology Labs, and the Research Technologies Division of University Information Technology Services September 1999 – June 2011: a public report*. Indiana University, Bloomington, IN. 2011. <http://hdl.handle.net/2022/13559>
- Almes, G.T.; Jent, D.; Stewart, C.A. 2011. Campus Bridging: Data and Networking Issues Workshop Report. <http://hdl.handle.net/2022/13200>. Available as print-on-demand book from: <https://www.createspace.com/3592681>
- Barnett, W., V. Welch, A. Walsh and C.A. Stewart. A Roadmap for Using NSF Cyberinfrastructure with InCommon. 2011. <http://hdl.handle.net/2022/13024> or <http://www.incommon.org/nsfroadmap.html>. Available as print-on-demand book from <https://www.createspace.com/3630011>
- Barnett, W., V. Welch, A. Walsh and C.A. Stewart. A Roadmap for Using NSF Cyberinfrastructure with InCommon: Abbreviated Version. 2011. <http://hdl.handle.net/2022/13025> or <http://www.incommon.org/nsfroadmap.html>
- Dreher, P., S.C. Ahalt, G. Almes, M. Mundrane, J. Pepin and C.A. Stewart, (eds.), 2011. Campus Bridging: Campus Leadership Engagement in Building a Coherent Campus Cyberinfrastructure Workshop Report. 2011. <http://hdl.handle.net/2022/13194>
- NSF Advisory Committee for Cyberinfrastructure Task Force on Campus Bridging. Final Report. March 2011. [http://www.nsf.gov/od/oci/taskforces/TaskForceReport\\_CampusBridging.pdf](http://www.nsf.gov/od/oci/taskforces/TaskForceReport_CampusBridging.pdf). Available as print-on-demand book from: <https://www.createspace.com/3597300>  
[Stewart chaired this task force and led writing of this report]
- Stewart, C.A., D.S. Katz, D.L. Hart, D. Lantrip, D.S. McCaulay and R.L. Moore. Technical Report: Survey of cyberinfrastructure needs and interests of NSF-funded principal investigators. 2011. <http://hdl.handle.net/2022/9917>

Stewart, C.A., D.S. McCaulay, S. Jul and R.L. Moore. Technical Report: TeraGrid eXtreme Digital Campus Bridging Requirements Elicitation Meeting. 2011. <http://hdl.handle.net/2022/13026>

Henschel, R.; Stewart, C.A.; Link, M.R.; McCaulay, D. S.; Hancock, D.Y. 2011. Technical Report: Acceptance Test for FutureGrid IBM iDataPlex at Indiana University (India). <http://hdl.handle.net/2022/13429>

Stewart, C.A., G.T. Almes, D.S. McCaulay and B.C. Wheeler, eds., 2010. Cyberinfrastructure Software Sustainability and Reusability Workshop Final Report. <https://scholarworks.iu.edu/dspace/handle/2022/6701>. Also available as print on demand hardcopy from <https://www.createspace.com/3506064>

Stewart, C.A. Progress Report on Implementation of Recommendations from the Indiana University Cyberinfrastructure Research Taskforce. 2010. <http://hdl.handle.net/2022/8974>

Dreher, P., V. Agarwala, S. Ahalt, G. Almes, S. Fratkin, T. Hauser, J. Odegard, J. Pepin, and C.A. Stewart. Developing a Coherent Cyberinfrastructure from Local Campuses to National Facilities: Challenges and Strategies. 2009. <http://hdl.handle.net/2022/5122>

Stewart, C.A.; Link, Matthew; McCaulay, D. Scott; Rodgers, Greg; Turner, George; Hancock, David; Wang, Peng; Saied, Faisal; Pierce, Marlon; Aiken, Ross; Mueller, Matthias S.; Jurenz, Matthias; Lieber, Matthias; Tillotson, Jenett; Plale, Beth A. 2009. Application benchmark results for Big Red, an IBM e1350 BladeCenter Cluster. <http://hdl.handle.net/2022/5125>

Stewart, C.A., S.C. Simms, C. Pilachowski and R. Bramley. Acquisition of a High-Speed, High Capacity Storage System to Support Scientific Computing: The Data Capacitor Final Report. Indiana University, Bloomington, IN. 2009. <http://hdl.handle.net/2022/14525>

Indiana University Research Data Management Taskforce. Report of the Indiana University Research Data Management Taskforce. 2007. <http://hdl.handle.net/2022/3294>

McRobbie, M.A., K. Adams, M.P. Baker, G. Fox, D. Gannon, R. Heiland, A. Lumsdaine, D.F. McMullen, T. Miller, D. Siefert-Herron, C.A. Stewart, S. Wallace, M. Pierce and G. Travis. Pervasive Technology Labs Program Report, July 2007. 2007. <http://hdl.handle.net/2022/3210>

McRobbie, M.A., M.P. Baker, G. Fox, D. Gannon, R. Heiland, A. Lumsdaine, D.F. McMullen, T. Miller, D. Siefert-Herron, C. Stewart, and S. Wallace. Pervasive Technology Labs Program Report, July 2006. 2006. <http://hdl.handle.net/2022/456>

McRobbie, M.A, G. Fox, D. Gannon, M.J. Palakal, and C.A. Stewart. Extensible Terascale Facility (ETF): Indiana-Purdue Grid (IP-Grid). Indiana University, Bloomington, IN, 2006. <http://hdl.handle.net/2022/472>

McRobbie, M.A., K. Adams, M.P. Baker, G. Fox, D. Gannon, R. Heiland, A. Lumsdaine, D.F. McMullen, C.A. Stewart, and S. Wallace. Pervasive Technology Labs Program Report, August 2005. 2005. <http://hdl.handle.net/2022/455>

McRobbie, M.A., R. Bramley, J.C. Huffman and C.A. Stewart. Creation of the AVIDD Data Facility: A Distributed Facility for Managing, Analyzing and Visualizing Instrument-Driven Data (AVIDD). Indiana University, Bloomington, IN, 2003. <http://hdl.handle.net/2022/477>



Stewart, C.A. IU-IBM Protein Family Annotator Project Final Report. 2004.  
<http://hdl.handle.net/2022/1830>

Stewart, C.A. IU-IBM DiscoveryLink Project Final Report. 2003.  
<http://hdl.handle.net/2022/1831>

Stewart, C.A., M. Papakhian, D. Hart, A. Shankar, A.D. Arenson, D.F. McMullen, M. Palakal, M. Dalkilic and P. Ortoleva. 2003 Report on Indiana University Accomplishments supported by Shared University Research Grants from IBM, Inc., 2003. <http://hdl.handle.net/2022/2186>

Cruise, R., D. Hart, M. Papakhian, R. Repasky, J. Samuel, A. Shankar, C.A. Stewart and E. Wernert. University Information Technology Services' Advanced IT Facilities: The least every researcher needs to know. M. Lingwall, ed., Indiana University, Bloomington, IN. 2003.  
<http://hdl.handle.net/2022/14766>

Cruise, R., D. Hart, M. Papakhian, R. Repasky, J. Samuel, A. Shankar, C.A. Stewart and E. Wernert. *INGEN's advanced IT facilities: The least you need to know*. M. Lingwall, ed., Indiana University, Bloomington, IN. 2002. <http://hdl.handle.net/2022/15221>

Stewart, C.A., R. Bramley, G. Bernbom, J.W. Dunn, Z. Meglicki, D.F. McMullen, D. Hart and M. Papakhian. Indiana University Shared University Research grants - Report on Accomplishments. 2000. <http://hdl.handle.net/2022/2185>

#### POSITION PAPERS AND CONGRESSIONAL TESTIMONY

Coalition for Academic Scientific Computation. The future of the TeraGrid and the national advanced cyberinfrastructure: a perspective from the Coalition for Academic Scientific Computation. 2008. <http://hdl.handle.net/2022/3082>

Stewart, Craig A. Testimony before the United States House of Representatives Committee on Science and Technology Hearing on Leadership Under Challenge: Information Technology R&D in a Competitive World (2007 report of the President's Council of Advisors on Science and Technology). 2008. <http://hdl.handle.net/2022/5124>

Coalition for Academic Scientific Computation. Opportunities for Biomedical Research and the NIH through High Performance Computing and Data Management. 2003.  
<http://hdl.handle.net/2022/5123>

#### OTHER PUBLICATIONS (NOT PEER REVIEWED)

Stewart, C.A. State of the Coalition for Academic Scientific Computing (CASC) – 2008. 2008.  
<http://www.hpcwire.com/offthewire/State-of-the-Coalition-for-Academic-Scientific-Computing-CASC--2008-37099739.html>

Indiana University Life Sciences Strategic Plan Drafting Committee (McRobbie, M.A., K.R. Subbaswamy, D.C. Brater, and C.A. Stewart). 2006. Indiana University Life Sciences Strategic Plan. <http://hdl.handle.net/103333/391>

Lingwall, M., and C.A. Stewart. 2007. The Promise of Petascale Computing. [http://www.bio-itworld.com/BioIT\\_Article.aspx?id=51184](http://www.bio-itworld.com/BioIT_Article.aspx?id=51184)

Stewart, C.A. and G. Bertoline. I-Light: A Network for Collaboration Between Indiana University and Purdue University. In: *Proceedings of the 2005 I-Light Conference*. (Bloomington, IN, 2005). E.A. Wernert, G.R. Bertoline and G.S. Moore, eds. <http://hdl.handle.net/2022/435>

Peebles, C.S., C.A. Stewart, G. Bernbom, D.F. McMullen, A. Shankar, J.V. Samuel, J. Daniels, M. Papakhian, D. Hart, J. Walsh and E. Wernert. *Research and Academic Computing Implementation Plan*. Indiana University. 2000. <http://hdl.handle.net/2022/15223>

Stewart, C.A. 1992. Statistical and mathematical computing at IU: A look back; a look forward. UCS Times Nov-Dec 1992: 1-3. Published by University Computing Services, Indiana University Bloomington. <http://hdl.handle.net/2022/13618>

Stewart, C.A., 1991. Big improvements in statistical software support. UCS Times Sep-Oct 1991: 15-16. Published by University Computing Services, Indiana University Bloomington. <http://hdl.handle.net/2022/13609>

#### BOOKS AND JOURNAL ISSUES EDITED

Lehner, W., N. Meyer, A. Streit, C. Stewart (eds.). Euro-Par 2006 Parallel Processing: Workshops: In: CoreGRID 2006, UNICORE Summit 2006, Petascale Computational Biology and Bioinformatics, Dresden, Germany (Lecture Notes in Computer Science). Springer-Verlag Berlin Heidelberg.

SPECIAL ISSUE: Bioinformatics: transforming biomedical research and medical care. Communications of the ACM. 47(11), November 2004. ISSN:0001-0782. <http://cacm.acm.org/magazines/2004/11>

Peromyscus Newsletter. Co-editor, 1997-1998. <http://stkctr.biol.sc.edu/Peromyscus.Newsletter.htm>

#### Tutorials

---

Stewart, C.A. and M. Dahan. 2008. *Introduction to Parallel Computing on the TeraGrid Part I: the TeraGrid and Parallel Computing concepts* (Tutorial presentation) TeraGrid08 Conference (Las Vegas, NV, 9 Jun 2008). <http://hdl.handle.net/2022/13990>

Stewart, C.A. 2007. *Resources that matter to you: accessing IU's Big Red supercomputer and massive data storage system via the TeraGrid*. (Tutorial presentation) IEEE 7th International conference on Bioinformatics & BioEngineering (Boston, MA, 14 Oct 2007). <http://hdl.handle.net/2022/13992>

Stewart, C.A. 2006. *Scientific Data Management*. (Tutorial presentation) PittCon 2006 (Orlando, FL, 13 Mar 2006). <http://hdl.handle.net/2022/13993>

Stewart, C.A. 2005. *Introduction to computational biology*. (Tutorial presentation) High Performance Computing Center (Stuttgart, Germany, 1 July 2005). <http://hdl.handle.net/2022/13995>

Stewart, C.A. 2005. *Scientific Data Management*. (Tutorial presentation) PittCon 2005 (Orlando, FL, 3 Mar 2005). <http://hdl.handle.net/2022/13996>

Stewart, C.A., R. Repasky and A.D. Arenson. 2004. *Open source tools for computational biology*. (Tutorial presentation) IEEE/ACM SC04 Conference (Pittsburgh, PA, 7 Nov 2004). <http://hdl.handle.net/2022/13997>

Stewart, C.A. 2004. *Scientific Data Management*. (Tutorial presentation) PittCon 2004 (Chicago, IL, 10 Mar 2004). <http://hdl.handle.net/2022/13998>

Stewart, C.A. 2003. *Computational Biology*. (Tutorial presentation) IEEE/ACM SC03 Conference (Phoenix, AZ, 14 Nov 2003). <http://hdl.handle.net/2022/14000>

Stewart, C. 2002. *Scientific Data Management*. (Tutorial presentation) Laboratory Information Management Systems Conference (LIMS 2002) (Philadelphia, PA, 2 May 2002). <http://hdl.handle.net/2022/14001>

Stewart, C.A. 2000. *Computational Biology*. (Tutorial presentation) IEEE/ACM SC00 Conference (Dallas, TX, Nov 2000). <http://hdl.handle.net/2022/14007> (Presented as part of tutorial Simon, H.D., M.D. Zorn, S.J. Spengler, B.K. Shoichet, C.A. Stewart, Dubchak I.L. and A.P. Arkin. *Computational Biology and High Performance Computing 2000 (Technical report LBNL-47001)*. 2000. Presentation. Presented at: SC2000 (Dallas, TX, 4-10 Nov 2000). <http://hdl.handle.net/2022/15225>)

Hewitt, D., and C.A. Stewart. *Online Help Systems and Knowledge Bases: Building a Virtual Helpdesk*. Half-day tutorial given at CAUSE96, San Francisco, Dec. '96. <http://hdl.handle.net/2022/13611>

## **Courses Taught**

---

Stewart, C.A. 2003. Einführung in die Bioinformatik. Aommer I, Universitaet Stuttgart, Stuttgart, Germany.

## **Data Sets Published**

---

Welch, V., Sheppard, R., Lingwall, M.J., Stewart, C.A. 2011. Current structure and past history of US cyberinfrastructure (data set and figures). <http://hdl.handle.net/2022/13136>

## **Poster Presentations**

---

Doak, T., R. LeDuc, L.-S. Wu, C.A. Stewart, R. Henschel and W.K. Barnett. *The National Center for Genome Analysis Support (Poster)*. 2012. Presentation. Presented at: International Conference on Genomics in the Americas (Philadelphia, PA, 27 Sept 2012). <http://hdl.handle.net/2022/14769>

Doak, T., R. LeDuc, L.-S. Wu, C.A. Stewart, R. Henschel and W.K. Barnett. *The National Center for Genome Analysis Support (Poster)*. 2012. Presentation. Presented at: International Society of Protistologists -- North American Section (North Carolina Central University, Durham, NC, 22 Sept 2012). <http://hdl.handle.net/2022/14769>

Doak, T., R. LeDuc, L.-S. Wu, C.A. Stewart, R. Henschel and W.K. Barnett. *The National Center for Genome Analysis Support (Poster)*. 2012. Presentation. Presented at: New Directions for Investigating Biodiversity of Ciliates (North Carolina Central University, Durham, NC, 19 Sept 2012). <http://hdl.handle.net/2022/14769>

Doak, T.G., L.-S. Wu, C.A. Stewart, R. Henschel and W.K. Barnett. *National Center for Genome Analysis Support (Poster)*. 2012. Presentation. <http://hdl.handle.net/2022/14539>

McCaulay, D.S., M.R. Link, G.W. Turner, D.Y. Hancock, M. Morris and C.A. Stewart. 2006. *Powerful New Research Computing System Available via the TeraGrid*. (Presentation) IEEE/ACM SC06 Conference (Tampa, FL, 14 Nov 2006). <http://hdl.handle.net/2022/13994>

Stewart, C.A., D. Hart, D. K. Berry. 1998. Maximum likelihood estimation of phylogenetic relationships with geographically distributed supercomputers. Presented at CASCON 98, November 30 - December 3, 1998, Toronto, Canada.

## Abstracts

---

Simms, S.C., M. Davy, B. Hammond, M.R. Link, C.A. Stewart, S. Teige, M.-H. Baik, Y. Mantri, R. Lord, D.F.R. McMullen, J.C. Huffman, K. Huffman, G. Juckeland, M. Kluge, R. Henschel, H. Brunst, A. Knuepfer, M. Mueller, P.R. Mukund, A. Elble, A. Pasupuleti, R. Bohn, S. Das, J. Stefano, G.G. Pike and D.A. Balog. 2007. Using the Data Capacitor for Remote Data Collection, Analysis, and Visualization. IEEE/ACM 2007 Conference (Reno, NV, 13 Nov 2007). <http://hdl.handle.net/2022/13991>

McCaulay, D.S., M.R. Link, G.W. Turner, D.Y. Hancock, M. Morris and C.A. Stewart. 2006. *Powerful New Research Computing System Available via the TeraGrid*. (Presentation) IEEE/ACM SC06 Conference (Tampa, FL, 14 Nov 2006). <http://hdl.handle.net/2022/13994>

Hart, D., J. Palmer, W. Fischer, S. Turner, D.K. Berry, E. Wernert, C.A. Stewart, T.W. Tan, M. Sakharkar, L.X. Zhang, M. Buchhorn and T. Potter. *Maximum Likelihood Analysis of Phylogenetic Data*. 1998. Presentation. Presented at: IEEE/ACM SC98 Conference (Orlando, FL, Nov 1998). <http://hdl.handle.net/2022/13893>

Hart, D., D.A. Lauer, J.W. Naab, C.A. Stewart and D.F. McMullen. *PC Clusters: Performance Comparisons in NT and Linux Environments (Abstract)*. 2000. Presentation. Presented at: Society for Industrial and Applied Mathematics First SIAM Conference (Washington D.C., 24 Sept 2000). <http://hdl.handle.net/2022/15224>

Valentine, D.W. and C.A. Stewart. A preliminary analysis of diet and resource partitioning in *Etheostoma caeruleum* Storer and *Etheostoma flabellare* Rafinesque in Rock Run, Clark County, Ohio. Ohio Journal of Science April Program Abstracts. Ohio Academy of Science 90th Annual Meeting. 1981. <http://hdl.handle.net/2022/15227>

Reash, R.J. and C.A. Stewart. "Preliminary investigations of longitudinal distribution and fish species diversity in Rock Run, Clark County, Ohio. (Abstract)". *Bios*, 52(3), 178. 1981. <http://hdl.handle.net/2022/15228>

## Major Research Conference Displays

---

Indiana University. 2011. Moving fast, thinking big. Indiana University display at SC11, Seattle, WA. <http://pti.iu.edu/sc11>

Indiana University. 2010. Look to the future of high performance computing. Indiana University display at SC10, New Orleans, LA. <http://sc10.supercomputing.iu.edu/>

Indiana University. 2009. Look to the future of innovation. Indiana University display at SC09, Portland, OR. <http://sc09.supercomputing.iu.edu/>

Indiana University. 2008. Foundations for innovation, gateways to insight. Indiana University display at SC08, Austin, TX. <http://sc08.supercomputing.iu.edu/>

Indiana University. 2007. Foundations for innovation, gateways to insight. Indiana University display at SC07, Reno, NV. <http://supercomputing.iu.edu/sc2007/>

Indiana University. 2006. Foundations for innovation. Indiana University display at SC06, Tampa, FL. <http://supercomputing.iu.edu/sc2006/>

Indiana University. 2005. Research works. Indiana University display at SC05, Seattle, WA. <http://supercomputing.iu.edu/sc2005/>

Indiana University. 2004. Indiana University display at SC04, Pittsburgh, PA. <http://supercomputing.iu.edu/sc2004/>

Indiana University, Purdue University, and University of Notre Dame. Research in Indiana collaborative display at SC03, Phoenix, NM. <http://supercomputing.iu.edu/sc2003/>

Indiana University. 2002. University Information Technology Services/INGEN IT Core display booth at Iconomy conference. Indiana Marriott. Jan 2003. <http://www.iconomy.org/>

Indiana University, Purdue University, University of Notre Dame, and the Rose Hulman Institute of Technology. Research in Indiana collaborative display at SC02, Baltimore, MD. <http://supercomputing.iu.edu/sc2002/>

Indiana University, Purdue University, and the University of Notre Dame. Research in Indiana collaborative display at SC01, Denver, CO. <http://supercomputing.iu.edu/sc2001/>

## Presentations

---

2012

Stewart, C.A., M. Jacobs, B. Hallock, R. Knepper and W.K. Barnett. *Get the convenience of cloud while keeping your rights – through the IU / Penguin Computing partnership*. 2012. Presentation. (2012). <http://hdl.handle.net/2022/14704>

Jacobs, M. and C.A. Stewart. 2012. *Penguin Computing / IU Partnership HPC “cluster as a service” and Cloud Services*. (Presentation) Coalition for Academic Scientific Computation (Arlington, VA, 29 Feb). <http://hdl.handle.net/2022/14441>

Stewart, C.A. 2012. *Campus Bridging*. (Presentation) XSEDE (eXtreme Environment for Science and Engineering Discovery) Advisory Board Meeting (Chicago, IL, 23 Apr). <http://hdl.handle.net/2022/14443>

Stewart, C.A. 2012. *Cyberinfrastructure Begins at Home*. (Presentation) Rutgers University (New Brunswick, NJ, 20 Feb). <http://hdl.handle.net/2022/14442>

Stewart, C.A., S. Marru, R. Knepper, D.Y. Hancock, J. Wernert, C. Aikman, J. Bolte, P. Brown and T.M. Miller. 2012. *Indiana University collected XSEDE update*. (Presentation) XSEDE (eXtreme Environment for Science and Engineering Discovery) Quarterly Meeting (Austin, TX, 6-7 Mar). <http://hdl.handle.net/2022/14444>

Stewart, C.A. 2012. “What is campus bridging and why should XSEDE Campus Champions Care?” Presentation. Presented to XSEDE Campus Champions 8 June 2012. Presented to campus champions virtual meeting from Michigan City, IN. <http://hdl.handle.net/2022/14709>

Stewart, C.A. 2012. "WBS 1.6.5 Campus Bridging Program Plan" Presentation. Presented to NSF review panel 14 June 2012. Arlington VA. <http://hdl.handle.net/2022/14710>

Stewart, C.A. 2012. XSEDE12 closing remarks. Presentation. Presented at XSEDE12, Chicago, IL. 16-20 July 2012 <http://hdl.handle.net/2022/14711>

Stewart, C.A. 2012. XSEDE12 opening remarks. Presentation. Presented at XSEDE12, Chicago, IL. 16-20 July 2012 <http://hdl.handle.net/2022/14712>

Stewart, C.A., R. Knepper, J.W. Ferguson, F. Bachmann, I. Foster, A. Grimshaw, V. Hazlewood and D. Lifka. What is campus bridging and what is XSEDE doing about it? 2012. Presentation. Presented at: XSEDE12 (Chicago, IL, 16-20 Jul 2012). <http://hdl.handle.net/2022/14599>

Stewart, C.A. 2012. Campus Bridging Security Challenge. From "Panel: Security for Science Gateways and Campus Bridging". Jim Basney, Randy Butler, Dan Fraser, Suresh Marru, Craig A. Stewart. Presented at XSEDE12, Chicago, IL 16-20 July 2012. <http://hdl.handle.net/2022/14713>

## 2011

Stewart, C.A. and V. Welch. 2011. *Overview of NSF ACCI Task Force on Campus Bridging Report*. (Presentation) Coalition for Academic Scientific Computation Meeting (Arlington, VA, 16 Mar 2011). <http://hdl.handle.net/2022/13421>

Stewart, C.A. 2011. *Educational Applications of Supercomputing and Cyberinfrastructure*. (Presentation) KAUST Economic Development International Symposium at ISC'11 (Hamburg, Germany, June 21). <http://hdl.handle.net/2022/13365>

Stewart, C.A. 2011. *Management and organizational structure of large scale innovative projects*. (Presentation) FLEET Working Group Meeting (Vienna, Austria, 19 July 2011). <http://hdl.handle.net/2022/13403>

Stewart, C.A. 2011. *Communicating with government & public stakeholders*. (Presentation) FLEET Working Group Meeting (Vienna, Austria, 19 July 2011). <http://hdl.handle.net/2022/13404>

Stewart, C.A. 2011. *A tale of two grids -- Open Science Grid & TeraGrid*. (Presentation) FLEET Working Group Meeting (Vienna, Austria, 20 July 2011). <http://hdl.handle.net/2022/13405>

Stewart, C.A. 2011. *XSEDE Campus Bridging*. (Presentation) CASC (Coalition for Academic Scientific Computation) Meeting (Arlington, VA, 7 Sept 2011). <http://hdl.handle.net/2022/13608>

Knepper, R., C.A. Stewart and J.W. Ferguson. 2011. *XSEDE Campus Bridging Birds of a Feather*. (Presentation) TeraGrid '11 (Salt Lake City, UT, 18-21 Jul). <http://hdl.handle.net/2022/13423>

Stewart, C.A. 2011. *XSEDE Campus Bridging*. (Presentation) XSEDE Quarterly Meeting (Pittsburgh, PA, 31 Aug 2011). <http://hdl.handle.net/2022/13909>

Stewart, C.A., R. Henschel, W.K. Barnett and T. Doak. 2011. *Experiences with a large-memory HP cluster – performance on benchmarks and genome codes*. (Presentation) HP-CAST 17 - HP Consortium for Advanced Scientific and Technical Computing World-Wide User Group Meeting (Seattle, WA, 12 Nov 2011). <http://hdl.handle.net/2022/13879>

Stewart, C.A., M.R. Link, G. Turner and W.K. Barnett. 2011. *Penguin Computing and Indiana University partner for "above campus" and campus bridging services to the community.* (Presentation) IEEE/ACM SC11 Conference (Seattle, WA, 14-17 Nov 2011). <http://hdl.handle.net/2022/13880>

Stewart, C.A. and B.C. Wheeler. 2011. *Cyberinfrastructure Begins at Home.* (Presentation) IBM Multi-customer Briefings, IEEE/ACM SC11 Conference (Seattle, WA, 15 Nov 2011). <http://hdl.handle.net/2022/13888>

## 2010

Stewart, C.A. 2010. *Future of Supercomputer Centers: an evolutionary ecology view.* (Presentation) "Future of Supercomputing Centers" Panel, IEEE/ACM SC10 Conference (New Orleans, LA, 19 Nov 2010). <http://hdl.handle.net/2022/9918> (Panel organizer: Thom Dunning, NCSA)

Stewart, C.A. 2010. *It's not a data deluge - it's worse than that (Keynote address).* (Presentation) DIDC'10 (Chicago, IL, 22 Jun). <http://hdl.handle.net/2022/13195>

Stewart, C.A. 2010. *FutureGrid: an experimental, high-performance grid testbed.* (Presentation) TeraGrid Quarterly Meeting (Tampa Bay, FL, 1-3 Mar 2010). <http://hdl.handle.net/2022/13911>

Stewart, C.A. 2010. *What is Cyberinfrastructure?* (Presentation) ACM SIGUCCS 2010 Annual Meeting (Norfolk, VA, 24-27 Oct 2010). <http://hdl.handle.net/2022/13987>

Stewart, C.A. NSF ACCI (Advisory Committee for Cyberinfrastructure) *Taskforce Update.* 2010. Presentation. Presented at: CASC meeting (Arlington, VA, 22 March 2010). <http://hdl.handle.net/2022/14526>

Stewart, C.A. and S.C. Simms. 2010. *Indiana University's Lustre WAN: Empowering Production Workflows on the TeraGrid and beyond.* (Presentation) TeraGrid Forum (Distributed virtual meeting, 20 May 2010). <http://hdl.handle.net/2022/13912>

## 2009

Stewart, C.A. 2009. *Campus Bridging Task Force.* (Presentation) ACCI Task Force Birds of a Feather Session, ACM / IEEE SC09 Conference (Portland, OR, 14-20 Nov 2009). <http://hdl.handle.net/2022/13908>

Stewart, C.A. 2009. *Campus Bridging Task Force.* (Presentation) NSF Advisory Committee for Cyberinfrastructure (Arlington, VA, 2-3 Dec 2009). <http://hdl.handle.net/2022/13908>

Stewart, C.A. 2009. *FutureGrid: an experimental, high-performance grid testbed.* (Presentation) TeraGrid Science Advisory Board meeting, Quarterly Meeting (Arlington, VA, 10-11 Dec 2009). <http://hdl.handle.net/2022/13900>

Stewart, C.A. 2009. *The future is cloudy.* (Presentation) Technische Universitaet Dresden (Dresden, Germany, 18 Jun 2009). <http://hdl.handle.net/2022/13913>

Stewart, C.A. 2009. *FutureGrid: an experimental, high-performance grid testbed.* (Presentation) National Center for Supercomputer Applications (Champaign-Urbana, IL, 21 Oct 2009). <http://hdl.handle.net/2022/13899>

Stewart, C.A. 2009. *Big Red, the Data Capacitor, and the future (clouds)*. (Presentation) University of Houston (Houston, TX, 2 Mar 2009). <http://hdl.handle.net/2022/13940>

Stewart, C.A. 2009. *Welcome to IU Purdue IBM Supercomputing Lunch*. (Presentation) IUPUI (9 Feb 2009). <http://hdl.handle.net/2022/13941>

Stewart, C.A. 2009. *Everything happens somewhere (Keynote)*. (Presentation) Indiana Geographic Information Council Annual Meeting (Bloomington, IN, 18 Feb 2009). <http://hdl.handle.net/2022/13942>

Stewart, C.A. 2009. *Where are we, and where ought we be going?* (Presentation) UITS Brownbag Presentation Series (Bloomington, IN, 29 Apr 2009). <http://hdl.handle.net/2022/13943>

Stewart, C.A. 2009. *Pervasive Technology Institute overview*. (Presentation) PTI RT All Hands Meeting (Bloomington, IN, 22 May 2009). <http://hdl.handle.net/2022/13967>

Stewart, C.A. 2009. *Cyberinfrastructure in research, education, and workforce development*. (Presentation) Kentucky EPSCOR strategic planning meeting (Lexington, KY, 23 Jul 2009). <http://hdl.handle.net/2022/13968>

Stewart, C.A. 2009. *Where are we, and where ought we be going?* (Presentation) University of Houston Department of Computer Science Distinguished Lecture Series (Houston, TX, 2 Mar 2009). <http://hdl.handle.net/2022/13988>

Stewart, C.A. 2009. *The year that was ... 2009 for PTI, RT, and our collaborators*. (Presentation) Pervasive Technology Institute – Research Technologies all hands meeting (Bloomington, IN, 15 Dec 2009). <http://hdl.handle.net/2022/13989>

## 2008

Stewart, C.A. *The TeraGrid: An essential tool for 21st century science*. 2008. Presentation. Presented at: Annual Meeting of the American Association for Advancement of Science (Boston, MA, 17 February 2008). <http://hdl.handle.net/2022/14527>

Stewart, C.A., C. Jordan and S.C. Simms. *Data gateways for scientific communities -- Birds of a Feather Session*. 2008. Presentation. Presented at: TeraGrid '08 (Las Vegas, NV, 9-13 Jun 2008). <http://hdl.handle.net/2022/14528>

Almes, G.T., P. Dreher and C.A. Stewart. *Making campus cyberinfrastructure work for your campus*. 2008. Presentation. Presented at: EDUCAUSE 2008 (Orlando, FL, 28-31 Oct 2008). <http://hdl.handle.net/2022/14529>

Stewart, C.A. *IT/Library partnerships at IU: almost two decades (and counting)*. 2008. Presentation. Presented at: Brown University Library (Providence, RI, 21 Apr 2008). <http://hdl.handle.net/2022/14601>

Stewart, C.A. *Research Technologies at Indiana University Brown Bag Series Presentation*. 2008. Presented at: Brown Bag Series Presentation (Indiana University, Bloomington, IN, 9 Oct 2008). <http://hdl.handle.net/2022/14602>

Stewart, C.A. *Research Technologies: what a long, strange trip it's been (and will continue to be)*. 2008. Presentation. Presented at: BIO Brownbag Presentation Series (Indiana University, Bloomington, IN, 8 Apr 2008). <http://hdl.handle.net/2022/14603>



2007

Simms, S.C., M. Davy, B. Hammond, M.R. Link, C.A. Stewart, S. Teige, M.-H. Baik, Y. Mantri, R. Lord, D.F.R. McMullen, J.C. Huffman, K. Huffman, G. Juckeland, M. Kluge, R. Henschel, H. Brunst, A. Knuepfer, M. Mueller, P.R. Mukund, A. Elble, A. Pasupuleti, R. Bohn, S. Das, J. Stefano, G.G. Pike and D.A. Balog. 2007. *Using the Data Capacitor for Remote Data Collection, Analysis, and Visualization*. (Presentation) IEEE/ACM 2007 Conference (Reno, NV, 13 Nov 2007). <http://hdl.handle.net/2022/13991>

Stewart, C.A. and R. Repasky. *High Performance Computing for University Medical Research: A Successful Implementation*. 2007. Presentation. Presented at: Bio-IT World Conference & Expo (Boston, MA, 24-26 Apr 2007). <http://hdl.handle.net/2022/14600>

Stewart, C.A. *Research Computing - University Information Technology Services*. 2007. Presentation. Presented at: IUPUI Faculty Council IT Conference (Indianapolis, IN, 27 Feb 2007). <http://hdl.handle.net/2022/14604>

Stewart, C.A. and M.R. Link. *Research Computing - University Information Technology Services*. 2007. Presentation. Presented at: Ohio Supercomputer Center (Columbus, OH, 4 Apr 2007). <http://hdl.handle.net/2022/14605>

Stewart, C.A. *Indiana Economic Development 2007-2010 From Indiana Economic Development Corporation to Indiana and Purdue Universities*. 2007. Presentation. Presented at: UITS Research Technologies Retreat (Bradford Woods, Martinsville, IN, 3 Feb 2007). <http://hdl.handle.net/2022/14606>

Stewart, C.A. *Implementation and experience with Big Red – a 20.4 TFLOPS IBM BladeCenter cluster*. 2007. Presentation. Presented at: International Supercomputer Conference (Dresden, Germany, 26 Jun 2007). <http://hdl.handle.net/2022/14607>

Stewart, C.A. *Implementation and experience with Big Red (a 30.7 TFLOPS IBM BladeCenter cluster), the Data Capacitor, and HPSS*. 2007. Presentation. Presented at: UITS Research Technologies Brownbag Lunch (Indianapolis and Bloomington, IN, 1 Nov 2007). <http://hdl.handle.net/2022/14608>

Stewart, C.A. *University role in preserving research data*. 2007. Presentation. Presented at: NSF Crystallography Workshop (Bloomington, IN, 27 Feb 2007). <http://hdl.handle.net/2022/14609>

Stewart, C.A. *Implementation and experience with Big Red (a 30.7 TFLOPS IBM BladeCenter cluster), the Data Capacitor, and HPSS*. 2007. Presentation. Presented at: IU Display, SC2007 Exhibit Hall (Reno, NV, 13 Nov 2007). <http://hdl.handle.net/2022/14610>

2006

Simms, S., M. Davy, B. Hammond, M. Link, C.A. Stewart, R. Bramley, B. Plale, D. Gannon, M.-H. Baik, S. Teige, J. Huffman, D. McMullen, D. Balog and G. Pike. 2006. *All in a Day's Work: Advancing Data-Intensive Research with the Data Capacitor*. (Presentation) Bandwidth Challenge Competition, IEEE/ACM SC06 Conference (Tampa, FL, 14 and 15 Nov 2006).

Stewart, C.A. *Forschungsvorschlag: BLAST Leistungskennzeichnung, Leistungsanalyse, und Leistungsverbesserung (Research proposal: BLAST performance measurement, analysis, and improvement)*. 2006. Presentation. Presented at: Technische Universitaet (Dresden, Germany, 11 Apr 2006). <http://hdl.handle.net/2022/14612>

Stewart, C.A. *Life Sciences and Cyberinfrastructure: a perspective from Indiana University*. 2006. Presentation. Presented at: Colloquium at Technische Universität Dresden (Dresden, Germany, 18 Apr 2006). <http://hdl.handle.net/2022/14775>

Stewart, C.A. *Life Science Software and High Performance Computing: Seminar Series Part I*. 2006. Presentation. Presented at: Technische Universität Dresden (Dresden, Germany, 13 Apr 2006). <http://hdl.handle.net/2022/14767>

Stewart, C.A. *Life Science Software and High Performance Computing: Seminar Series Part II*. 2006. Presentation. Presented at: Technische Universität Dresden (Dresden, Germany, 20 Apr 2006). <http://hdl.handle.net/2022/14767>

Stewart, C.A. *Life Science Software and High Performance Computing: Seminar Series Part III*. 2006. Presentation. Presented at: Technische Universität Dresden (Dresden, Germany, 25 Apr 2006). <http://hdl.handle.net/2022/14767>

Stewart, C.A. *Life Science Software and High Performance Computing: Seminar Series Part IV*. 2006. Presentation. Presented at: Technische Universität Dresden (Dresden, Germany, 27 Apr 2006). <http://hdl.handle.net/2022/14767>

Stewart, C.A. *Introduction: IU, Information Technology, and Life Sciences*. 2006. Presentation. Presented at: Technische Universität Dresden visit to IU (Indianapolis, IN, 12 Mar 2006). <http://hdl.handle.net/2022/14748>

Rodgers, G.P. and C.A. Stewart. *On the road to petascale processing with IU's Big Red Supercomputer and IBM BladeCenter H*. 2006. Presentation. Presented at: SC|06 (Tampa, FL, 12 Nov 2006). <http://hdl.handle.net/2022/14749>

Stewart, C.A. *Development of an advanced cyberinfrastructure at Indiana University*. 2006. Presentation. Presented at: IBM Watson Research Center (5 Jun 2006). <http://hdl.handle.net/2022/14768>

## 2005

Stewart, C.A. and G.R. Bertoline. *I-Light: A Network for Collaboration between Indiana University and Purdue University*. 2005. Presentation. Presented at: I-Light Conference (Indianapolis, IN, 22 Sept 2005). <http://hdl.handle.net/2022/14772>

Stewart, C.A. *Information Technology as an enabler of Life Sciences Research*. 2005. Presentation. Presented at: Statewide IT Conference (Indianapolis, IN, 24 Sept 2005). <http://hdl.handle.net/2022/14771>

Stewart, C.A. *Research and computing*. 2005. Presentation. Presented at: Statewide IT Conference (Indianapolis, IN, 25 Sept 2005). <http://hdl.handle.net/2022/14776>

Stewart, C.A. and W. Stephan. *The Health & Life Sciences Economy of Indiana: Today and Tomorrow*. 2005. Presentation. Presented at: TechPoint Tech Summit (Indianapolis, IN, 1 Nov 2005). <http://hdl.handle.net/2022/14777>

Stewart, C.A. *IBM – IU Recent Research Activities and Collaboration Opportunities*. 2005. Presentation. (Bloomington, IN, 18 May 2005). <http://hdl.handle.net/2022/14774>

Stewart, C.A. *Recent key achievements in research computing at IU*. 2005. Presentation. Presented at: IBM corporate visit (Bloomington, IN, Oct 2005). <http://hdl.handle.net/2022/14773>

## 2004

Stewart, C.A. *Bioinformatics: Have fun, change the world*. 2004. Presentation. Presented at: Marian College (Indianapolis, IN, 1 Dec 2004). <http://hdl.handle.net/2022/14778>

Stewart, C.A. *BioGrids in the US: Current status and future opportunities*. 2004. Presentation. Presented at: International School on Physics and Industry workshop on Particle Accelerators and Detectors: from Physics to Medicine (Ettore Majorana Foundation and Center for Scientific Culture, Erice, Italy, 15 Apr 2005). <http://hdl.handle.net/2022/14780>

Stewart, C.A. *Transforming life science research with advanced Information Technology at Indiana University*. 2004. Presentation. Presented at: IBM Life Sciences Symposium (Pallisades, NY, 31 May 2004). <http://hdl.handle.net/2022/14785>

Stewart, C.A. *Information Technology Leadership & Strategies in the Life Sciences*. 2004. Presentation. (Kelley School of Business, Bloomington, IN, 2 Dec 2004). <http://hdl.handle.net/2022/14781>

Stewart, C.A., A.D. Arenson and A. Shankar. *The centralized life science data service at Indiana University*. 2004. Presentation. Presented at: IBM Solutions Seminar (Bethesda, MD, 2 Mar 2004). <http://hdl.handle.net/2022/14779>

Stewart, C.A., R. Keller, R. Repasky, M. Hess, D. Hart, M. Müller, R. Sheppard, U. Wössner, M. Aumüller, H. Li, D.K. Berry and J. Colbourne. *A Global Grid for Analysis of Arthropod Evolution*. 2004. Presentation. Presented at: Grid2004 - 5th IEEE/ACM International Workshop on Grid Computing (Pittsburgh, PA, 8 Nov 2004). <http://hdl.handle.net/2022/14784>

Stewart, C.A., R. Keller, M. Hess, U. Wössner, M. Aumüller, M. Müller, R. Repasky, D. Hart, H. Li and D.K. Berry. *Global grid analysis of arthropod evolution – a successful grid project*. 2004. Presentation. Presented at: 7th HLRS Metacomputing and GRID Workshop (Stuttgart, Germany, 26 Apr 2004). <http://hdl.handle.net/2022/14782>

Stewart, C.A., R. Repasky, J. Colbourne, D. Hart, D.K. Berry, R. Sheppard, E. Wernert, M. Papakhian and J.N. Huffman. *Global Analysis of Arthropod Evolution*. 2004. Presentation. Presented at: I-Light Conference (Indianapolis, IN, 9 Mar 2004). <http://hdl.handle.net/2022/14783>

## 2003

Keller, R., M. Hess, R. Repasky, J. Colbourne, C.A. Stewart, D. Hart, J. Steinbachs, U. Wössner, D.K. Berry, M. Müller and H. Li. *Global Analysis of Arthropod Evolution*. 2003. Presentation. Presented at: HPC Challenge, SC03 (Phoenix, AZ, 19 Nov 2003). <http://hdl.handle.net/2022/14806>

Peebles, C.S., C.A. Stewart, B.D. Voss and S.B. Workman. *Measuring Quality, Cost, and Value of IT Services*. 2003. Presentation. Presented at: Meeting of Indianapolis ASQ Section 0903 (Indianapolis, IN, 14 Jan 2003). <http://hdl.handle.net/2022/15213>

Stewart, C.A. *Information technology, collaboration, and achieving IU's research goals*. 2003. Presentation. Presented at: Indiana University Research Symposium (Indiana University, Bloomington, IN, 13 Nov 2003). <http://hdl.handle.net/2022/14805>

Stewart, C.A. *Research & Academic Computing*. 2003. Presentation. Presented at: Indiana University Statewide IT Conference (Indianapolis, IN, 11 Sept 2003). <http://hdl.handle.net/2022/15215>

Stewart, C.A. *Computational Biology: Practical lessons and thoughts for the future*. 2003. Presentation. Presented at: Facultaet Informatik (Universitaet Stuttgart, Stuttgart, Germany, 25 Jun 2003). <http://hdl.handle.net/2022/15218>

Stewart, C.A. *Computational Biology: Practical lessons and thoughts for the future*. 2003. Presentation. Presented at: ZIH, Technische Universität Dresden (Dresden, Germany, 19 Jun 2003). <http://hdl.handle.net/2022/14802>

Stewart, C.A. *Computational Biology: Practical lessons and thoughts for the future*. 2003. Presentation. (Universität Stuttgart, Stuttgart, Germany, 17 Jun 2003). <http://hdl.handle.net/2022/14804>

Stewart, C.A. 2003. "1 TFLOPS achieved with a distributed Linux Cluster," Department of Computer Science Colloquium, University of Stuttgart, Germany, 28 May.

Stewart, C.A. *Current challenges and opportunities in Biogrids*. 2003. Presentation. Presented at: 6th Metacomputing Symposium (High Performance Computing Center, Universitaet Stuttgart, Stuttgart, Germany, 22 May 2003). <http://hdl.handle.net/2022/15217>

Stewart, C.A. *Overview of IU activities in supercomputing, grids, and computational biology*. 2003. Presentation. (Universität Stuttgart, Stuttgart, Germany, 14 May 2003). <http://hdl.handle.net/2022/14803>

Stewart, C.A.. 2003. "INGEN's advanced IT facilities," Presented to Dept. of Psychiatry, IU School of Medicine. February, 2003. <http://hdl.handle.net/2022/15222>

Stewart, C.A. 2003. "INGEN's advanced IT facilities," Presented to Dept. of Physiology, IU School of Medicine. February, 2003. <http://hdl.handle.net/2022/15222>

Stewart, C.A., A. Arenson and A. Shankar. *The Centralized Life Sciences Data Service at Indiana University*. 2003. Presentation. Presented at: IBM/Lilly/IU Data Integration Conference (Indianapolis, IN, 17 Jan 2003). <http://hdl.handle.net/2022/15216>

Stewart, C.A., and R. Repasky. 2003. High Performance Computing for University Medical Research: A Successful Implementation. 26 Mar, BioITWorld 2003 Conference, Cambridge Healthtech Institute, Boston, MA.

Stewart, C.A. and E. Wernert. *Computational Biology: Data, computation, and visualization*. 2003. Presentation. Presented at: Visualization Workshop (Arctic Region Supercomputer Center, University of Alaska Fairbanks, 7 Aug 2003). <http://hdl.handle.net/2022/15219>

## 2002

Repasky, R., D. Hart, and C.A. Stewart. 2002. The Indiana Genomics Information Technology Core. INGEN Proteomics Symposium. 15 November, Indianapolis, IN.

Stewart, C.A. 2002. "INGEN's advanced IT facilities," Presented to Division of Nephrology, IU School of Medicine. November, 2002. <http://hdl.handle.net/2022/15222>

Stewart, C.A. 2002. "INGEN's advanced IT facilities," Presented to Indiana Health Industry Forum meeting, October 2002. <http://hdl.handle.net/2022/15222>

Stewart, C.A. 2002. "INGEN's advanced IT facilities," Presented to Wells Center, IU School of Medicine. June, 2002. <http://hdl.handle.net/2022/15222>

Stewart, C.A. 2002. "Indiana University facilities in support of Bioinformatics Research" School of Informatics, Indianapolis, IN.

Stewart, C.A. 2002. "Opportunities in bioinformatics," Department of Biology, Wittenberg University, Springfield, OH. April 28, 2002.

Stewart, C.A. 2002. "INGEN's advanced IT facilities," Presented to Department of Endocrinology, IU School of Medicine. March, 2002. <http://hdl.handle.net/2022/15222>

Stewart, C.A. *INGEN's advanced IT facilities*. 2002. Presentation. Presented at: Department of Medical Genetics (IU School of Medicine, Indianapolis, IN, 8 Jan 2002). <http://hdl.handle.net/2022/15222>

Stewart, C.A. (convenor). 2002. "Computational Biology," Panel session at SC2002 conference. November 2002, Baltimore, MD. <http://www.sc-conference.org/sc2002/>

Stewart, C.A. *Implementing advanced IT facilities for the Indiana Genomics Initiative*. 2002. Presentation. Presented at: HPC User Forum (Santa Fe, New Mexico, 23 Apr 2002). <http://hdl.handle.net/2022/15220>

## 2001

Peebles, C.S., C.A. Stewart, B.D. Voss and S.B. Workman. 2001. *Measuring Quality, Cost, and Value of IT Services*. (Presentation) EDUCAUSE 2001 (Indianapolis, IN, 29 October 2001). <http://hdl.handle.net/2022/13896>

Peebles, C.S., C.A. Stewart, B.D. Voss and S.B. Workman. 2001. *Measuring Quality, Cost, and Value of IT Services*. (Presentation) 55th Annual Quality Congress (Charlotte, NC, 8 May 2001). <http://hdl.handle.net/2022/13897>

Stewart, C.A., D. Hart, D.K. Berry, G.J. Olsen, E.A. Wernert and W. Fischer. 2001. *Parallel implementation and performance of fastDNAm1: a program for maximum likelihood phylogenetic inference*. (Presentation) ACM/IEEE SC01 Conference (Denver, Colorado, 14 Nov 2001). <http://hdl.handle.net/2022/14004>

Stewart, C.A. 2001. *IT at IU*. (Presentation) IBM T.J. Watson Research Center (Hawthorne, NY, 7 Feb 2001). <http://hdl.handle.net/2022/14005>

Stewart, C.A. 2001. *Services overview for School of Medicine and Indiana Genomics Initiative*. (Presentation) IU School of Medicine (Indianapolis, IN, 28 Aug 2001). <http://hdl.handle.net/2022/14003>

## 2000

Stewart, C.A. 2000. *University Information Technology Services*. (Presentation) Meeting of IUPUI Research Deans (Indianapolis, IN, March 2000). <http://hdl.handle.net/2022/14006>

Stewart, C.A. 2000. *Status of IU's E10000 and recent activities with Sun*. (Presentation) Indiana University Wrubel Computing Center (Bloomington, IN, 14 Jun 2000). <http://hdl.handle.net/2022/14009>

Stewart, C.A. and Z. Meglicki. 2000. *High Performance Storage System at Indiana University*. (Presentation) High Performance Computing Center, University of Stuttgart symposium on massive storage systems. Jan 18, 2000.

Hart, D., Lauer, D.A., J.W. Naab, C.A. Stewart, and D.F. McMullen. 2000. Performance of parallel programs on PC clusters: NT vs. Linux. Presented at 2000 SIAM conference on Computational Science and Engineering, 21-24 September, Washington, D.C. [www.siam.org/meetings/cse00/](http://www.siam.org/meetings/cse00/)

## 1990S

Stewart, C.A. 1999. *IU's Compaq Parallel PC Cluster*. (Presentation) Compaq - Indiana University Visit (Bloomington, IN, 17 Mar 1999). <http://hdl.handle.net/2022/13898>

Stewart, C.A. 1999. *Evolutionary Biology and Computational Grids*. (Presentation) CASCON Workshop on Computational Biology (Mississauga, Ontario, Canada, 10 Nov 1999). <http://hdl.handle.net/2022/14010>

Hart, D., J. Palmer, W. Fischer, S. Turner, D.K. Berry, E. Wernert, C.A. Stewart, T.W. Tan, M. Sakharkar, L.X. Zhang, M. Buchhorn and T. Potter. *Maximum Likelihood Analysis of Phylogenetic Data*. 1998. Presentation. Presented at: IEEE/ACM SC98 Conference (Orlando, FL, Nov 1998). <http://hdl.handle.net/2022/13893>

Voss, B.D., D. Jung-Gribble and C.A. Stewart. 1996. *The Leveraged Support Model*. (Presentation) CUMREC '96 (Nashville, TN, May 1996). <http://hdl.handle.net/2022/14011>

## 1980S

Stewart, C.A. 1986. Diurnal variation in metabolic parameters of white-footed mice (*Peromyscus leucopus*). Presented at annual meeting, American Society of Mammalogists, May, 1986.

Stewart, C.A. 1981. A preliminary analysis of diet and resource partitioning in *Etheostoma caeruleum* Storer and *Etheostoma flabellare* Rafinesque in Rock Run, Clark County, OH. Presented at Ohio Academy of Science, Wooster, OH. Ohio J. Science 81 (April Program Abstracts): 17.

Reash, R., and C.A. Stewart. 1981. Preliminary investigations of longitudinal distribution and fish species diversity in Rock Run, Clark County, Ohio. Beta Beta Beta Annual Meeting, Bios 52: 178 (abstract).

## Grants, Contracts, and Fellowships Received

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### CURRENT GRANTS

McCaulay, D.S., F. Luehring, C.A. Stewart. 2007. Open Science Grid Subcontract: Grid Operations Center. \$2,130,000. 2/1/2007 – 9/30/2012.

Stewart, C.A., D.S. McCaulay. 2011. Subcontract of NSF 0932251: TeraGrid Extension: Bridging to XD. NSF (subaward from University of Chicago). IU subcontract amount: \$1,835,000. 4/1/2010 – 3/31/2012

Stewart, C.A., B.A. Plale, D.S. McCaulay. Subcontract of NSF 0503697: Grid Infrastructure Group Providing System Management and Integration to the TeraGrid. NSF (sub-award from University of Chicago). IU subcontract amount: \$2,519,689. 8/1/2005 – 3/1/12.

McRobbie, M.A., K. Subbaswamy, T. Widlanski, P. Cherbas, C.A. Stewart. The Indiana METACyt Initiative. Lilly Endowment, Inc. 2005. \$53,000,000. 1/1/2005 – 12/31/2011. Stewart is Information Architect, and Co-Director of the Center for Computational Cytomics within the METACyt Initiative.

McRobbie, M.A., Pescovitz, O., et al. 2000. Indiana Genomics Initiative. Grant from Lilly Endowment, Inc. Stewart is Director of the Indiana Genomics Initiative Information Technology Core, budgeted at \$6,700,000.

### COMPLETED GRANTS

Fox, G.C., L. Hayden, C.A. Stewart, M. Pierce, M. LeCompte. Acquisition of PolarGrid: Cyberinfrastructure for Polar Science. NSF. \$1,964,049. 8/1/2007 – 9/31/2010.

Stewart, C.A., M. Bruhn, D.S. McCaulay. 2005. TeraGrid Resource Partners. NSF. \$4,414,078. 8/1/2005-6/31/2010.

Stewart, C.A., C. Pilachowski, R. Bramley, S. Simms. 2005. Major Research Infrastructure: Data Capacitor. \$1,720,000. 10/1/2005-9/30/2008.

Stewart, C.A. 2004. Center for Computational Homeland Security. Subcontract from Purdue University (A. Churvedi, Purdue PI). \$150,000

Stewart, C.A., A. Shankar, and A. Arenson. 2003. Consortium for Study of Fetal Alcohol syndrome - Information Technology Core. National Institutes of Health. \$324,000. 10/1/2003-9/30/2007.

McCaulay, D.S., B.A. Plale, S.D. Mooney, R. Bramley, R. Heiland, Y. Ma, C.A Stewart, A. Arenson, R. Repasky, E. Wernert. 2006. Taming the data deluge: Grid and Web services for managing massive flows of data. IBM Shared University Research grant (hardware grant).

Stewart, C.A., B. Voss, A. Shankar. 2005. TeraGrid: Early Operations. NSF. \$832,000.

McRobbie, M.A., Gannon, D., Voss, B., Stewart, C.A., et al. 2003. IP-Grid - Indiana Purdue Grid. National Science Foundation. \$2,900,000.

C.A. Stewart, M.A. McRobbie, O. Pescovitz, H. Edenberg, M. Dalkilic, J.C. Huffman, P. Cherbas, S. Kim, V. Moskvina, M. Papakhian, A. Shankar, R. Repasky, D. Hart, D. Steward. 2003. Data-intensive and distributed computing in the life sciences. IBM Inc. Shared University Research grant (hardware grant-in-kind).

Boerner, K., C.A. Stewart, E. Wernert. Sun Center of Excellence: Data Visualization. (hardware grant-in-kind).

Dalkilic, M., and C.A. Stewart. 2002. Development of the Protein Family Annotator. Joint Development Contract with IBM. Inc. \$35,000.

McRobbie, M.A., C.A. Stewart, R. Bramley, J.C. Huffman. 2001. Creation of the AVIDD Data Facility: A distributed facility for managing, Analyzing and Visualizing Instrument-Driven Data. NSF MRI grant, \$1,800,000.

Stewart, C.A., M.A. McRobbie, G. Bernbom, K. Dunn, S. Fang, D. Hart, G. Hutchins, B. Molitoris, S. Mukhopadhyay, P. Ortoleva, M. Palakal, R. Rajee, R. Repasky, E. Wernert. 2001. Information Technology Applications for the Life Sciences. IBM Inc. Shared University Research grant (hardware grant-in-kind).

McRobbie, M.A., C.A. Stewart, R. Bramley, H. Cohn, P. Lugger, G. Martyna, G. Meglicki, S. Slavin. 2000. Tightly integrated distributed supercomputing: the Indiana TeraCloud. IBM Inc. Shared University Research grant (hardware grant-in-kind).

Maki, D., W.P. Ziemer, W.H. Wheeler, J. Hall, C.A. Stewart. 2000. WeBWorK: An Electronic Homework Environment for Mathematics and other academic disciplines. Sun Microsystems Inc. Academic Equipment Grant award (hardware grant-in-kind).

Bramley, R., M.A. McRobbie, C.A. Stewart, Z. Meglicki, D.F. McMullen, G. Bernbom. 1999. Infrastructure for deep computing: High Performance Computing component technologies and transparent, unlimited I/O in support of data-intensive research. IBM Inc. Shared University Research grant (hardware grant-in-kind).

Bramley, R., M.A. McRobbie, C. Stewart, C. Peebles, D.F. McMullen, Z. Meglicki, J. Villacis, T. Stuckey. 1998 Development of parallel component technologies for high performance computing. IBM Inc. Shared University Research grant (hardware grant-in-kind).

Stewart, C.A. 1982. Geographical variation in lipid stores of the white-footed mouse (*Peromyscus leucopus*). \$500 graduate student research support grant, Indiana Academy of Sciences.

## Awards

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|------|--|
| 2007 | Bandwidth Challenge Award at Supercomputing 2007 conference ( <a href="http://sc07.supercomputing.org/">http://sc07.supercomputing.org/</a> ) for a project using a wide area file system to support several data-intensive research projects, including analysis of amyloid proteins implicated in Alzheimer's disease. |
| 2007 | IEEE Bioinformatics and Bioengineering Excellence in Service Award   |
| 2006 | Bandwidth Challenge honorable mention at Supercomputing 2006 conference ( <a href="http://sc06.supercomputing.org/">http://sc06.supercomputing.org/</a> ).   |
| 2003 | High Performance Computing Challenge Award, at Supercomputing 2003 conference ( <a href="http://www.sc-conference.org/sc2003/">http://www.sc-conference.org/sc2003/</a> ) Stewart led an international   |



team that created a global grid of supercomputers spanning every continent except Antarctica to perform maximum likelihood analysis of DNA data to analyze the phylogenetic relationships of arthropods.

1981 Wittenberg University; Biology major of the year, Mathematics major final exam passed with distinction.

### Technical Skills

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I have particular expertise in bioinformatics, especially computational phylogenetics and bioinformatics applications of high performance computers. I have had broad experience in Information Technology, including hands-on responsibility for support, systems administration, administrative applications, and networking. Quality assessment, business process improvement, delivery of online information, and customer service are also areas of expertise. Other technical skill areas include high performance computing architectures, online help systems, statistical and mathematical software, and Unix system administration.

### Language Skills

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German (read, write, speak). I am not quite fluent, but am able to carry on a prolonged technical conversation in German, or give a seminar in German.

### Professional Association Memberships & Activities

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Institute of Electrical and Electronics Engineers

Association for Computing Machinery

Coalition for Academic Scientific Computing	Chair	2007-2008
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	Executive Committee	2009-2010
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### Steering & Program Committees

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#### *CURRENT STEERING, ADVISORY, & PROGRAM COMMITTEES*

2010- InCommon Steering Committee

2010- NEESit Advisory Committee

2010- University of Buffalo TeraGrid XD Technology Analysis Science Advisory Committee

2010- Indiana University Center for Survey Research Advisory Committee

#### *RECENT STEERING, ADVISORY, & PROGRAM COMMITTEES*

2011 Program Committee of CSEDU 2012 (“4th International Conference on Computer Supported Education”) (<http://www.csedu.org/>)

2009-2011 Member, NSF Advisory Committee for Cyberinfrastructure

2009-2011 Chair, NSF Advisory Committee for Cyberinfrastructure Task Force on Campus Bridging

2009 Member, Kentucky Cyberinfrastructure Steering Committee, 2009

2008 Reviewer, Aspirations in Computing Award, National Center for Women & IT (NCWIT), 2008

### Other Information

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USA Track & Field Member Number 6110304616