

Stephen M. Beckstrom-Sternberg

Qualifications

- 15 years teaching undergraduate/graduate biology courses, both online & in person
Northern Arizona University (NAU), Scottsdale Community College (SCC), Park University
- 13 years research in federal government
US Department of Agriculture (USDA) - ethnobotany & plant genomics
National Institutes of Health (NIH) - Human Genome Project, bioinformatics
- 11 years research in non-profit
Rancho Santa Ana Botanical Garden (RSABG) - plant molecular systematics
Translational Genomics Research Institute (TGen) - genetic disease diagnostics
- Computer skills: unix, programming, perl, python, pipeline scripting, sql, html, blackboard, canvas, ms office

Education

PhD 1988, Claremont Graduate University - Botany

Dissertation: *Molecular Systematics of the Centrospermae: Studies Using 2-D PAGE*

MS 1981, University of California, Riverside - Botany

BS 1979, University of California, Riverside - Plant Science

Positions Held

Editor, Cactus Global, 2018

Adjunct Professor, Park University, Luke Air Force Base, Glendale AZ 85307, 2017.

Adjunct Professor, Department of Life Sciences, Scottsdale Community College (SCC), Scottsdale, AZ, 2016 - current.

Associate Professor, Department of Biological Sciences, NAU, Flagstaff, AZ, 2003-2016

Senior Investigator, Translational Genomics Research Institute (TGen), Phoenix, AZ, 2003-2011

Associate Investigator, GTB/NHGRI, National Institutes of Health, Bethesda, MD, 2002-2003

Co-Director, Bioinformatics Group, NIH Intramural Sequencing Center (NISC), National Institutes of Health, Gaithersburg, MD, 1997-2003

President, StarMountain Enterprises, Inc., Silver Spring, MD, 1996-2005

Faculty Research Associate, Dept. Cell Biology & Molecular Genetics, Univ. Maryland, College Park/NAL, 1994-1997

Research Scientist, Economic Botany, NGRL, ARS, USDA, 1994-1996

Consultant, Protein Analysis, Large Scale Biology, Corp., Rockville, 1992-1993

Postdoctoral Scientist, Economic Botany, NGRL, ARS, USDA, (GS-11), 1991-1994

Lecturer, Biology, Cal. State Univ. Los Angeles, 1991

Postdoctoral Scientist, Molecular Systematics, RSABG, Claremont, CA, 1988-1991

References

John V. Pearson, Manager, Genome Informatics Group, QIMR Berghofer Medical Research Institute, University of Queensland, Australia - j.pearson@uq.edu.au

Dr. Catherine R. Propper, Professor, Department of Biological Sciences, Northern Arizona University, Flagstaff, AZ - Catherine.Propper@nau.edu

Matthew Minister, Lead Instructional Technologist, eLearning Center, Northern Arizona University (NAU), Flagstaff, AZ - Matt.Minister@nau.edu

Awards

NAU/CENS Faculty Travel Award, 2005

NHGRI Merit Award, 2002

NIH Director's Award, 1998

Teaching

California State University, Los Angeles 1991

Botany for Non-Majors - 1991

Department of Biology, Northern Arizona University (NAU), Flagstaff AZ 2004 - 2016

Epigenetics Bio 497/499*/599**

- Developed and instructed hybrid course for both undergraduate and graduate students
- Relied on primary literature as well as textbook, both historically and topically
- Incorporated student-led groups, teaching & discussions (flipped classroom)

Genetics & Evolution Bio 340/240*

- Developed and instructed completely online undergraduate course
- Incorporated online resources & extra-credit projects

Introduction to Bioinformatics Bio 499/450*/680**

- Developed and instructed hybrid course for both undergraduate and graduate students
- Relied on both primary literature and textbook
- Incorporated appropriate guest lectures (in person & synchronous/online [including one from Australia!!]) of subject-matter experts
- Final projects used tools learned in course to solve student-generated research question

Next Generation Sequencing (NGS) Aligners & Assemblers Bio 499/599**

- Developed and instructed hybrid course for both undergraduate and graduate students
- Relied on both primary literature and textbook
- Final projects used tools learned in course to solve student-generated research question

Perl for Bioinformatics Bio 499/699**

- Developed and instructed hybrid course for both undergraduate and graduate students
- Relied on both primary literature and textbook
- Final projects used programming skills learned in course to solve student-generated research question

Relevance of Science Bio 302

- Completely revamped large-format online undergraduate course into Blackboard
- Emphasized critical thinking and testing hypotheses through written analysis of evidence
- Required written analysis of each topic using critical thinking skills of synthesis and evaluation
- Topics included diversity, global warming, over-population, health care, recycling, energy crisis

Scottsdale Community College (SCC), Scottsdale, AZ 2016 - current

General Biology for Majors Bio 181

Park University, Luke AFB, Glendale, AZ 2017

Biology for Non-Majors Bi 101

* course number change

** graduate course

Professional Activities

Co-Investigator NIH/NIAID U01 AI075568-01 (Paul Keim), “*Burkholderia*: International Collaborative Development of Novel Diagnostics”, 2007-2012

Board of Directors, Zing Wardrobe, Redwood City, CA, 2011- 2012

Co-Investigator NIH, U01CA089600 (John Carpten), “Prostate Cancer susceptibility: The ICPCG Study”, 2009-2011

Principal Investigator NIH/NIAID R15 AI075333-01, “Extreme Halophiles: A Potential Reservoir of New Antibiotics”, 2007-2010.

Co-Investigator Arizona Biomedical Research Commission (Paul Keim), “Novel Analysis of *Coccidioides posadasii* Isolates for Molecular Epidemiology and Population Characterization of Valley Fever”, 2007-2009.

Co-Principal Investigator DHS, BAA08-04, “Statistical Confidence in Evidentiary Material Based Upon Bacterial Population Genetics”, 2007-2008.

Principal Investigator DOD-USAMRMC, W81XWH-07-1-0100, “Bioinformatics tools for meta-genomic analysis of pathogen backgrounds and human microbial communities”, 2007-2010.

Board of Directors, StarMountain, Inc. 2006 – present.

Co-Principal Investigator DHS-HSARPA grant, “High resolution and highly sensitive assays for bacterial biothreat agents”, 2005-2008.

Co-Principal Investigator NIH/NIAID U01, “Real-time PCR assays for the direct detection of sepsis and CAP pathogens”, 2005-2010.

Judging Chair, 56th Intel International Science and Engineering Fair, Phoenix, AZ 2005
NIH BCHI study section (SSS-9) 2004
Co-Principal Investigator NSF grant for Mendel Database, 1996, 1998
Board of Directors, Commission on Plant Gene Nomenclature 1998- 2003
Organizer - Abstracts: Plant and Animal Genome Conference, 1996-1997
Technical Editor - Journal of Quantitative Trait Loci (JQTL), 1996-1997
Contributing Columnist - WWW, Probe, 1996-1997
Vice President - Duke's Herbal Vineyard, Inc., 1996-1998
Chair, Session on WWW, Internet and Taxonomy, Molecular Biology Conference, Sept. 19, 1995, San Diego, CA
Computer Technology Assessment Subcommittee, Plant Germplasm Operations Committee, 1994-1997

Service on Graduate Committees

Raymond Auerbach (MS), 2004 – 2006
Amy Fleishman Littlejohn (MS), 2004 – 2008
Leo Kenefic (PhD), 2005 - 2008
Sergey Kachur (MS), 2005 – 2008
Matt Wieben (MS), 2006
Carrie Vargas (MS), 2007 – 2009
Peter Polsgrove (MS), 2008 – 2009
Chandler Roe (MS), 2008 – 2010

Graduate Committee Chair

Peter Polsgrove, (PhD) 2009 - 2015
Chandler Roe, (MS) 2010 - 2012

Publications (56)

In Prep

Beckstrom-Sternberg, Stephen M. James S. Babic-Sternberg, Talima Pearson, Paul Keim, et al. Large Insertion Tool (LIT).

Submitted

Payne-Jackson, A, **S Beckstrom-Sternberg**, and Henry Lowe. Submitted (book). Herbal medicine: Treasures from the past - Answers for the future.

Published

- Sahl Jason W, Beckstrom-Sternberg Stephen M, Babic-Sternberg James, Gillece John D, Hepp Crystal M, Auerbach Raymond K, Tembe Waibhav, Wagner David M, Keim Paul S, Pearson Talima. (2015). The In Silico Genotyper (ISG): an open-source pipeline to rapidly identify and annotate nucleotide variants for comparative genomics applications. bioRxiv. doi: <http://dx.doi.org/10.1101/015578>. (not peer reviewed)
- Khmaladze Ekaterina, Birdsell Dawn N, ..., **Beckstrom-Sternberg Stephen M**, Beckstrom-Sternberg James, ..., Wagner David M, ..., Keim Paul, Pearson Talima. (2014). Phylogeography of *Bacillus anthracis* in the country of Georgia shows evidence of population structuring and is dissimilar to other regional genotypes. PLoS One 9(7):e102651.
- Gopaul Krishna K, Sells Jessica, Lee Robin, **Beckstrom-Sternberg Stephen M**, Foster Jeffrey T, and Whatmore Adrian M. (2014). Development and application of a multiplex High Resolution Melting assay as a tool for the rapid single-tube identification of five significant *Brucella* species. BMC research notes 7:903. doi: 10.1186/1756-0500-7-903.
- Baltrus DA, Dougherty K, **Beckstrom-Sternberg SM**, Beckstrom-Sternberg JS, & Foster JT. (2014). Incongruence between MLSA and whole genome based phylogenies: *Pseudomonas syringae* pathovar *pisi* as a cautionary tale. Molecular plant pathology 15(5):461-465.
- Wattam Alice, Foster Jeffrey, Mane Shrinivasrao, **Beckstrom-Sternberg Stephen**, Beckstrom-Sternberg James, Dickerman Allan, Keim Paul, Pearson Talima, Shukla Maulik, Ward Doyle, Williams Kelly, Sobral Bruno, Tsolis Renee, Whatmore Adrian, and O'Callaghan David. (2014). Comparative phylogenomics and evolution of the Brucellae: A path to virulence. J Bacteriology 196(5):920-930. doi: 10.1128/JB.01091-13.
- Busch Joseph, Van Andel Roger, Stone Nathan, Cobble Kacy, Nottingham Roxanne, Lee Judy, Versteeg Michael, Corcoran Jeff, Cordova Jennifer, Van Pelt Bill, Shuey Megan, Foster Jeffrey, Schupp James, **Beckstrom-Sternberg Stephen**, Beckstrom-Sternberg James, Keim Paul, Smith Susan, Rodriguez-Ramos Julia, Williamson Judy, Rocke Tonie, and Wagner David. (2013). The innate immune response may be important for surviving plague in wild Gunnison's prairie dogs. Journal of Wildlife Diseases, 49(4), 920-931.
- Price Erin P, Sarovich Derek S, Mayo Mark, Tuanyok Apichai, Drees Kevin P, Kaestli Mirjam, **Beckstrom-Sternberg Stephen M**, Beckstrom-Sternberg Jamie, Kidd Timothy J, Bell Scott C, Keim Paul, Pearson Talima and Currie Bart J. Within-host evolution of *Burkholderia pseudomallei* over a twelve-year chronic carriage infection. mBio 2013 Jul 16;4(4). pii: e00388-13. doi: 10.1128/mBio.00388-13..
- Pearson, Talima, Hornstra Heidie M, Schaack Sarah, Schupp James M, **Beckstrom-Sternberg Stephen M**, O'Neill Matthew W, Priestly Rachael A, Champion Mia, Beckstrom-Sternberg James S, Kersh Gilbert J, Samuel James E, Massung Robert F, Keim Paul. Rooting when outgroups fail; phylogenomics of the emerging pathogen, *Coxiella burnetii*. Systematic biology. 06/2013. doi: 10.1093/sysbio/syt038.
- Vogler, Amy J, Fabien Chan, Roxanne Nottingham, Genevieve Andersen, Kevin Drees, **Stephen M Beckstrom-Sternberg**, David M Wagner, Suzanne Chanteau, Paul Keim. A decade of plague in Mahajanga, Madagascar: insights into the global maritime spread of pandemic plague. mBio 2013 Feb 12; 4(1) e00623-12. doi: 10.1128/mBio.00623-12.
- Price EP, Seymour ML, Sarovich DS, Latham J, Wolken SR, Mason J, Vincent G, Drees KP, **Beckstrom-Sternberg SM**, Phillippy AM, Koren S, Okinaka RT, Chung WK, Schupp JM, Wagner DM, Vipond R, Foster JT, Bergman NH, Burans J, Pearson T, Brooks T, Keim P. Molecular epidemiologic investigation of an anthrax outbreak among heroin users, Europe. Emerg Infect Dis. 2012 Aug;18(8):1307-13. doi: 10.3201/eid1808.111343.
- Foster JT, Price LB, **Beckstrom-Sternberg SM**, Pearson T, Brown WD, Kiesling DM, Allen CA, Liu CM, Beckstrom-Sternberg JS, Roberto FF, Keim PS. Genotyping of *Brucella* species using clade specific SNPs. BMC Microbiol. 2012 Jun 19;12(1):110.
- Price EP, Dale JL, Cook JM, Sarovich DS, Seymour ML, Ginther JL, Kaufman EL, **Beckstrom-Sternberg SM**, Mayo M, Kaestli M, Glass MB, Gee JE, Wuthiekanun V, Warner JM, Baker A, Foster JT, Tan P, Tuanyok A, Limmathurotsakul D, Peackck SJ, Currie BJ, Wagner DM, Keim P, Pearson T. Development and Validation of *Burkholderia pseudomallei*-Specific Real-Time PCR Assays for Clinical, Environmental or Forensic Detection Applications. PloS one. 2012;7(5):e37723. Epub 2012 May 18.
- Searcy BT, **Beckstrom-Sternberg SM**, Beckstrom-Sternberg JS, Stafford P, Schwendiman AL, Soto-Pena J, Owen MC, Ramirez C, Phillips J, Veldhoen N, Helbing CC, Propper CR. Thyroid hormone-dependent development in *Xenopus laevis*: A sensitive screen of thyroid hormone signaling disruption by municipal wastewater treatment plant effluent. Gen Comp Endocrinol. 2012 May 1;176(3):481-92. Epub 2012 Jan 11. <http://dx.doi.org/10.1016/j.ygcen.2011.12.036>.

- Gyuranecz M, Birdsell DN, Splettstoesser W, **Beckstrom-Sternberg SM**, Makrai L, Fodor L, Fabbi, M Vicari N, Johansson A, Busch JD, Vogler AJ, Keim P, Wagner DM. Phylogeography of *Francisella tularensis* subsp. *holarctica*, Europe. *Emerg Infect Dis* 2012 Feb; 18(2): 290–293 DOI: 10.3201/eid1802.111305.
- Okinaka R, Price E, Wolken S, Gruendike, J Chung W, Pearson T, Xie G, Munk C, Hill K, Challacombe J, Ivins B, Schupp J, **Beckstrom-Sternberg S**, Friendlander A, Keim P. An Attenuated Strain of *Bacillus anthracis* (CDC 684) has a Large Chromosomal Inversion and Altered Growth Kinetics. *BMC Genomics* 2011, 12:477 doi:10.1186/1471-2164-12-477.
- Vogler AJ, Chan F, Wagner DM, Roumagnac P, Lee J, Nera R, Eppinger M, Ravel J, Rahalison L, Rasoamanana BW, **Beckstrom-Sternberg, SM**, Achtman M, Chanteau S, Keim P. Phylogeography and Molecular Epidemiology of *Yersinia pestis* in Madagascar. *PLoS Negl Trop Dis*. Sept 2011; 5(9): e1319. doi:10.1371/journal.pntd.0001319.
- Engelthaler DM, Bowers J, Scupp JA, Pearson T, Ginther J, Hornstra HM, Dale J, Stewart T, Sunenshine R, Waddell V, Levy C, Gillece J, Price LB, Contente T, **Beckstrom-Sternberg SM**, Blaney DD, Wagner DM, Mayo M, Currie BJ, Keim P, Tuanyok A. Molecular investigations of a locally acquired case of melioidosis in Southern AZ, USA. *PLoS Negl Trop Dis* 2011; 5(10): e1347. doi:10.1371/journal.pntd.0001347
- Gravel S, Henn BM, Gutenkunst RN, Indap AR, Marth GT, Clark AG, Yu F, Gibbs RA. The 1000 Genomes Project (... , **Beckstrom-Sternberg, SM**,...), Bustamante, CD. Demographic history and rare allele sharing among human populations. *PNAS*. 2011 July 5; doi: 10.1073/pnas.1019276108.
- Rivarola M, Foster JT, Chan AP, Williams AL, Rice DW, Liu X, Melake-Berhan A, Huot Creasy H, Puiu D, Rosovitz MJ, Khouri HM, **Beckstrom-Sternberg SM**, Allan GJ, Keim P, Ravel J, Rabinowicz PD. Castor bean organelle genome sequencing and worldwide genetic diversity analysis. *PLoS One*. 2011;6(7):e21743. Epub 2011 Jul 7.
- Chanturia G, Birdsell DN, Kekelidze M, Zhgenti E, Babuadze G, Tsertsvadze N, Tsanova S, Imnadze P, **Beckstrom-Sternberg SM**, Beckstrom-Sternberg JS, Champion MD, Sinari S, Gyuranecz M, Farlow J, Pettus AH, Kaufman EL, Busch JD, Pearson T, Foster JT, Vogler AJ, Wagner DM, Keim P. Phylogeography of *Francisella tularensis* subspecies *holarctica* from the country of Georgia. *BMC Microbiol*. 2011 Jun 17;11:139. PubMed PMID: 21682874.
- Engelthaler, David M, Chiller Tom, Schupp James A, Colvin Joshua, **Beckstrom-Sternberg Stephen M**, Driebe Elizabeth M, Moses Tracy, Tembe Waibhav, Sinari Shripad, Beckstrom-Sternberg James S, Christoforides Alexis, Pearson John V, Carpten John, Keim Paul, Peterson Ashley, Terashita Dawn, and Balajee S. Arunmozhi. Next-Generation Sequencing of *Coccidioides immitis* Isolated during Cluster Investigation. *Emerging Infectious Diseases*. [serial on the Internet]. 2011 Mar 1. http://wwwnc.cdc.gov/eid/article/17/2/10-0620_article. DOI: 10.3201/eid1702.100620.
- Robbins CM, Tembe WA, Baker A, Sinari S, Moses TA, **Beckstrom-Sternberg S**, Beckstrom-Sternberg J, Barrett M, Long J, Chinnaiyan A, Lowey J, Suh E, Pearson JV, Craig DW, Agus DB, Pienta KJ, Carpten JD. 2010. Copy Number and Targeted Mutational Analysis Reveals Novel Somatic Events in Metastatic Prostate Tumors. *Genome Research*. 2011. 21: 47-55. doi: 10.1101/gr.107961.110.
- The 1000 Genomes Project Consortium (... , **Beckstrom-Sternberg SM**,... et al.). A map of human genome variation from population-scale sequencing. *Nature*. 2010. 467(7319):1061-1073. <http://www.nature.com/nature/journal/v467/n7319/abs/nature09534.html>. doi: 10.1038/nature09534.
- Losada L, Ronning CM, DeShazer D, Woods D, Fedorova N, Kim HS, Shabalina SA, Pearson TR, Brinkac L, Tan P, Nandi T, Crabtree J, Badger J, **Beckstrom-Sternberg S**, Saqib M, Schutzer SE, Keim P, Nierman, WC. Continuing evolution of *Burkholderia mallei* through genome reduction and large-scale rearrangements. *Genome Biology and Evolution* 2010 Vol. 2:02; doi:0.093/gbe/evq003.
- Trunck LA, Propst KL, Wuthiekanun V, Tuanyok A, **Beckstrom-Sternberg SM**, Beckstrom-Sternberg JS, Peacock SJ, Keim P, Dow SW, Schweizer HP. Molecular Basis of Rare Aminoglycoside Susceptibility and Pathogenesis of *Burkholderia pseudomallei* Clinical Isolates from Thailand. *PLoS Neglected Trop. Dis*. 2009 September; 3(9): e519.
- Sheff KW, York E, Driebe E, Barker B, Rounsley S, Waddell V, **Beckstrom-Sternberg SM**, Beckstrom-Sternberg JS, Keim P and Engelthaler DM. Development of a Rapid, Cost-Effective TaqMan Real-Time PCR Assay for Identification and Differentiation of *Coccidioides immitis* and *Coccidioides posadasii*. *Med. Mycology*. 2010 May; 48(3): 466-469.
- Pearson T, Giffard P, **Beckstrom-Sternberg S**, Auerbach R, Hornstra H, Tuanyok A, Price EP, Glass MB, Leadem B, Beckstrom-Sternberg JS, Allan GJ, Foster JT, Wagner DM, Okinaka RT, Sim SH, Pearson O, Wu Z, Chang J, Kaul R, Hoffmaster AR, Brettin TS, Robison RA, Mayo M, Gee JE, Tan P, Currie BJ, Keim P.

- Phylogeographic reconstruction of a bacterial species with high levels of lateral gene transfer. *BMC Biology* 2009, 7:78 doi:10.1186/1741-7007-7-78.
- Vogler AJ, Birdsell D, Price LB, Bowers JR, **Beckstrom-Sternberg SM**, Auerbach RK, Beckstrom-Sternberg JS, Johansson A, Clare A, Buchhagen JL, Petersen JM, Pearson T, Vaissaire J, Dempsey MP, Foxall P, Engelthaler DM, Wagner DM, Keim P. Phylogeography of *Francisella tularensis*: global expansion of a highly fit clone. *J Bacteriol.* 2009 Apr;191(8):2474-84. Epub 2009 Feb 27.
- Foster JT, **Beckstrom-Sternberg SM**, Pearson T, Beckstrom-Sternberg JS, Chain PS, Roberto FF, Hnath J, Brettin T, Keim P. Whole-genome-based phylogeny and divergence of the genus *Brucella*. *J Bacteriol.* 2009 Apr;191(8):2864-70. Epub 2009 Feb 6.
- Tuanyok Apichai, Leadem Benjamin R, Auerbach Raymond K, **Beckstrom-Sternberg Stephen M**, Beckstrom-Sternberg James S, Mayo Mark, Vanaporn, Wuthiekanun, Nierman, William C, Peacock Sharon J, Currie Bart J, Keim Paul, Wagner David M. Genomic islands of *Burkholderia pseudomallei*. *BMC Genomics*, submitted.
- Beckstrom-Sternberg SM**, Auerbach RK, Godbole S, Pearson JV, Beckstrom-Sternberg JS, Deng A, Munk C, Kubota K, Zhou Y, Bruce D, Noronha J, Scheuermann RH, Wang A, Wei X, Wang J, Hao J, Wagner DM, Brettin TS, Brown N, Gilna P, Keim PS. 2007. Complete genomic characterization of a pathogenic A.II strain of *Francisella tularensis* subspecies *tularensis*. *PLoS ONE* 2007; 2 (9): e947.
- Touchman JW, Wagner DM, Hao J, Mastrian SD, Shah MK, Vogler AJ, Allender CJ, Clark EA, Benitez DS, Youngkin DJ, Girard JM, Auerbach RK, **Beckstrom-Sternberg SM**, Keim P. A. 2006. North American *Yersinia pestis* genome sequence: SNPs and phylogenetic analysis. *PLoS ONE* 2006; 2(2): e220. doi:10.1371/journal.pone.0000220.
- Payne-Jackson A, **Beckstrom-Sternberg S**. 2005. Traditional remedies – Legacy from the past – implications for the future. Pp. 50-77. *In*: YN Clement, and CE Seaforth, eds. *Advancing Caribbean herbs in the 21st century – II. Proceeding of the seventh international workshop on herbal medicine in the Caribbean.*
- Lei B, Morris DP, Smith MP, Svetkey LP, Newman MF, Rotter JI, Buchanan TA, **Beckstrom-Sternberg SM**, Green ED, Schwinn DA. Novel human 1α -adrenoceptor single nucleotide polymorphisms alter receptor pharmacology and biological function. *Naunyn-Schmiedeberg's Archives of Pharmacology* 2005; 371(3):229-39.
- Thomas JW, JW Touchman, RW Blakesley, GG Bouffard, **SM Beckstrom-Sternberg**, EH Margulies, M Blanchette, AC Siepel, PJ Thomas, JC McDowell, B Maskeri, NF Hansen, MS Schwartz, RJ Weber, WJ Kent, D Karolchik, TC Bruen, R Bevan, DJ Cutler, S Schwartz, L Elnitski, JR Idol, AB Prasad, S-Q Lee-Lin, VVB Maduro, TJ Summers, ME Portnoy, NL Dietrich, N Akhter, K Ayele, B Benjamin, K Cariaga, CP Brinkley, SY Brooks, S Granite, X Guan, J Gupta, P Haghihi, S-L Ho, MC Huang, E Karlins, PL Laric, R Legaspi, MJ Lim, QL Maduro, CA Masiello, SD Mastrian, JC McCloskey, R Pearson, S Stantripop, EE Tiongson, JT Tran, C Tsurgeon, JL Vogt, MA Walker, KD Wetherby, LS Wiggins, AC Young, L-H Zhang, K Osoegawa, B Zhu, B Zhao, CL Shu, PJ De Jong, CE Lawrence, AF Smit, A Chakravarti, D Haussler, P Green, W Miller & ED Green 2003. Comparative analyses of multi-species sequences from targeted genomic regions. *Nature*, 424:788-793.
- Thomas JW, MG Schueler, TJ Summers, RW Blakesley, JC McDowell, PJ Thomas, JR Idol, VV Maduro, SQ Lee-Lin, JW Touchman, GG Bouffard, **SM Beckstrom-Sternberg**, NISC Comparative Sequencing Program, & ED Green 2003. Pericentromeric Duplications in the Laboratory Mouse. *Genome Research*, 13(1):55-63.
- DeSilva U, L Elnitski JR Idol, JL Doyle, W Gan, JW Thomas, S Schwartz, NL Dietrich, **SM Beckstrom-Sternberg**, JC McDowell, RW Blakesley, GG Bouffard, PJ Thomas, JW Touchman, W Miller, and ED Green. 2002. Generation and comparative analysis of ~3.3 mb of mouse genomic sequence orthologous to the region of human chromosome 7q11.23 implicated in Williams Syndrome. *Genome Research*, 12:3-15.
- Blackshear PJ, WS Lai, JM Thorn, EA Kennington, NG Staffa, Jr., DT Moore, GG Bouffard, **SM Beckstrom-Sternberg**, JW Touchman, MF Bonaldo, and MB Soares. 2001. The NIEHS *Xenopus* Maternal EST Project: interim analysis of the first 13,879 ESTs from unfertilized eggs. *Gene*, 267:71-87.
- Lowe H, A Payne-Jackson, **SM Beckstrom-Sternberg**, and JA Duke. 2000. *Jamaica's ethnomedicine: It's potential in the health care system*, University Press of the West Indies, Jamaica.
- Ellsworth RE, DC Jamison, JW Touchman, SL Chissoe, VV Braden Maduro, GG Bouffard, NL Dietrich, **SM Beckstrom-Sternberg**, LM Iyer, LA Weintraub, M Cotton, L Courtney, J Edwards, R Maupin, P Ozersky, T Rohlfing, P Wohldmann, T Miner, K Kemp, J Kramer, I Korf, K Pepin, L Antonacci-Fulton, RS Fulton, P Minx, LW Hillier, RK Wilson, RH Waterston, W Miller, and ED Green. 2000. Comparative genomic sequence analysis of human and mouse cystic fibrosis transmembrane conductance regulator genes. *PNAS* 97:3 1172-1177.

- Touchman, J.W., Y. Anikster, NL Dietrich, VV. Braden Maduro, G McDowell, V Shotelersuk, GG. Bouffard, **SM Beckstrom-Sternberg**, WA Gahl, and ED Green. 2000. The encompassing the nephropathic cystinosis gene (CTNS): complete sequencing of a 200-kb segment and discovery of a novel gene within the common cystinosis-causing deletion. *Genome Research* 10:165-173.
- Beckstrom-Sternberg, SM** and DC Jamison. 1999. Using the Agricultural Genome Information System. In: *Bioinformatics Databases and Systems*, Ch. 14, (S. Letovsky, ed.), Kluwer.
- Duke, JA, J. duCellier, and **S Beckstrom-Sternberg**. 1997. Western Herbal Medicine: Materia Medica. in: Schoen, AM, Wynn, S.G, eds. "Complementary and Alternative Veterinary Medicine", Chap. 19, Unit 5, Botanical Medicine. Mosby (publisher)
- Beckstrom-Sternberg, SM**, G Juvik, D Bigwood, J Barnett, J Krainak, M Sikes, J Martin, M Shives, S Cartinhour, and S Heller. 1996. Plant molecular biology. In: *Internet for the molecular biologist*. Horizon Sci. Press, London.
- Beckstrom-Sternberg, SM**, and JA Duke. 1996. CRC handbook of medicinal mints (Aromathematics). CRC Press, Boca Raton, FL.
- Beckstrom-Sternberg, SM** and JA Duke. 1994. Potential for synergistic action for phytochemicals in spices. Pp. 201-223. In: G. Charalambous, ed. *Herbs, spices and edible fungi*. Elsevier Science Publications, Amsterdam.
- Duke, JA and **SM Beckstrom-Sternberg**. 1994. "Acceptable" levels of flavoring ingredients? Pp. 741-757. In: G. Charalambous, ed. *Herbs, spices and edible fungi*. Elsevier Science Publications, Amsterdam.
- Beckstrom-Sternberg, SM** 1993. Utility of the PHYTOCHEMECO database. Pp. 267-286. In: K. Downum, J. Romeo, and H. Stafford, eds. *Phytochemical potential of tropical plants*. Plenum Press, New York.
- Beckstrom-Sternberg, SM**, LH Rieseberg, and K Doan. 1991. Gene lineage analysis in populations of *Helianthus niveus* and *H. petiolaris* (Asteraceae). *Plant Syst. Evol.* 195: 125-138.
- Rieseberg, LH, **SM Beckstrom-Sternberg**, A Liston, and D Arias. 1991. Phylogenetic and systematic inferences from chloroplast DNA and isozyme variation in *Helianthus* section *Helianthus* (Asteraceae). *Syst. Bot.* 16: 50-76.
- Rieseberg, LH, **SM Beckstrom-Sternberg**, and K Doan. 1990. *Helianthus annuus* ssp. *texanus* has chloroplast DNA and nuclear ribosomal RNA genes of *Helianthus debilis* ssp. *cucumerifolius*. *Proc. Natl. Acad. Sci. USA* 87: 593-597.
- Beckstrom-Sternberg, SM** 1989. Two-dimensional gel electrophoresis as a taxonomic tool: Evidence from the Centrospermae. *Biochem. Syst. Ecol.* 17: 573-582.
- Beckstrom-Sternberg, SM** 1988. Molecular systematics of the Centrospermae: Studies using two-dimensional gel electrophoresis. Ph.D. thesis. Claremont Graduate School: Claremont, CA.

Papers Presented at Meetings (26)

- Beckstrom-Sternberg, SM, and Beckstrom-Sternberg JS. SolScape. Presentation to TGen NGS Group Meeting, March 2011, TGen, Phoenix. (Invited Talk)
- Wagner DM, Vogler AJ, Lee J, Petersen JM, Birdsell DN, Nera RD, Doyle AL, Allender CJ, Colman RE, Hall CM, Auerbach RK, Beckstrom-Sternberg SM, Foster JT, Keim P. Phylogeography of *Yersinia pestis* in North America. 10th International Symposium on *Yersinia*, Recife, Brazil, October, 2010. (Invited Talk)
- Beckstrom-Sternberg, SM. In Silico Genotyper. ISG. Presentation to MGGen Group Meeting, July 2010, TGen, Phoenix. (Invited Talk)
- Beckstrom-Sternberg SM, Pius Brzoska, Craig Cummings, Melissa Barker, Elizabeth Driebe, James S Beckstrom-Sternberg, John V Pearson, Shripad Sinari, Waibhav D Tembe, Derek Sarovich, Eugene Spier, Manohar R Furtado and Paul Keim. 2009. SOLiDTM short-read sequencing of Methicillin Resistant Staphylococcus aureus (MRSA) for SNP identification and strain typing. Talk presented by Pius Brzoska at Genome Informatics, October 2009. Cold Spring Harbor.

- Chandrasekhar A, Tyler Izatt, Erin Price-Wright, Shripad Sinari, Alexis Christoforides, Jamie Beckstrom-Sternberg, John Pearson, and Stephen Beckstrom-Sternberg. 2009. SolPicker: Using a Software Suite for Picking Oligonucleotide Probes DNA Capture Using Custom Microarray Chips. Talk presented at Helios Scholar Symposium, July 2009, Phoenix.
- Beckstrom-Sternberg SM and JS Beckstrom-Sternberg. 2009. Tools for assembly. Talk presented at TGen Cancer Genome Analysis Jamboree, December 2009, Phoenix.
- Beckstrom-Sternberg SM and JS Beckstrom-Sternberg. 2009. Visualization. Talk presented at TGen Cancer Genome Analysis Jamboree, December 2009, Phoenix.
- Beckstrom-Sternberg SM and JS Beckstrom-Sternberg. 2009. Visualization of NGS Data with SolScape. Talk presented at SOLiD Users Meeting, September 2009, Foster City.
- Beckstrom-Sternberg, SM, Beckstrom-Sternberg, J, Keim, PS. 2007. Tandem Block Signatures Are Shared Across Multiple Bacterial Genomes . (Invited speaker for the PLoS Track, 15th Annual International Conference on Intelligent Systems for Molecular Biology, July 2007, Vienna, Austria).
- Auerbach, RK, Beckstrom-Sternberg, SM, Keim PS. 2007. Characterization and Comparative Genomics of a *Francisella tularensis* A.II Strain. (Invited speaker at Advances in Genome Biology and Technology, February 2007, Marco Island, FL).
- Searcy, B, Beckstrom-Sternberg, SM, Stafford, P, Schwendiman, A, Soto, J, Flikkema, PG, Propper, CR. 2006. (Invited speaker at Mountain West Society of Toxicology Conference, September 2006, Phoenix, AZ).
- Auerbach, RK, Beckstrom-Sternberg, S, Hao, J, Wieben, M, Keim, P, Schwartz, E, Hungate, B, Weinstock, G, Petrosino, J, Qin, X, Pearson, J. 2006. Metagenomics: The next frontier. (Invited speaker at Fourth Annual TGen Scientific Retreat, 5 May 2006, Westin Kierland Resort, Scottsdale, AZ).
- Payne-Jackson, A, Beckstrom-Sternberg, S. 2005. Traditional remedies – Legacy from the past – implications for the future. (Invited speaker at the 7th international conference on herbal medicine in the Caribbean, June 23-26, 2005, Bay Gardens Hotel, Rodney Bay, St. Lucia, West Indies).
- Beckstrom-Sternberg, Stephen M. 1997. A remote data entry system. (Invited speaker at the ACE97 Conference, July 1997, Cornell University).
- Jamison, D Curtis and Stephen M Beckstrom-Sternberg. 1997. Setting up a WWW interface to ACEDB. (Invited speaker at the ACE97 Conference, July 1997, Cornell University).
- Beckstrom-Sternberg, Stephen M. 1997. ExternalDB and beyond. (Invited speaker at the International Nomenclature Workshop, May 1997, Jackson Laboratory, Maine).
- Beckstrom-Sternberg, Stephen M, D Curtis Jamison, Danh Thuong Vo, and David Lonsdale. 1997. Mendel at the workbench: Let the coding sequences speak. (Invited speaker at the Plant and Animal Genome V Conference, Nomenclature Workshop, January 1997, San Diego, CA).
- Bigwood, Douglas W, Stephen M Beckstrom-Sternberg, D Curtis Jamison, and Samuel Cartinhour. 1997. New user interfaces for AGIS - The Agricultural Genome Information System (Computer demo at the Plant and Animal Genome V Conference, January 1997, San Diego, CA).
- Beckstrom-Sternberg, SM 1996. Diamonds in the rough: Complex queries through the AGIS. (Invited speaker at the Plant Genome 4 Conference, Computer Tools and Resources Workshop, January 1996, San Diego, CA).
- Juvik, G, J Barnett, and S Beckstrom-Sternberg. 1996. Database seeking identifiers: Send URL. (Paper given January 1996 at Plant Genome 4 Conference, San Diego, CA).
- Reardon, EM, CA Price, SM Beckstrom-Sternberg, W Loeffelhardt, and D Lonsdale. 1996. A common nomenclature for sequenced plant genes: Update 1996. (Invited speaker at the Plant Genome 4 Conference, Nomenclature Workshop, January 1996, San Diego, CA).
- Beckstrom-Sternberg, SM. 1995. The Agricultural Genome Information Server and beyond.... (Invited speaker at the Molecular Biology Conference, September 1995, San Diego, CA).
- Beckstrom-Sternberg, SM, D Bigwood, S Cartinhour, J Barnett, G Juvik, J Krainak, M Sikes, and S Heller. 1995. Plant genome databases linked around the world via WWW. (Invited speaker at the American Chemical Society Bioinformatics Symposium, August 1995, Chicago, IL).
- Rieseberg, L, SM Beckstrom-Sternberg, A Liston, and D Arias. 1990. Phylogenetic systematic inferences from chloroplast DNA, nuclear ribosomal DNA, and isozyme variation in *Helianthus* section *helianthus* (Asteraceae). *Amer. J. Bot.* 77: 153. (Abstract of paper presented at the annual meeting of the AIBS).
- Beckstrom-Sternberg, SM, LH Rieseberg, and K Doan. 1990. *Helianthus annuus* ssp. *texanus* has chloroplast DNA and nuclear ribosomal RNA genes of *Helianthus debilis cucumerifolius*. *Amer. J. Bot.* 77: 121. (Abstract: AIBS).

Beckstrom-Sternberg, SM 1987. Two-dimensional electrophoresis: A taxonomic tool for plants at the molecular level. *Amer. J. bot.* 74: 725. (Abstract: AIBS).

Posters Presented at Meetings (31)

- Roe CC, Urbanz J, Krohn A, Polsgrove PJ, Beckstrom-Sternberg SM. Genetic characterization of *Onchocerca lupi* and its *Wolbachia* endosymbiont in the southwestern United States. Poster presented at Regional ASM meeting, April 2011, Flagstaff.
- Beckstrom-Sternberg SM, and Beckstrom-Sternberg JS. In Silico Genotyper (ISG) and SolScape. Poster presented at Regional ASM meeting, April 2011, Flagstaff.
- Price EPP, Cook JM, Seymour ML, Dale JL, Beckstrom-Sternberg S, Kaestli M, Tuanyok A, Engelthaler D, Currie B, Pearson T, Keim P. Identification and characterization of *Burkholderia pseudomallei*-specific genetic signatures. Poster presented at WMC 2010, November 2010.
- Engelthaler DM, Schupp JA, Gillece J, Blajee SA, Chiller T, Wojack B, Beckstrom-Sternberg SM, DeBess E, Saubolle MA, Lockhart S, Keim P. Next Generation Sequencing for Molecular Epidemiology and Clinical Medicine: Cryptococcosis, Coccidioidomycosis and Cystic Fibrosis. Poster presented at 48th annual meeting of the Infectious Diseases Society of America, October 2010, Vancouver, BC.
- Beckstrom-Sternberg SM. In Silico Genotyper. ISG. Poster presented at AZ Biofest 2010, October 2010, JW Marriott Camelback Inn, Scottsdale.
- Driebe, EM, Schupp J, Gillece J, Bowers J, Waters A, Beckstrom-Sternberg S, Tembe WD, Sinari S, Beckstrom-Sternberg JS, Brzoska P, Cummings C, Furtado M, Sarovich D, Wagner D, Engelthaler D, Keim P. Next-Generation Sequencing and SNP Phylogenetic Analysis of Twenty-Nine *Staphylococcus aureus* Strains. Poster presented at ICEID, July 2010, Hyatt Regency, Atlanta. Chandrasekhar A and Beckstrom-Sternberg S. SolScape: Visualizing the Results of Next-Generation DNA Sequencing. Poster presented at Helios Scholar Symposium, July 2010, Phoenix Convention Center, Phoenix.
- Engelthaler DM, James A Schupp, John Gillece, S Arunmozhi Balajee, Tom Chiller, Bette Wojack, Stephen M Beckstrom-Sternberg, Emilio DeBess, Michael A. Saubolle, Shawn Lockhart, and Paul S. Keim. 2010. Next Generation Sequencing for Molecular Epidemiology and Clinical Medicine: Cryptococcosis, Coccidioidomycosis and Cystic Fibrosis. Poster presented at Infectious Diseases Society of America, October 2010, Vancouver.
- Beckstrom-Sternberg SM. 2010. In Silico Genotyper. Talk presented at MGen, NAU, July 2010.
- Engelthaler DM, James Schupp, John Gillece, Shawn Lockhart, Stephen Beckstrom-Sternberg, Jamie Beckstrom-Sternberg, Tom Chiller, Paul S Keim and S Arunmozhi Balajee. 2010. Next generation sequencing in microbial molecular epidemiology: investigation of two fungal disease events. Poster presented at ICEID, July 2010, Atlanta.
- Chandrasekhar C, Stephen Beckstrom-Sternberg. 2010. SolScape: Visualizing the Results of Next-Generation DNA Sequencing. Poster presented at Helios Scholar Symposium, July 2010, Phoenix.
- Driebe EM, J. M. Schupp, J. D. Gillece, J. Bowers, A. Waters, S. M. Beckstrom-Sternberg, A. Tembe, S. Sinari, J. S. Beckstrom-Sternberg, P. M. Brzoska, C. A. Cummings, M. R. Furtado, D. S. Sarovich, D. M. Wagner, D. M. Engelthaler, P. S. Keim. 2010. Next-Generation Sequencing and SNP Phylogenetic Analysis of Twenty-Nine *Staphylococcus aureus* Strains. Poster presented at ASM, May 2010, San Diego.
- Roe C, Peter Polsgrove, Carrie Vargas, and Stephen Beckstrom-Sternberg. 2010. Novel antimicrobial gene discovery from halophilic microorganisms. Poster presented at ASM, April 17, 2010.
- Schupp J, Gillece J, Contente T, Driebe E, Sheff K, Pearson T, Colvin J, Beckstrom-Sternberg S, Barker B, Rounsley S, Keim P, Engelthaler DM. 2010. Targeted Large Scale SNP Genotyping Facilitates Fine Scale Resolution and Accurate Phylogeographic Characterization of *Coccidioides immitis* and *C. posadasii*. Poster presented at 2nd ASM Conference on Dimorphic Fungal Pathogens, March 2010, Miami.
- Chandrasekhar A, Tyler Izatt, Erin Price-Wright, Shripad Sinari, Alexis Christoforides, Jamie Beckstrom-Sternberg, John Pearson, and Stephen Beckstrom-Sternberg. 2009. SolPicker: Using a Software Suite for Picking Oligonucleotide Probes for DNA Capture Using Custom Microarray Chips. Poster presented at Helios Scholar Symposium, July 2009, Phoenix.
- Robbins CM, Wendy Hernandez, Stephen Beckstrom-Sternberg, Waibhav Tembe, James Beckstrom-Sternberg, Tracy Y. Moses, John Pearson, Rick A. Kittles, John D. Carpten. 2009. Assessment of genetic diversity of EpHB2 and its role as a genetic risk factor for prostate cancer among African American men. Poster presented at American Society of Human Genetics, November 2009, Honolulu.

- Pearson, JV, James Beckstrom-Sternberg, Mitchell Storey, Shripad Sinari, Waibhav D Tembe, Matthew J Huentelman, John D Carpten, David W Craig, Paul Keim, Stephen M Beckstrom-Sternberg. SolSuite: An Analysis and Visualization Platform for Massively Parallel Sequencing Platforms. *Advances in Genome Biology and Technology*, Marco Island, FL, February, 2009.
- Beckstrom-Sternberg, SM, Pius Brzoska, Craig Cummings, Melissa Barker, Elizabeth Driebe, James S Beckstrom-Sternberg, John V Pearson, Shripad Sinari, Waibhav D Tembe, Derek Sarovich, Manohar R Furtado and Paul Keim. SOLiDTM short-read sequencing of Methicillin Resistant *Staphylococcus aureus* (MRSA) for SNP identification and strain typing. *Advances in Genome Biology and Technology*, Marco Island, FL, February, 2009.
- Beckstrom-Sternberg, SM, Beckstrom-Sternberg, JS, Keim, PS. 2007. Tandemizer – A cross-genome tandem block comparison tool for prokaryotes. *Pacific Symposium on Biocomputing*, Wailea, HI, January, 2007.
- Beckstrom-Sternberg, SM, Beckstrom-Sternberg, JS, Keim, PS. 2007. Tandemizer – A cross-genome tandem block comparison tool for prokaryotes. *Advances in Genome Biology and Technology*, Marco Island, FL, February 2007.
- Beckstrom-Sternberg, SM, Beckstrom-Sternberg, JS, Keim, PS. 2007. Tandem Block Signatures Are Shared Across Multiple Bacterial Genomes. 15th Annual International Conference on Intelligent Systems for Molecular Biology, July 2007, Vienna, Austria.
- Godbole, S, Beckstrom-Sternberg, SM, Auerbach, RK, et al. 2006. BioHealthBase: The Bioinformatics Resource Center for *Francisella tularensis*. 5th International Tularemia Conference, Woods Hole, MA, November 2006.
- Beckstrom-Sternberg, SM, Auerbach, RK. 2006. SIDACS: an integrated computational system for SNP/INDEL discovery and classification. *Computational Systems Bioinformatics Conference*, Stanford, CA, 14-18 August 2006.
- Beckstrom-Sternberg, SM, Auerbach, RK. 2006. SNP DiscoClass: an integrated computational system for SNP discovery and classification. *Fourth Annual TGen Scientific Retreat*, 5 May 2006.
- Beckstrom-Sternberg, SM, Auerbach, RK, Keim, P. 2006. Characterization of a pathogenic *Francisella tularensis* strain. *Fourth Annual TGen Scientific Retreat*, 5 May 2006.
- Beckstrom-Sternberg, Stephen M, Jicheng Hao, Jeffrey Touchman, James Lowey, Paul Keim. 2005. The plague of sequence validation. *Third Annual TGen Scientific Retreat*, 14 February 2005.
- Beckstrom-Sternberg, Stephen M, Jicheng Hao, Jeffrey Touchman, Raymond Auerbach, Zack Jay, Edward Suh, Paul Keim. 2005. Framework for a pathogen genomics knowledgebase. *Third Annual TGen Scientific Retreat*, 14 February 2005.
- Auerbach, Raymond, Stephen M Beckstrom-Sternberg, Jicheng Hao, David Wagner, Jeffrey Touchman, Paul Keim. 2005. To syn or not to syn (SNP mining in genes of bacterial genomes. *Third Annual TGen Scientific Retreat*, 14 February 2005.
- Beckstrom-Sternberg, Stephen M, Douglas W Bigwood, D Curtis Jamison. 1997. Resources available through the AGIS. (Poster given January 1997 at Plant and Animal Genome V Conference, San Diego, CA).
- Bigwood, D, J Barnett, S Beckstrom-Sternberg, S Cartinhour, G Juvik, J Krainak, M Shives, and M Sikes. 1996. The Agricultural Genome Information Server: A WWW resource for geneticists and biologists. (Poster given January 1996 at Plant Genome 4 Conference, San Diego, CA).
- Beckstrom-Sternberg, SM 1992. Utility of the PHYTOCHEMECO database. (Poster given August 1992 at Phytochemical Society meetings, Miami Beach, Florida).
- Beckstrom-Sternberg, SM and JA Duke. 1992. Sister-site selection for the neem tree using the ORACLE climate-crop database. *BARC Poster Day 1992*. (Poster given March 10, 1992, BARC-West, USDA-ARS: Beltsville, MD).

Internet Databases Developed

- Beckstrom-Sternberg, Stephen M, and James A Duke. "The Ecosys Database."
<http://ukcrop.net/perl/ace/search/Ecosys> (data version November 1995). [taken offline May 2013]
- Beckstrom-Sternberg, Stephen M., James A. Duke, and K.K. Wain. "The Ethnobotany Database."
<http://ukcrop.net/perl/ace/search/EthnobotDB> (data version July 1994). [taken offline May 2013]. Revised version available here: <https://data.nal.usda.gov/dataset/dr-dukes-phytochemical-and-ethnobotanical-databases> .

- Beckstrom-Sternberg, Stephen M., and James A. Duke. "The Foodplant Database."
<http://ukcrop.net/perl/ace/search/FoodplantDB> (data version July 1994). [taken offline May 2013]
- Duke, James A. and Stephen M. Beckstrom-Sternberg. "The Phytochemical and Ethnobotanical Databases."
<http://www.ars-grin.gov/duke/> (data version December 1998). [taken offline May 2013]. Revised version available here: <https://data.nal.usda.gov/dataset/dr-dukes-phytochemical-and-ethnobotanical-databases> .
- Beckstrom-Sternberg, Stephen M., and James A. Duke. "The Phytochemical Database."
<http://ukcrop.net/perl/ace/search/PhytochemDB> (data version July 1994). [taken offline May 2013]. Revised version available here: <https://data.nal.usda.gov/dataset/dr-dukes-phytochemical-and-ethnobotanical-databases> .
- Beckstrom-Sternberg, Stephen M., Daniel E. Moerman, and James A. Duke. "The Medicinal Plants of Native America Database." <http://ukcrop.net/perl/ace/search/MPNADB> (data version June 1995). [taken offline May 2013]

Web Sites Developed

- Beckstrom-Sternberg, Stephen M, and James A Duke. "The Phytochemical and Ethnobotanical Databases."
<http://www.ars-grin.gov/duke/>. (site no longer available). Revised version available here:
<https://data.nal.usda.gov/dataset/dr-dukes-phytochemical-and-ethnobotanical-databases> .
- Beckstrom-Sternberg, Stephen M. "The Agricultural Genome Information Server." <http://probe.nal.usda.gov:8000/>.
This site was moved to <http://ars-genome.cornell.edu/> and subsequently decommissioned.

WWW Tools Developed

- Beckstrom-Sternberg, Stephen M., D. Curtis Jamison, and Truong Le. 1997. "Genome Sequence Shopping Cart Interface to the Biology Workbench" [no longer available on-line] (Perl5/CGI.pm/Java, Last modified March 1997).
- Beckstrom-Sternberg, Stephen M. 1996. "Nucleic Acids Search Tool - Link to NCSA Biology Workbench" [no longer available on-line] (Perl5/CGI.pm, Last modified January 1997).
- Beckstrom-Sternberg, Stephen M. 1996. "Protein Search Tool - Link to NCSA Biology Workbench" [no longer available on-line] (Perl5/CGI.pm, Last modified October 1996).
- Beckstrom-Sternberg, Stephen M. 1996. "Nucleic Acids Blast Search Tool" [no longer available on-line] (Perl5/CGI.pm, Last modified September 1996).
- Beckstrom-Sternberg, Stephen M. 1996. "Protein Blast Search Tool" [no longer available on-line] (Perl5/CGI.pm, Last modified September 1996).