



## NEW & IMPROVED Luxury Housing for your ZEBRAFISH



Under the guidance of co-directors Dr. Shannon Fisher and Andy McCallion, with Steve Leach and Michael Parsons, JHU's ICE (Institute for Cell Engineering) and IGM (McKusick-Nathans Institute for Genetic Medicine) zebrafish facility has been expanded and outfitted with state of the art Aquatic Habitats fish housing.

After full completion this summer, the new facility in BRB will have capacity for 60,000 fish, in 1800 tanks, in an environmentally controlled, self cleaning, flow through system. Water for each tank is UV sterilized and delivered through independent valves, to maintain excellent water quality in each tank.

Learn more about ICE and IGM initiatives at: <http://www.hopkins-ice.org/> and <http://edipus.med.jhmi.edu/IGM/Home/Index.cfm>.

## Phenotyping Seminars & Meetings

In Madison, Wisconsin July 25-27, the **CL Davis Foundation Symposium: Pathology of Genetically Engineered Rodents and Aquatic Species, An Introduction to Phenotyping** attracted diverse registrants from Asia and North America. The busy 3 day program emphasized pathology of spontaneous and infectious diseases in mice, rats and Zebrafish, included a microbial surveillance round table, an Aperio virtual microscopy slide conference (for which participants stayed until 9pm for all 25 slides), and tours of a state of the art pathology laboratory. Resource materials provided to registrants included DVD's of the virtual slides, ample syllabus and extensive supplementary resources.

AT JHU upcoming Molecular & Comparative Pathobiology Friday Seminars include:

September 14, 1-2pm BRB 103: "**Genetically Engineered Mouse Resources - a global challenge**"; Franziska B. Grieder, DVM, PhD Director, Division of Comparative Medicine, NCRR, NIH

September 21, 1-2pm Turner G007 "**Canine influenza virus pathogenesis: Of mice and dogs**" William L. Castleman, DVM, PhD, DACVP; Pro-

fessor, Department of Pathobiology University of Florida, Gainesville, FL;

Contact Dr. Brayton to meet with either speaker: [cbrayton@jhmi.edu](mailto:cbrayton@jhmi.edu)

**IMGC Annual meeting in Kyoto, Japan. October 28-31** <http://www.imgc2007.com/>

**6th Annual Workshop on the Pathology of Mouse Models for Human Disease, at Jackson laboratory September 30- October 6:** For application information, contact [nancy.place@jax.org](mailto:nancy.place@jax.org)



### IN THIS ISSUE

Zebra Fish Facility	1
MORE Phenotyping, seminars etc	1
What's Your Diagnosis? Clinical Pathology	2
Slide Conference Update	2
What's Your Diagnosis? In a Xenopus	2

### Upcoming 2007 Events

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

SAVE THE DATE: February 19, 2008

Johns Hopkins Phenotyping Symposium  
III

# Clinical Pathology: What's Your Diagnosis?

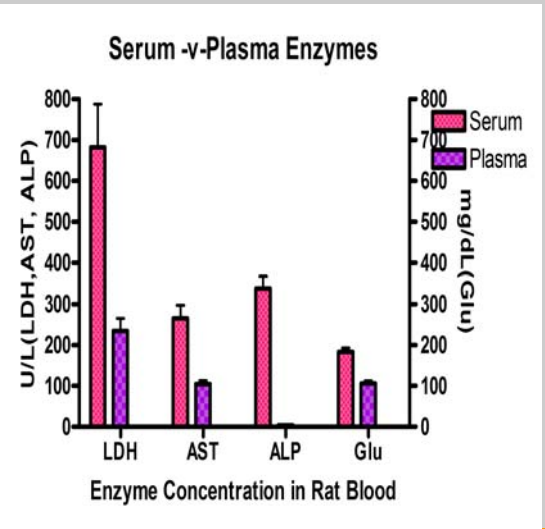
In this study, blood from the same anatomic site was drawn from 20 rats. Half of the blood volume was placed in a serum separator tube (gel tube) for serum chemistry, and the other half was placed in a lavender top, potassium EDTA tube for CBC analysis. Within 2 hours of drawing blood, serum was separated by centrifugation of the gel tube. After CBC's, within 4 hours of drawing blood, plasma was separated from remaining blood in the lavender top tubes.

A 12 analyte chemistry panel was performed on the serum and plasma specimens. Significant differences between results from serum and from plasma specimens were identified for AST, LDH, ALP and glucose. These discrepancies (see bar graph) illustrate some important principles of blood specimen preparation, handling and processing.

1. Why are LDH and AST values so much lower in serum compared to plasma specimens?
2. Why is ALP almost undetectable in plasma specimens?
3. Why is Glucose so much lower in the plasma specimens?

Answers next month.

LDH—Lactate Dehydrogenase  
AST Aspartate Aminotransferase  
ALP—Alkaline Phosphatase



## Slide Conference

The Department of Molecular and Comparative Pathobiology and the Phenotyping Core host an **informal semimonthly 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 or if you have slides or a case that you would like to present, contact [phenocore@jhmi.edu](mailto:phenocore@jhmi.edu)

The next slide conference will be Tuesday September 18, 2007, 4-6PM, in 801 BRB. Check <http://www.hopkinsmedicine.org/mcp/PHENOCORE/SlideConference.html> for more information and upcoming conference dates.

### Recent Cases (August 21)

- Dr.'s Manasse, Brayton - marmoset - Zygomycosis, mycotic gastritis, enteritis
- Dr.'s Manasse, Brayton - marmoset - Amyloidosis, spleen, liver, kidneys, adrenal, intestine, stomach, ovary
- Dr. Simons - mouse - model of Barrett's esophagus
- Dr. Simons - Tg mouse - Medulloblastoma
- Dr.'s Pate, Southard - Tg mouse - Rhabdomyosarcoma
- Dr.'s Mangus, Brayton - ICR mouse - ~ 5mo generalized lymphoma
- Dr.'s Brice, Brayton - ICR mouse - ~ 5mo Astrocytoma
- Dr.'s Southard, Brayton - B6,129 ++ mouse - Pituitary adenoma
- Dr. Pierce - Rooster - *Knemicocptes mutans*, hyperkeratosis + acariasis
- Dr. Pierce - Cat - Pneumonia, abscesses, pyothorax, 3+ *Moraxella* sp isolated
- Dr. Pierce - mini foal - Pneumonia, abscesses, *Rhodococcus equi* isolated
- Dr. Montali - Chicken - Fowl pox, Bollinger bodies
- Dr. Montali - Hamster - Flank gland melanocytoma

## What's Your Diagnosis?

July 2007: Mouse; colitis, IBD, *Helicobacter*

For additional information and references Go to <http://www.hopkinsmedicine.org/mcp/phenotypingcore/newsletter.html>.

August-September WHAT'S YOUR DIAGNOSIS ?  
*Xenopus laevis* liver; Ziehl Neelsen stain

