

June 12, 2004

Dear Center for Emerging Infectious Diseases investigators and associates,

We have **much good news** regarding our Center....

NEW PERSONNEL:

Tara Smith, PhD, will join the Epidemiology Department of the UI's College of Public Health (CPH) and fill the Department's new **Molecular Infectious Disease Epidemiologist** faculty position. Tara earned her BS in Biology at Yale, her PhD in Microbiology at the Medical College of Ohio, and recently completed a postdoctoral fellowship at the Center for Molecular and Clinical Epidemiology of Infectious Diseases at the University of Michigan's School of Public Health. She has considerable research experience and interest in a number of bacteria including: Group A and Group B streptococci and Haemophilus influenza

Jim Gill, MD, PhD, a zoonotic disease expert at the UI's Hygienic Laboratory (UHL), has joined our Center as a new investigator. Jim has special interests in tick-borne diseases and has recently won a grant with us to study wildlife workers for evidence of avian influenza infections. See grant news below. He has promised to help us establish a zoonotic disease course that we hope to first offer in the summer of 2005.

Mark LeBeck and **Debbie Korte** will join the Emerging Pathogens Laboratory this summer as research assistants. Mark a former Peace Corps worker has 3 years of molecular experience and a major interest in international health. Debbie also has considerable molecular experience as well as some unique tissue and viral culture experience from her 4 years of work at Fort Dodge Animal Health.

We have 3 students working or volunteering in our Emerging Pathogens Laboratory this summer. **Sarah Starks** (PhD student, UI CPH), **Sandy Olson** (MS student, University of Wisconsin), and **Heather Gray** (undergraduate, Azusa Pacific University). All are learning the various molecular, culture, and serologic techniques we use in studying adenovirus, human metapneumovirus, and zoonotic influenza infections.

TEACHING/TRAINING:

New course a hit with distance learners - **Mike Pentella** and **Greg Gray** offered a new course this spring, **Diagnostic Microbiology for Epidemiologists (173:155)**. We had 15 students, 8 of which tuned in from 5 different Iowa Cable Network (ICN) sites. The course was run from the UHL's new, well-equipped ICN room. The course was well-received and the Dept of Epidemiology plans to offer it again next spring. Mike has agreed to direct next year's course. You may view Lucy DesJardin lecturing about molecular diagnostic methods at:

http://itsnt155.iowa.uiowa.edu/vwb/vs_webcasting/viewer/lv?e=188

In the Jungle Now - Two of our CPH students (**Stacy Holzbauer, DVM** and **Kaitlin Rainwater**) are presently conducting tropical infectious disease research in **Iquitos, Peru** along side US DoD and CDC researchers. Iquitos is a small town on the Amazon River. Stacy and Kaitlin have sent us messages that they are enjoying their work and they have promised to present their research via seminars in the summer & fall.



Recent photo of Stacy Holzbauer (left) at the Dengue Control office and riding a river boat (left) on the Amazon near Iquitos, Peru

Mike Parker, DVM, and Tina Parker DVM, also CPH students, are planning to fly to the jungle and take Stacy's and Kaitlin's places in late July. Note that the students' summer research work has been sponsored by **James Olson, Patrick Blair, and Jeff Stancil** of the Navy lab in Lima and partially funded by UI's **Center for International Rural and Environmental Health** as well as our **Center for Emerging Infectious Diseases**

Epi of ID lecturers to be filmed. Due to a request from **Radford Davis** and two CPH students located at ISU, this fall **Epidemiology of Infectious Diseases (173:255)** will be digitally recorded and the lectures made available via the course web-site. We thank **Ray Bennett** and his team for offering to do this such that the ISU students can take the course.

JOB / TRAINING OPPORTUNITIES

Data Analysts Needed for US Infectious Disease Research in Egypt - If you have Masters or PhD level training with an emphasis in epidemiology and biostatistics then this unique opportunity may be for you. Shan Putnam (UI CPH PhD in epidemiology) tells me there will likely be 1 or 2 opportunities for professionals to join a US Navy/CDC team of enteric disease researchers in Cairo, Egypt for at least 1 year. **The salary, housing, transportation, and other benefits are outstanding.** You would help to coauthor numerous research publications and enjoy some very interesting travel. The multi-disciplined team is located in a very large, well-established laboratory with BL-3 capabilities (see <http://www.nmrc.navy.mil/namru3.htm>). If you are interested, send your resume and the date you would be available to Dr. John Sanders (sandersj@namru3.org). NAMRU3 was an excellent first research position for me (Greg Gray).

Part-time Data Manager / Analyst Needed in Iowa City – The Center for Emerging Infectious Diseases will soon post an advertisement for a 50% time data manager/web site developer to support a 5-year NIAID grant to study adenoviruses. The ideal candidate would have 1-2 years experience in SAS programming and website development using Dreamweaver software. A masters degree in epidemiology or biostatistics is desired. This position will likely quickly become a full-time position and a long term employee is desired. For more information contact Dr. Gray at gregory-gray@uiowa.edu

NIAID funded post-doc positions in Iowa City - Jack Stapleton of UI's College of Medicine has two NIAID funded post-doc positions in pathogenesis of **bacterial, viral or parasitic diseases**. Candidates must be a US citizen or have a green card. Jack may be contacted via Jack-Stapleton@uiowa.edu.

Get Paid to Go to the Beach – How easy is this? Work on your tan while making \$8/hr for 15-30 hours per week recruiting epidemiology study subjects. The **Iowa Beach Study** (see more information in the research news below) is looking for 6 responsible assistants willing to distribute research study flyers to beachgoers on weekends at 3 Iowa Lakes: Backbone, Rock Creek, and Pleasant Creek during the last week of July through September 6, 2004. Transportation to and from the lakes and a money for lunch will be provided.

Supplementally, CPH graduate students in these positions may volunteer to add a fall preceptorship (data analysis with Dr. Bill Field) and/or academic credit through special study (fall laboratory training with UHL's Nancy Hall) to their employment with this study. Persons interested in these positions should send their resume with telephone number to Janice Boekhoff of the DNR, jboekhoff@igsb.uiowa.edu, and Greg Gray (CPH), gregory-gray@uiowa.edu.

Emerging Infectious Diseases (EID) Laboratory Fellowships or Post-Doctoral Laboratory Research Fellowships - Students or postdocs interested in these positions should contact Beth Hochstedler, the University Hygienic Laboratory's Training and Outreach Coordinator at 319-335-4303 or e-mail: beth-hochstedler@uiowa.edu. **These programs offer annual stipend, medical insurance, funds to travel to host laboratory and funds for travel to professional or scientific meetings.**

University Hygienic Laboratory—Student Help Needed - UHL is seeking a student to assist with testing for West Nile Virus. Work will involve assisting technologists in the preparation and testing specimens and other duties as required. This position requires that a person that is preferably available to work in the mornings, maintain a consistent work schedule, and estimate a 20 hour per week commitment. The position is available to all persons including UI work-study students. Experience in public health, infectious diseases, microbiology, or clinical laboratory work is preferred. Please send resume or requests for additional information to: Lucy E. DesJardin, Ph.D., University of Iowa Hygienic Laboratory, 102 Oakdale Campus, H-101-OH, Iowa City, Iowa 52242-5002 ldesjard@uhl.uiowa.edu, 319-335-4339

Potential Student Clinical Thesis Project – A business is seeking collaborators to conduct a clinical trial to evaluate their hand sanitizer as an intervention to reduce acute respiratory infections. They have identified a local population and will provide the supplies. This could be a very nice student thesis project and may lead to a publication. Interested students should contact Dr. Gray, via his email: gregory-gray@uiowa.edu.

Graphic Art Logo Contest – The **Iowa Beach Study** is sponsoring a contest to develop a study logo. This logo would be printed on T-shirts for study staff and subjects, and used in flyers and on the study web-site. In addition to receiving a study T-shirt, the contest winner will likely see his/her design worn throughout the malls of Eastern Iowa. Designs should be submitted to Dr. Bill Field via email Bill-Field@uiowa.edu no later than **June 20, 2004**. The image file must be JPG or GIF - 500 x 400 pixels @ 72 dpi (minimum). Smaller images will not be accepted.

OPPORTUNITIES WANTED

Part-time Work Wanted - A recent graduate of our MPH program is looking for part-time work for 2 to 12 months. She is available in mid-July. She has considerable epidemiology field, SAS and web site development experience. For more information please her (Meghan Harris): mlharris103@yahoo.com, tel (319) 845-4064/ cell (319) 330-5903.

NEWLY FUNDED RESEARCH GRANTS /CONTRACTS:

James Gill (PI) 6/1/04-5/31/06

Are Iowans Exposed to Wild Ducks, Geese, and Game Birds at Risk of Avian Influenza Infections?

Center for Health Effects of Environmental Contamination University of Iowa

This is a cross-sectional pilot study of occupational groups exposed to ducks, geese, and game birds

NEWLY SUBMITTED GRANTS:

Charles Grose (PI) 8/1/04-7/30/09

Varicella Zoster and Influenza Virus Diseases in Iowa

Response to CDC PA 04116

Establishes population-based surveillance for varicella, zoster, and influenza across Iowa

James Gill (PI) 6/1/04-5/31/06

Avian Influenza among Wildlife Professionals

Response to NIH-NIAID-PA-03-080

Cross-sectional study of wildlife workers for evidence of avian influenza virus infection

Sandy Olson (Graduate Student) Gregory C. Gray (PI) 7/25/04-6/30/05

Poultry Handling Safety Study

Epidemiology Department funds

Pilot study of occupational risks for avian influenza at county fairs

Gregory C. Gray (PI) 7/01/04-6/30/07

Study of Iowans Colds that can Kill (SICK)

Response to CDC Program announcement 04109.

This is a 3-year, annual evaluation of influenza vaccine effectiveness in the United States

All grant / contract activity may be found at the Center web site:

<http://www.public-health.uiowa.edu/CEID/Projects.htm>

RESEARCH NEWS:

National Surveillance for Emerging Adenovirus Infections – The Center has recently won a 5-year, NIAID grant of this title and is in the process of selecting 15 laboratory sites across the nation to collaborate. An investigator meeting is planned for the fall. The investigators will attempt to generate new molecular typing algorithms for human and possible animal adenoviruses.

Swine influenza infections in man – **Kendall Myers**, PhD student in the CPH's Occupational and Environmental Health Dept, in pursuit of her dissertation, has helped to design and manage three cross-sectional studies of Iowans at risk of zoonotic influenza. Early laboratory results (conducted by the Emerging Pathogens Laboratory's Sharon Setterquist) indicate a **high proportion of veterinarians and rural farmers** have serological evidence of emergent swine influenza virus infections. Remarkably, as many as **25%** of these groups have such serological evidence of infection.

Hawkeye Flu Study – UI CPH staff and students aided the CDC in an emergency evaluation of influenza vaccine effectiveness this winter. With the gracious support of the **James Merchant** (Dean, CPH), **Phillip Jones** (UI Vice President for Student Affairs), and **Mary Khowassah** (Director, Student Health) over a period of weeks beginning on the academic break in December, the team enrolled more than 2900 students via a web-based survey and followed them for influenza disease. Participation involved subjects completing enrollment, biweekly, and end-of-study questionnaires and considering the holidays was extremely high at ~86%! Participants were asked to seek medical evaluation in Student Health when they developed flu-like illnesses and a team

of student evaluators screened them when ever doors were open. Considering all the barriers to success, this new innovative effort was remarkable for it's emergency execution and set up. The team included: **Rebecca Chackalacakal**, **Robert Harris**, and **Gayle Nelson** of Student Health Services; **Sandra Jirsa** and **Lucy DesJardin** of the UHL; **Kelly O'Berry**, **Mike Mueller**, and **John Hawkins** of UI's Preventive Interventive Center; **Greg Gray** and **Sharon Setterquist** of the Center for Emerging Infectious Diseases; **Niranjan Bhat**, **Keiji Fukuda**, **Mark Lamais**, **Craig Borkowf**, **Brian Santucci**, and **Tim Uyeki** of the CDC; and CPH graduate students: **Dianna Appelgate**, **Obiora Onwuamese**, **Ernesto Ortiz**, **Kaitlin Rainwater**, and **Sarah Starks**. Study photographs may be viewed at the Center web site's photo gallery: <http://www.public-health.uiowa.edu/CEID>

Trojan Chicken Study - **Sandy Olson** a graduate student from the University of Wisconsin (recommended by **Chris Olsen**) is spending her summer with the Center for Emerging Infectious Diseases to conduct her thesis project. Having been involved in the leadership of 4H for many years, she has designed a study of poultry handling safety at county fairs. As suggested by **Mike Pentella** of the UHL, she plans to use a harmless surrogate marker for avian influenza virus and to monitor chicken-to-person and chicken-to-chicken transmission in county fairs this summer. This study is very unique for its field work and digital photographic recording.

Avian influenza among Iowa's DNR workers and hunters – Jim Gill of the UHL will employ Center for Emerging Infectious Diseases laboratory staff and students in a cross-sectional study of wildlife workers this summer. In collaboration with CDC **Jackie Katz** (CDC), **Carolyn Bridges** (CDC), **Keiji Fukuda** (CDC), and **Richard Webby** (St. Jude's Childrens Hospital, Memphis, TN) we are adapting the various serological techniques to detect previous avian influenza infection in humans.

Iowa Beach Study – Investigators from UI's University Hygienic Laboratory, Iowa's DNR, the Center for Emerging Infectious Diseases, and the CPH's Department of Occupational and Environmental Health are collaborating this summer to conduct a web-based study of Iowans who frequent Iowa's fresh water beaches. The team plans to prospectively follow these beachgoers for diarrheal disease during that may be associated with bacterial contamination. The cohort will be followed during August and September. Researchers include: **Pete Weyer**, **Bill Field**, **Greg Gray**, **Sandy Olson**, **Nancy Hall**, **David Riley**, **Michael Wickhman**, **Janice Boekhoff**, and **Eric O'Brien**.

How Do We Study CAFO Workers? – **Karry Jannie**, graduate student in the CPH, has dedicated her MPH practicum this summer to describing confined animal feeding operation (CAFO) workers. Her goal is to learn who they are, where they live and how we might in the future study them for evidence of zoonotic infections. She is linking up with various state and county health workers, and academicians to describe these workers and their access to health care.

Risk Factors for Human Metapneumovirus Infection – **Sarah Starks**, PhD student in epidemiology at the CPH, is performing complex data analyses of Univ. of Iowa's Health

Care data with UIHC's **Newell Nobbs**, and **Greg Gray** this summer with the goal to identify risk factors for human metapneumovirus infections. She will link these rather messy data with the laboratory data **Sharon Setterquist** and CPH students are generating from studying ~1500 archived viral culture specimens. This is a NIAID funded RO3 grant.

New influenza vaccine trial likely – While we cannot be sure, indications are very good that the Center for Emerging Infectious Diseases (**Greg Gray** and **Jody Murph**) and the Center for Preventive Interventive Center (**Kelly O'Berry**, and a cast of **others**) will collaborate in enrolling children in a large, double blind, double-dummy influenza vaccine trial comparison this fall.

S.I.C.K. – UI's Center for Emerging Infectious Diseases, UI's Preventive Interventive Center, and the UHL have just submitted a large grant application to annually evaluate influenza vaccine effectiveness among healthy person >5 years of age at three sites across Iowa. This **Study of Iowans Colds that can Kill (SICK - acronym coined by Neal Kohatsu)** would use a web-based study system to enroll and follow 8,000 persons each winter for influenza disease. Patients who meet a case-definition would be evaluated with laboratory testing at 3 Preventive Interventive Center clinics. Investigators and staff include: **Regina Arthur, Jane Bravick, Sandra Jirsa, Lucy DesJardin, Deb Fedderson, John Hawkins, Karla Hurley, Neal Kohatsu, Mike Mueller, Kelly O'Berry, Sandy Jirsa, and Sharon Setterquist.**

ANNOUNCEMENTS

Congratulations to **Kevin Ault, MD!** Kevin was recently elected **President of the International Infectious Diseases Society for Obstetrics and Gynecology – USA** at their annual meeting in Philadelphia May 1, 2004.

Congratulations to **Dr. Patty Quinlisk**, Iowa's state epidemiologist. On Tuesday, June 8th, 2004, during an evening banquet at the Council of State and Territorial Epidemiologists (CSTE) conference in Boise Idaho, Dr Quinlisk, received the organization's highest honor, the **John Snow "Pump Handle" Award** for her outstanding service to the CSTE in general and the promotion and use of epidemiology as the basic science of public health, specifically. Dr. Quinlisk has been very active in the College of Public Health.

BiodefenseEducation.org is a Biodefense Digital Library and Collaboratory which serves as a source of continuing education on biodefense affairs. The web site is managed by UI's Donna M. D'Alessandro, M.D. and Michael P. D'Alessandro, M.D

The **Center for National Animal Health Surveillance** invites interested professionals to subscribe to it's surveillance news mailing list. See:

<http://www.aphis.usda.gov/vs/ceah/cahm/index.htm>

NEW PUBLICATIONS / MANUSCRIPTS:

Boivin, G, Mackay, I Madhi, S, Freymuth, F, Wolf, D, **Gray, GC**, LeBlanc, E. Global Genetic Diversity of the Human Metapneumovirus Fusion Gene. *Emerg Infect Dis*, 2004;10:1154-7. See: <http://www.cdc.gov/ncidod/EID/vol10no6/03-1097.htm>

Ault KA, Giuliano A, Edwards R, Suhr G *et al.* A Phase I Study to Evaluate a Human Papillomavirus (HPV) Type 18 L1 VLP Vaccine. *Vaccine* (in press.)

Oberley R, Levesque T, **Ault KA**, Snyder J. The effect of surfactant protein A and surfactant protein D on the phagocytosis of *Chlamydia* by macrophages. *American Journal of Physiology* (in press).

Gray GC, Setterquist SF, Jirsa SJ, DesJardin LE, Erdman DE. An emergent strain of human adenovirus has become endemic in Iowa. Under journal review.

NEW ABSTRACTS:

Gaydos CA, Ginocchio C, LeBar W, Lovchik J, Hammerschlag M, Mazzulli T, Gray GC, Khalil A, Wood B, Rothman R. Performance of the BDProbeTec™ ET System for the Detection of the *Chlamydiaceae* family and Its Evaluation in Clinical Respiratory Specimens. American Society for Microbiology 104th General Meeting, May 23-27, 2004, New Orleans, LA.

Gray G, Duffy L, Gaydos CA, Ginocchio CC, LeBar W, Lovchik J, Hammerschlag M, Mazzulli T, Rothman R. BD ProbeTec™ ET System for the Detection of the *Mycoplasma pneumoniae* from Clinical Respiratory Specimens. American Society for Microbiology 104th General Meeting, May 23-27, 2004, New Orleans, LA.

PRESS COVERAGE:

Our new adenovirus project received some media coverage on 6/10/04:

UI Center Receives \$2.8 Million Grant To Study Respiratory Illness Virus

The Center for Emerging Infectious Diseases (CEID), based in the University of Iowa College of Public Health, has been awarded a five-year, \$2.8 million grant by the National Institute of Allergy and Infectious Diseases to study a virus associated with respiratory infections. For full story see:

<http://www.uiowa.edu/~ournews/2004/june/061004respiratory-virus.html>

UPCOMING EVENTS:

June 17, 2004 - Region 5 Bio-Emergency Preparedness Conference, time: 10:00 am to 3:30 pm. Dr Russ Currier will be speaking about zoonoses at a one-day conference at the Ivy Restaurant, Hwy 34 West, Mt Pleasant. Steve Mercer, IDPH, will be joining him to speak about the SNS. Please contact Region 5 education coordinator, R.D. Keep, at ema@mahahaskacounty.org to sign up!

June 23rd, 2004 - Center for Emerging Infectious Diseases investigator informal dinner meeting (6-8:00PM, The Sanctuary, 405 S Gilbert St, Iowa City) See: <http://www.sanctuarypub.com>

Oct 2, 2004 - Kevin Ault MD (Obstetrics and Gynecology, Epidemiology) will be giving a talk entitled "Human Papilloma Virus Vaccines" at the annual meeting of the **Infectious Diseases Society of America in Boston**. This lecture will be part of a session entitled "Bridging the Generation Gap in Vaccines." <http://www.idsociety.org/>

October 14-16, 2004 – a meeting of researchers and public health officials regarding TSEs "**Animal Prion Diseases and the Americas**" will take place on October 14-16, 2004, in Ames, Iowa. See: <http://www.ustse2004.com>

October 21, 2004 – **Human prion disease epidemiology**, Grand Rounds presentation from 12:00 – 1:00 p.m. at room 20 Nursing Building, by Dr. James Torner, Professor and Head, Department of Epidemiology, College of Public Health, University of Iowa

July 10-13 2005 - International Society for STD Research Amsterdam, Netherlands July 10-13 2005. <http://www.isstdr.org/>

The Center for Emerging Infectious Diseases greatly appreciates your collaboration.

Please help us make the Center useful to you. Let me know if you have ideas to share, grant proposals to draft with others, opportunities for students, or email news that would be appropriate for such periodic email messages such as these. Please also let me know if you have recommendations to improve our Center web site.

My best,

Gregory C. Gray, MD, MPH
Professor, Department of Epidemiology
College of Public Health University of Iowa
200 Hawkins Dr, C21K GH
Iowa City, IA 52242
Tel 319 384-5008
Fax 319 384-5004

Director, Center for Emerging Infectious Diseases
<http://www.public-health.uiowa.edu/CEID>