



The BMI Buzz

August 2008

www.bmi.utah.edu

Issue 8



The University of Utah
Biomedical Informatics

In this issue:

New Students.....	1
Giving to BMI	1
IPHIE	2
Annual NLM	3
Reed Gardner Lecture	3
News Article.....	3
Awards.....	3
Faculty/Staff Info	3
Grants	4,5
Presentations	5,6
Publications	6,7,8
Peer-Reviewed.....	8
Conference Proceedings	8
Calendar of Events.....	8
Contact The Buzz.....	8

BMI

New school year, new students

With the school year starting soon, we welcome the incoming class of twelve PhD candidates, five MS candidates, and six certificate students. The new students are from the USA, India, China, and Korea. Their names are:

Fen Bao, Brian Gibson, Christopher Naun, Douglas Rose, Neelam Zafar (MS); **Shale Dames, Shan He, Jordan Hulet, Vanita Jain, Jin-qui Kuang, Sang-hoon Lee, Anusha Muthukutty, Sharanya Raghunath, Shuying Shen, Brett South, Christopher Stock, Ajay Vamadevan** (PhD); **Frank Hsu, Lisa Gren, Bodla Shankaranand, Igor Pavlov, Yik-ki Wan, and Brian Bray** (Certificate).

We also welcome post-doctoral student **Nathan Dykman**.

Orientation meetings and a kickoff barbecue will be held on August 20. Classes begin August 25.

The department has a new Director of Graduate Studies **Dr. John Hurdle**, who is taking over “DOGS” responsibilities from **Dr. Scott Narus**, effective immediately.

An opportunity to give

“The best use of life is to invest it in something which will outlast life.”
--William James

Your gift of any size does make a difference. Thank you in advance for your support.
(Please specify Biomedical or Medical Informatics.)

Online Giving Form --<https://umarket.utah.edu/development/form.tpl>

Cash or Check Gifts – May be hand delivered or mailed to:

The University of Utah
Health Sciences Development
540 Arapeen, Ste. 120
Salt Lake City, UT 84108

BMI Hosts IPHIE

The Department of Biomedical Informatics is a member of an international consortium called the International Partnership for Health Informatics Education, or IPHIE. The goal of this partnership is to encourage the diffusion of the different ways to teach and practice health informatics, especially in the international sphere. The partners are the University of Utah, the University of Minnesota, University of Washington, the University of Heidelberg/Heilbronn, Amsterdam Medical Center, and the University for Health Sciences Medical Informatics and Technology (UMIT) near Innsbruck, Austria. Every year, IPHIE convenes a Master Class, an intensive five-day program that mixes academic instruction focused on informatics mixed with a lively social agenda. Each partner institution sends two faculty members and four students to the meetings.

The location of the Master Class rotates between institutions, and between continents, every year. This year, IPHIE 2008 was hosted by the University of Utah's Department of Biomedical Informatics. We had attendees from all four countries for total of 35 participants. Most were housed at the Heritage Center in the Fort Douglas complex (the former Olympic Village).

The academic program started with a long site visit at the Veterans Administration Medical Center here in Salt Lake City where participants saw how the VA's CPRS electronic medical record is used in practice. They were also introduced to the informatics architecture that underlies CPRS. Over the course of the next two days they heard lectures that described the breadth of biomedical informatics today. **Dr. Chris Maloney** described two novel clinical informatics interventions under way at Primary Children's Medical Center. **Dr. Mollie Poynton** provided an overview of the essentials of Nursing Informatics, which was especially interesting to the international visitors. Mr. Jahn Barlow described the architecture of the UPDB and illustrated its use with several case

studies. The capstone lecture was delivered by **Dr. Andrew Balas**, who delivered the Second Annual Reed M. Gardner lecture (as a distinguished alumnus), on the nature of scientific discovery. The academic program concluded with four presentations by student groups. Each group was composed of one student from each program, and each group presented a thorough analysis of a pre-selected biomedical informatics paper from the literature. The papers were chosen to be challenging or controversial. All the students did a great job.

The social agenda, the real heart of IPHIE, started with a trip to Timpanogos Cave National Monument, including a hike up to and through the cave, and concluding with a Dutch Oven cook out. The cookout proved incredibly popular, because it was cooked entirely in cast-iron pots using nothing but coals right at the campground picnic area. The next afternoon and evening the group toured

Antelope Island, searched for buffalo, and enjoyed a barbecue picnic complete with cowboy music. The highlight of that trip came at the very end when, as the bus was departing, it found a number of buffalo taking a "dust bath." On the last full day of IPHIE, the group toured the Kennecott Bingham Copper Mine. Afterwards those that had the inclination visited the Utah Arts Festi-



val in Library Square.

All in all, IPHIE 2008 was a tremendous success. We are indebted to the efforts of the DBI staff, **Lynn Ford, Kathy Stoker, Jo Ann Thompson, and Linda Galbreath** for their direct (and indirect!) assistance in helping make IPHIE 2008 a reality. Special thanks also go to **Guilherme Del Fiol** and **Randy Madsen** for the technical support. The logistics and programming were provided by **John Hurdle**, with considerable assistance from **Joyce Mitchell** and **Lynn Ford**.

Thank you to **John Hurdle** for this article and the photo.

NLM

The annual NLM Training Meeting was held in Bethesda, MD, July 7 and 8. Three faculty members (**Dr. Julio Facelli, Dr. Catherine Staes, and Dr. Peter Haug**), one administrative person (**Lynn Ford**), and sixteen students from the department attended the meetings.

During the 2-day NLM meeting, students presented a wide array of topics. The following students from the department presented posters or abstracts at the meeting:

Ryan Abo, with Wei-Yu Lin, Neil Shephard, Angela Cox and **Nicola Camp**, presented an abstract entitled "Identification of CASP8 Haplotypes Associated with Breast Cancer."

Kristina M. Brinkerhoff, with Kristine C. Jordan and **John F. Hurdle**, presented a poster titled "Grocery Store Point-of-Purchase Date as a Nutritional Assessment Method in Public Health Informatics."

Stephen Piccolo, with co-authors **Nicola Camp** and **Lewis J Frey**, presented a poster titled "Polygenic Model for Predicting Breast Cancer Risk via Genome-Wide Polymorphisms."

Nephi Walton, with **Mollie R. Poynton, Chris Maloney** and Per H. Gesteland, presented an abstract titled "Forecasting Hospital Census at a Tertiary Care Children's Hospital."

Prior to the NLM meeting, there was a Public Health Informatics (PHI) Fellows Workshop, organized by the Public Health Informatics Institute. The meeting was an opportunity for PHI students and faculty to hear about national systems for vaccine safety and adverse event reporting. Ironically, the CDC experts in the room kept being called out to respond to calls as CNN was reporting vaccine problems in its breaking news. The topic was timely and very enlightening. Posters were presented by Martin Cryer and Kristina Brinkerhoff. Kristina's poster won the best poster award.

2nd Annual Reed Gardner Lecture

The Second Annual Reed M. Gardner Lecture was held on Saturday, June 28th, at the Health Sciences Education Building. **Andrew Balas**, MD, PhD, presented his lecture, "Scientific Knowledge Management in the Digital Age." Dr. Balas is Dean of the College of Health Sciences at Old Dominion University in Norfolk, Virginia.

The Reed M. Gardner Lectureship was established in 2006 to honor **Dr. Reed Gardner** for his many years of service in the field of medical informatics. Dr. Andrew Balas spearheaded the campaign to create the lectureship.

News Article

An article dated July 3, 2008, found on Time.com featured a project that involves **Dr. Robert Rolfs**, Utah's state epidemiologist and an adjunct member of the BMI faculty. The article discussed a collaboration of doctors, nurses, epidemiologists and IT experts, working with engineers at Collaborative Software Initiative (CSI), to use open source methods to develop a program to track infectious diseases. **Dr. Scott Narus** serves on the steering committee for the project. The link to the article is:
http://www.time.com/time/specials/2007/article/0,28804,1706699_1707550_1820094,00.html

CONGRADULATIONS

Lewis Frey received a caBIG Excellence in Mentoring award for 2008, presented in recognition of individuals with in-depth knowledge and understanding of caBIG compatibility requirements and the ability to effectively communicate them to developers. The award was presented at the caBIG Annual Meeting in Washington, DC, in June 2008.

Dr. Roberto Rocha has left the BMI faculty to take a position at Partners HealthCare in Boston.

Teri Birch has joined the department as an Administrative Assistant. She will work primarily with faculty administration, including CVs, Retention/Promotion/Tenure, faculty meetings, Grants, Recruiting, as well as providing support for several faculty members.

GRANT AWARDS

For the period June 1, 2008 – August 30, 2008

Lisa Cannon-Albright has been awarded a grant submitted through the Veteran's Administration. Titled "Creation and Analysis Of A Genealogy/Medical Phenotype Resource", this 3-year project will build a genealogy for Utah and Massachusetts, link to all appropriate VA patients in these 2 states, and analyze phenotypes with sufficient sample sizes. A non-identifiable version of the genealogy data linked to the VA diagnosis data will be used for population-based analyses of the heritable contribution to health-related phenotypes. This project could lead to a genealogy/medical resource for the entire country linked to phenotype data for all of it's VA patients.

Dr. Cannon-Albright also submitted and received a 1-year University Cancer Control and Population Sciences (CCPS) grant which seeks to investigate risk for cancer in NF1 case. It is hoped that the preliminary data gathered by this 1 year project will lead to an application for external funding for further study.

The Leukemia & Lymphoma Society awarded a research grant to **Dr. Nicola Camp**. This 3-year grant is titled "Genetic Dissection of Myeloma: Genome-wide Association and Gene-Expression" and begins October 1, 2008. Its goals are to identify germline variants that can recognize individuals at risk for myeloma, or more specifically poor prognosis myeloma, with the goal early detection, diagnosis, prognosis, risk stratification, treatment management and avenues for new therapeutic targets. **Lisa Cannon-Albright** is a co-investigator on this project.

The NIH has awarded an R25, "Utah - Texas Bridge to Biomedical Informatics Doctorate", to begin October 1. **Dr. Joyce Mitchell is PI; Lisa Cannon-Albright, Bruce Bray, Justin Clark, and Scott Narus** have roles on the project. This 5-year grant seeks to establish a partnership between the University of Texas at Brownsville and the University of Utah to provide an interactive Masters program and develop a path for students from UTB toward a doctoral degree in the University of Utah biomedical informatics program.

GRANT APPLICATIONS. Ten grant applications were submitted by Biomedical Informatics faculty June 1 through August 30, 2008; an impressive total of 25 thus far this year!

2008 BIOMEDICAL INFORMATICS GRANT SCORE-CARD		
PI	SUBMITTED	AWARDED
Allen-Brady	2	
Camp	10	1
Cannon-Albright	6	3
Hurdle	2	
Mitchell		1
Rocha	5	
Thomas	1	
Al-Sheikh (student)	1	

Note: Many of the submitted applications have yet to be reviewed.

Nicola Camp submitted five grant applications during this period. An NIH project titled "Genetic Epidemiology of Chronic Lymphocytic Leukemia" would work to identify regions of the genome harboring CLL susceptibility genes, help our understanding of the etiology of CLL and provide information about other lymphoproliferative disorders that may translate to other cancers. **Lisa Cannon-Albright** is a co-investigator.

A R01 application submitted to the NIH/NCI by **Nicola Camp** is "GENIE: Complex Genetic Association Analysis Software". It would further extend the statistical modules and search algorithms available in Genie to provide a freely available key tool in the genetic epidemiology tool-box. **Alun Thomas and Kristina Allen-Brady** are co-Investigators on the project.

Nicola Camp is PI on a subaward with Intermountain Healthcare on an NIH application to identifying genetic variants associated with specific stages of chronic heart disease.

A Cancer Control and Population Sciences application, "Pilot Study for the Genetic Epidemiology of Multiple Myeloma" was submitted by **Dr. Nicola Camp** with **Lisa Cannon-Albright**, and 3 investigators from other departments as co-investigators.

Dr. Camp also submitted a Multiple Myeloma pilot study to the University CCTS program. Its goal is to initiate ascertainment of a Utah case-control series for genetic epidemiologic study of MM to provide valuable proof of feasibility for larger gene finding grants. **Lisa Cannon-Albright** is co-investigator, along with three collaborators from other University departments.

Grants Continued

Lisa Cannon-Albright submitted 3 applications during this period, one of which (University CCPS detailed above) has already been awarded. Her application to the DOD would study "Unique approaches to identification of prostate cancer predisposition genes". The project would use powerful methodologies and unique resources to fine map and isolate 3 hypothesized prostate cancer predisposition genes. **Alun Thomas** is a co-investigator on the project.

Lisa Cannon-Albright also submitted a one-year project to the Lustgarten Foundation for Pancreatic Cancer Research. The project, "Novel Approaches to Mapping Pancreatic Cancer Predisposition Genes in Extended High-Risk Pedigrees" would utilize unique Utah resources using both established and new approaches to identify regions of interest for pancreatic cancer predisposition genes.

Professor Alun Thomas submitted a R01 application to NIH/NIGMS. The title is "A Statistical and Bioinformatic Approach to Filtering Protein Interaction Data" and the goals are to provide new statistical methods and programs to filter false positive and false negative results from large scale protein-protein interaction assays. **Lewis Frey** is a co-investigator.

Kristina Allen-Brady submitted a University CCTS Pilot application entitled "Down Syndrome and a Reduced Risk of Solid Tumors". This one-year project would gather preliminary data to define genetic difference in DS individuals that may be associated with the recognized reduced risk for solid tumors in this population. **Lisa Cannon-Albright** is a co-investigator on the project.

Dr. John Hurdle also submitted an application to the University CCTS Pilot program. The goal of this 1-year project is to use natural language processing (NLP) on a cross-section of clinical/research documents to automate case finding for clinical study participant recruitment.

Future plans.

Nicola Camp, John Hurdle and Lisa Cannon-Albright have plans for applications during the NIH Oct-Nov cycle; Alun Thomas anticipates an application to the University Funding Incentive Seed Grant Program in February 2009. Other faculty members planning grant submissions are encouraged to notify Sandie Strauss or Teri Birch, as appropriate, for assistance with the submission process.

Presentations

Gassert, Carole. "Technological Solutions To Nurse Workflow Inefficiencies:" Keynote speaker. Rutgers 26th Annual International Nursing Computer and Technology Conference. Las Vegas, NV. June 2008.

Staes CJ, Xu W, Davidson A, Lynch C, Lenert L. Improving Public Health Reporting: Use Cases, Knowledgebase Development, and a Federated Model. Panel presentation given at the 2008 AMIA Spring Congress; Phoenix, AZ; May 30, 2008.

Maulden S, Greim P, Bouhaddou O, Warnekar P, Megas L, Parrish F, Lincoln ML. "Using SNOMED CT as a Mediation Terminology: Mapping Issues, Lessons Learned, and Next Steps Toward Achieving Semantic Interoperability." Accepted for publication in the proceedings of Knowledge Representation in Medicine, Phoenix, AZ, June 2, 2008.

Beaudoin DE, Longo N, Logan RA, Mitchell JA. Using the "Info Rx" Process to Refer Parents of Newborns with Metabolic Conditions to the Genetics Home Reference Web Site. Joint conference of the Mountain Plains Library Association and the Utah Library Association. Salt Lake City, UT. April 2008.

Olola C.H.O., Rowan R., Narus S., Poynton M., Nebeker J., Hales J., Evans R.S. "Enhancing Continuity of Care Using an Emergency Medical Card and Continuity of Care Report." Oral Presentation. IPHIE 2008 Master Class. Salt Lake City, Utah, USA. June 26, 2008.

International (1) Cannon-Albright

Linkage, association, and shared genomic segment analysis of 55k SNPs in high risk melanoma pedigrees. *Genomel Meeting, Paris, France. July 2008.*

National Cannon-Albright (1)

Pancreas Cancer Gene Identification in Utah, *University of California San Francisco, Pancreas Cancer Group, San Francisco, California. July 2008.*

International Presentations

Camp, NJ = (6)

"Haplotype analysis in association studies:hapMC and hapConstructor in Genie," *Social Genetic and Developmental Psychiatry Center at the Institute of Psychiatry, London U.K. July 2008.*

"Localizing Susceptibility Genes for Prostate Cancer: New linkage techniques applied to data from the International Consortium for Prostate Cancer Genetics" *Statistical Genetics Group, Kings College London, U.K. July 2008.*

"Identifying Rarer Genetic Variants for Common Complex Diseases: Diseased versus Neutral Discovery Panels" *North of England Genetic Epidemiology Group, Newcastle, U.K. July 2008*

"hapConstructor: Informing the search for breast cancer susceptibility variants in CASP8" *Institute of Cancer Studies, University Sheffield Medical School, Sheffield, U.K. July 2008.*

"Meta Genetic Association of Colorectal Cancer and SNPs at 8q24, 9p24, and SMAD7" *Genetic Epidemiology Division, Cancer Research UK Clinical Centre, Leeds, U.K. July 2008.*

"Genetic Epidemiologic Studies of lymphoproliferative disorders in Utah" *North Trent Research Network, Sheffield, U.K. July 2008.*

ORAL PRESENTATIONS Keynote/Plenary Lectures Meeting Presentations

Staes CJ, Xu W, Davidson A, Lynch C, Lenert L. Improving Public Health Reporting: Use Cases, Knowledgebase Development, and a Federated Model. Panel presentation given at the 2008 AMIA Spring Congress; Phoenix, AZ; May 30, 2008.

Staes CJ. "Informatics Challenges and Opportunities with Public Health Case Reporting." Invited presentation for a pre-conference workshop organized by the National Center for Public Health Informatics, CDC. 2008 Annual Conference of the Council of State and Territorial Epidemiologists (CSTE). Denver, CO; June 8, 2008.

Presented "Utah's Center of Excellence in Public Health Informatics: GRID-The Next Generation of Technology" for the national Connection Meeting sponsored by the Public Health Informatics Institute, April 22-24, 2008.

Publications

Hall ES, Poynton MR, Narus SP, Thornton SN.

"Modeling the Distribution of Nursing Effort Using Structured Labor and Delivery Documentation." *Journal of Biomedical Informatics.* 2008 Apr 20. [Epub ahead of print]

D Sorenson², C Grissom¹, L Carpenter¹, **AH Morris**^{1,2}, A Austin¹, **K Sward**², L Napoli¹, **HR Warner**² Frame-based Knowledge Engineering for a Bedside Application: Ventilator Weaning. *J Biomed Informatics* 2008; 41:461-468.

K. Sward, PhD, RN¹, J. Orme, Jr., MD², **D. Sorenson**, PhD¹, L. Baumann, RN², and **A.H. Morris**, MD. Patterns of noncompliance with recommendations from a computerized insulin protocol. *J Biomed Informatics* 2008; 41:488-497.

AH. Morris, M.D,¹ J Orme, Jr. MD, C Grissom, MD¹, KH Lee MD, J Steingrub, MD, J Truwit, MD, L Guoliang, BT Thompson, MD, R Brower, MD, M Tidswell, MD, D Sorenson, PhD, **K Sward**, RN,MS, D Schoenfeld PhD, H Warner, MD, PhD. Methods for controlling blood glucose in the ICU: Computerized vs. Paper-based protocols, vs. Usual care. *Crit Care Med* 2008; 36:1787-1795.

BT Thompson¹, J Orme, Jr. MD,² JD Truwit, MD³, J Steingrub, MD⁴, C Grissom, MD², R Brower, MD⁵, Terry Clemmer MD², M Tidswell, MD³, G Bernard⁶, MD, **D Sorenson**, PhD⁷, **K Sward**, RN,MS⁸, H Zheng PhD⁹, D Schoenfeld PhD⁹, **H Warner**, MD, PhD⁷, Martha Curley RN. **AH. Morris**, MD². Multicenter Validation of a Computer-based Clinical Decision Support Tool for Glucose Control in Adult and Pediatric Intensive Care Units. *J Diabetes Science Technology* 2008; 2: 357-368.

Staes CJ, Evans RS, Rocha BHSC, Sorensen JB, Huff SM, Arata J, **Narus SP**. (May/June 2008). Computerized alerts improve outpatient laboratory monitoring of transplant patients. *J Am Med Inform Assoc*, 15(3), 324-332.

Bouhaddou O, Warnekar P, Parrish F, Do N, Mandel J, Kilbourne J, **Lincoln MJ**.

Exchange of computable patient data between the Department of Veterans Affairs (VA) and the Department of Defense (DoD): terminology mediation strategy. *J Am Med Inform Assoc.* 2008 Mar-Apr;15(2):174-83. Epub 2007 Dec 20.

PMID: 18096911 [PubMed - indexed for MEDLINE]

Publications Continued

Rausch T, Thomas A, Camp NJ, Cannon-Albright LA and Facelli JC. (2008). A Parallel Genetic Algorithm to Discover Patterns in Genetic Markers that Indicate Predisposition to Multifactorial Disease. *Computers in Biology and Medicine*, 38, 826-836.

Price RC, Bradford W, Bazterra VE and **Facelli JC.** (2008). Digital Sherpa: A Set of High Level Tools to Manage Scientific Applications in a Computational Grid. *Mardi Gras 2008 Conference, Baton Rouge, Louisiana, Baton Rouge*, 320, 1-7.

Clawson J, **Olola C**, Heward A, Patterson B, Scott G. Ability of the medical priority dispatch system protocol to predict the acuity of "unknown problem" dispatch response levels. *Prehosp Emerg Care*. 2008 Jul-Sep;12(3):290-6.

Clawson J, **Olola C**, Heward A, Patterson B, Scott G. The Medical Priority Dispatch System's ability to predict cardiac arrest outcomes and high acuity pre-hospital alerts in chest pain patients presenting to 9-9-9. *Resuscitation*. 2008 Jun 16. doi:10.1016/j.resuscitation.2008.03.229 [Epub ahead of print]

Clawson J, **Olola C**, Scott G, Heward A, Patterson B. Effect of a Medical Priority Dispatch System key question addition in the seizure/convulsion/fitting protocol to improve recognition of ineffective (agonal) breathing. *Resuscitation*. 2008 Jul 23. doi:10.1016/j.resuscitation.2008.06.006 [Epub ahead of print]

Thomas A, Camp NJ, Farnham JM, Allen-Brady K, Cannon-Albright LA. (2008). Shared Genomic Segment Analysis. Mapping Disease Predisposition Genes in Extended Pedigrees Using SNP Genotype Assays. *Ann Hum Genet*, 72(Pt 2), 279-87.

Meystre SM, Savova GK, Kipper-Schuler KC, Hurdle JF. Extracting information from textual documents in the electronic health record: a review of recent research. *Year Med Inform*. 2008:128-44. PMID: 18660887 [PubMed - in process]

Meystre SM, Haug PJ. Randomized controlled trial of an automated problem list with improved sensitivity. *Int J Med Inform*. 2008 Sep;77(9):602-12. Epub 2008 Feb 15. PMID: 18280787 [PubMed - in process]

Lin RS, **Horn SD, Hurdle JF, Goldfarb-Rumyantzev AS.** Single and multiple time-point prediction models in kidney transplant outcomes. *Journal of biomedical informatics*. 2008 Mar 22.

Allen-Brady K, Miller J, Matsunami N, Stevens J, Block H, Farley M, Krasny L, Pingree C, Lainhart J, Leppert M, McMahon WM, Coon H. (2008). A high-density SNP genome-wide linkage scan in a large autism extended pedigree. *Mol Psychiatry*. Feb 19. [Epub ahead of print] PMID: 18283277

Cameron DJ, Yang Z, Tong Z, Zhao Y, Praggastis A, Brinton E, Harmon J, Chen Y, Pearson E, Bernstein PS, Brinton G, Li X, Jorgensen A, Schneider S, Gibbs D, Chen H, Wang C, Howes K, **Camp NJ**, Zhang K. (2008). 10q26 is associated with increased risk of age-related macular degeneration in the Utah population. *Adv Exp Med Biol*, 613, 253-8.

Gibbs D, Yang Z, Constantine R, Ma X, **Camp NJ**, Yang X, Chen H, Jorgenson A, Hau V, Dewan A, Zeng J, Harmon J, Buehler J, Brand JM, Hoh J, Cameron DJ, Dixit M, Tong Z, Zhang K. (2008). Further mapping of 10q26 supports strong association of HTRA1 polymorphisms with age-related macular degeneration. *Vision Res*, 48(5), 685-689.

Abo R, Knight S, Wong J, Cox A, Camp NJ. (2008). hapConstructor: automatic construction and testing of haplotypes in a Monte Carlo framework. *Bioinformatics*.

Cannon-Albright LA. (2008). Detection of aneurysms. *J Neurosurg*, 108(6), 1130-1.

Florell SR, Meyer LJ, Boucher KM, Grossman D, **Cannon-Albright LA**, Harris RM, Samlowski WE, Zone JJ, Leachman SA. (2008). Increased Melanocytic Nevi and Nevus Density in a G-34T CDKN2A/p16 Melanoma-Prone Pedigree. *J Invest Dermatol*, 128(8), 2122-2125.

Publications Continued

Allen-Brady K, Horne BD, Malhotra A, Teerlink C, Camp NJ, Thomas A. (2008). Analysis of high-density SNP data: three novel methods that control for linkage disequilibrium between markers in a linkage analysis. *BMC Proc, 1(Suppl 1)*, S160.

Christensen GB, Cannon-Albright LA, Thomas A, Camp NJ. (2008). Extracting disease risk profiles from expression data for linkage analysis: application to prostate cancer. *BMC Proc, 1(Suppl 1)*, S82.

Jones SS, Thomas A, Evans RS, Welch SJ, Haug PJ, Snow GL. (2008). Forecasting daily patient volumes in the emergency department. *Academic Emergency Medicine, 15*, 159--170.

Jones SS, Evans RS, Allen TL, Thomas A, Haug PJ, Welch SJ, Snow GL. (2008). A multivariate time series approach to modeling and forecasting demand in the emergency department. *Journal of Biomedical Informatics*, May 17 [Epub ahead of print] PMID: 18571990

PEER-REVIEWED JOURNAL ARTICLES

Staes CJ, Evans RS, Rocha BHSC, Sorensen JB, Huff SM, Arata J, Narus SP. (May/June 2008). Computerized alerts improve outpatient laboratory monitoring of transplant patients. *J Am Med Inform Assoc, 15(3)*, 324-332.

Calendar of Events

Morgan Award Competition Opens	Aug 1, 2008
Orientation Fall 2008	Aug 20, 2008
Fall 2008 Semester Begins	Aug 25, 2008
Morgan Award Submission deadline	Sep 15, 2008
IGES/GAW16	Sep 17-20, 2008
InfoFair	Nov 7, 2008
Fall Break	Oct 13-17, 2008
Morgan Award Seminar	Oct 21, 2008
Fall AMIA	Nov 8-12, 2008
Utah Reunion at AMIA	Nov 10, 2008
American Society of Human Genetics	Nov 11-15, 2008
BMI Holiday Social	Dec 10, 2008
Fall Semester Classes End	Dec 12, 2008
Fall Semester Final Exam Period	Dec 15 - Dec 19
Spring Semester Begins	Jan 12, 2009
NLM Trainee Evaluations	Feb
AMIA Paper Submissions Due	March 2009
Spring Break	Mar 16-21, 2009
Houtchens Award Submission dead-	March 31, 2009
Gardner Award Nominations	April
HIMSS Conference 2009	Apr 4-8, 2009
Spring Semester Ends	Apr 29, 2009
Spring Final Exam Period	May 1-7, 2009
Summer Semester	May 18 - Aug 5

Do you have items for the newsletter?

If you have items for the next newsletter you can submit them **at any time** up to the deadline, *September 26, 2008*, to Teri Birch at teri.birch@hsc.utah.edu. Items of interest include new grants and contracts, awarded or applications submitted; papers and publications published; talks and presentations given, participation in meetings, posters presented; work or research or awards or honors that show what BMI students and faculty are doing in the informatics community. For more information, contact Teri at the above address or call her at (801) 213-3377.

If you have an idea for improving the BMI Buzz, contact Teri, or Dr. Scott Narus, newsletter advisor.

Change of email address?

If your email address or other contact information changes, please contact BMI secretary JoAnn Thompson at joann.thompson@hsc.utah.edu. She keeps track of student and alumni records and contact information.