

Remember Father's Day
June 17!



3rd Annual Year in Review Symposium

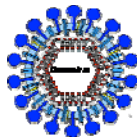
The Department of Molecular and Comparative Pathobiology will present its 3rd Annual Year in Review Symposium, June 22, 2007, in the PCTB West Lecture Hall, from 8am-3pm. Seating is limited. Contact YIR07@JHU.EDU for FREE registration.

The 2007 symposium will focus on the Molecular and Comparative Pathobiology of Cardiovascular Diseases. Faculty speakers include Dr. Chris Zink, Dr. David Graham, Dr. Kathleen Gabrielson, Dr. Joe Mankowski, Dr. Craig Morrell, Dr. Cory Brayton, Dr. Baktiar Karim, and Dr. Julie Watson.

Dr. Francois-Xavier Meslin, DVM, PhD will present the keynote address: Zoonoses: International Approaches for Detection and Containment. Dr. Meslin is the World Health Organization (WHO) Coordinator for Strategy Development and Monitoring of Zoonoses, Foodborne Diseases and Kinetoplastidae (ZFK); Department of Control, Prevention and Eradication (CPE) Communicable Disease Cluster (CDS). He currently heads the WHO team in charge of strategy development and monitoring of zoonoses, foodborne diseases, cholera and other epidemic enteric diseases, leishmaniasis and African trypanosomiasis in the Department of Communicable Diseases Control, Prevention and Eradication, in Geneva, Switzerland. For more information and schedule of events, go to http://www.hopkinsmedicine.org/mcp/Front_page/YIR_poster_2007.pdf



http://www.hopkinsmedicine.org/mcp/Front_page/YIR_poster_2007.pdf



Mouse Surveillance

Rodent health surveillance continues to evolve to support modern research needs. Not long ago, many research mouse colonies had mousepox, respiratory mycoplasmosis, Sendai virus, epizootic diarrhea of infant mice, mouse hepatitis virus, and parasites. Methods to detect and exclude infections were limited, so many infections were tolerated. Infections were evident when susceptible mice became ill and died. Infected survivors were the only available research subjects.

Today's most prevalent infectious agents typically do not cause obvious clinical signs, and may be difficult and expensive to detect, (e.g. mouse parvovirus (MPV) or rodent helicobacters). Pinworms and mites persist in the environment and evade barrier caging systems. Opportunists (e.g. *Pneumocystis murina*) that cause illness or death in immunodeficient animals can be very difficult to detect in more competent mice.



But clinically silent infections can impact a wide variety of research areas, by immunomodulating, or by cell-specific alterations or necrosis.

MPV chronically infects immune

cells. Various parvoviruses infect and damage rapidly dividing cells (including developing tissues or tumor cells).

Helicobacters, with more than 20 species that infect rodents, can cause lifelong inflammation in the liver and gastrointestinal tract. Even pinworms, long thought to be merely a nuisance, invade mucosa and elicit immune responses that clear infestations to very low levels in competent animals. Some parasites, such as free-living mesostigmatid mites, are being detected in rodent colonies for the first time in many years, and may carry bloodborne zoonotic diseases.

Research Animal Resources (RAR) and Dr. Julie Watson have developed cost effective helicobacter testing, and a cross-fostering program to eliminate mouse pathogens from valuable but infected mouse lines at JHU. RAR continues to investigate and implement novel strategies for disease detection and prevention, including the use of insect-specific growth regulators, new methods to control pinworms, and testing for the emerging agent murine Norovirus. *Continued on page 2.*



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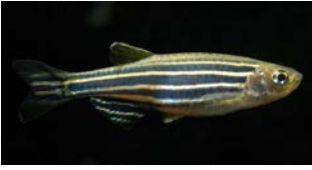
June 2007 Events

June 26 Slide Conference Page 2

Upcoming 2007 Events

Courses at Charles River, Cold Spring Harbor, Covance, Jackson etc.

<http://www.hopkinsmedicine.org/mcp/PHENOCORE/UPcoming.html>



Interested in Mouse, Rat or Zebrafish Phenotypes?



A new intensive 3-day workshop/symposium: **Pathology of Genetic Engineered Rodents and Aquatic Species, An Introduction to Phenotyping, will be held July 25-27, 2007, in Madison, Wisconsin.**

Technologies to manipulate genomes of mice, rats and zebrafish continue to improve, and use of these species in the development of genetically relevant models of human diseases continues to increase.

Characterizing induced phenotypes, and distinguishing those from spontaneous phenotypes, and phenotypes related to common infections is becoming increasingly important.

The program targets pathologists (MD, DVM, VMD), scientists and veterinarians,

who are becoming more involved in various aspects of phenotyping.

More than 20 hours of contact time, includes a health surveillance round table, and an evening virtual microscopy slide conference. Topics include:

- Mouse and Gene Nomenclature
- Spontaneous, strain-related, age-related, and Infectious/Infected Phenotypes in Mice
- Clinical Phenotyping and Physical Examination of Mice
- Imaging Strategies for Phenotyping
- Rodent Clinical Pathology
- Spontaneous, strain/stock-related, age-related, and Infectious/Infected Phenotypes in Rats

- Introduction to Zebrafish Biology, Pathology and Phenotyping
- Tuition:** \$300 for CLDavis Foundation Members, \$375 for Non-members (includes 1 yr membership). Registration/tuition includes proceedings in electronic format and a DVD of the virtual microscopy conference slides.

The CLDavis foundation presents more than 30 annual scientific and pathology-related symposia, seminars, or workshops in Africa, Australia, Europe, India, North and South America.

For more details and registration go to: www.cldavis.org/courses/upcoming.html

Mouse (Health) Surveillance (cont from page 1)



For more information, references and resources about infectious agents that impact mice and research, go to:

<http://www.hopkinsmedicine.org/mcp/PHENOCORE/07phenocourseLec3-BraytonSponInfect.html>

For more information about the extensive testing and disease prevention strategies that protect JHU mice and research, go to <http://www.hopkinsmedicine.org/animalresources>. This site has much of the information that is required for import or export to share mice between institutions and countries, as well as information that may

be requested by peer reviewers of your publications or grant applications.

For additional or special testing of your mice, contact Dr. Watson at 5-3273 or JWatso19@jhmi.edu.



Comparative Pathology Slide Conference

The Department of Molecular and Comparative Pathobiology and the Phenotyping Core host an **informal monthly slide conference**, to emphasize recent interesting phenotyping and comparative pathology cases, and to provide a friendly and educational venue for colleagues within and outside of the JHU community to present and discuss interesting cases.

To be added to our mailing list, contact phenocore@jhmi.edu

The next slide conference will be Tuesday June 26, 2007, 4-6PM, in 801 BRB. Please email cbrayton@jhmi.edu if you have slides or a case that you would like to present.

Cases from May 15, 2007:

Dr.'s Southard, Brayton – mouse – otitis & brain abscesses

Dr.'s Southard, Brayton – mouse - oxyuri-

asis with nematode larvae in distal colon/rectum mucosa; gravid females in proximal colon; flagellate protozoa

Dr. Montali – hamster – flank glands

Dr. Brayton – rat – glioblastoma multiforme v histocytic sarcoma

Dr.'s Kelly, Trembley, Brayton – Xenopus – mycobacteriosis spleen, liver, kidney; lung necrosis with many gram positive, acid fast bacilli (AFB), intravascular AFB

Dr. Southard – poison dart frog – renal cysts and nephritis

Dr. Southard – finch – encephalitis perivascular (r/o viral)

May 2007 – What's your diagnosis: **Mouse, Heart atrial-auricular thrombus**

For additional information and references, Follow links from:

<http://www.hopkinsmedicine.org/mcp/phenotypingcore/newsletter.html>.

[phenotypingcore/newsletter.html](http://www.hopkinsmedicine.org/mcp/phenotypingcore/newsletter.html).

WHAT'S YOUR DIAGNOSIS?
Tissue from a mouse.

