### Division of Gastroenterology, Hepatology and Nutrition

Research

#### Research

Matthew Cave, M.D.

# Cave Research Industry Sponsored Clinical Trials

- Merck (hepatitis C protease inhibitor)
- Intercept (PBC FXR agonist)
- **Sucampo** (Wo, cytokines in motility disorder)

# Cave Research Liver Research Opportunities

- Occupational/Environmental Liver Disease
- Alcoholic Liver Disease
- Industry Sponsored Clinical Trials

## Cave Research Alcoholic Liver Disease

- Zinc supplementtion for alcoholic cirrhosis. K23AA18399-01A. \$990,436.
- Epigenetic mechanisms of ethanol-induced immune suppression (Shirish Barve).
   National Institutes of Health Extramural Loan Repayment Program for Clinical Research (NIAAA).

#### Cave Research Industry Sponsored Clinical Trials

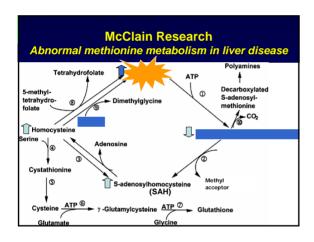
- **Merck** (hepatitis C protease inhibitor)
- Intercept (PBC FXR agonist)
- **Sucampo** (Wo, cytokines in motility disorder)

# Cave Research Occupational/Environmental Liver Disease

- Hepatic hemangiosarcoma biomarkers: Rubbertown workers. UofL/Commonwealth of Kentucky CTSPGP advanced Award. \$98,007.
- PCB's and organochlorine pesticides in obesity, diabetes, and NAFLD: Mouse and cell culture. NCRR 5P20RR024489-02. \$405,404.
- Identification (rubbertown workers) and mechanisms (mitochondrial toxicity / necrosis) of toxicant-associated steatohepatitis (TASH)
- Environmental liver disease (NHANES).

#### Research

Craig McClain, M.D.



# McClain Research Human NIH Trials

- 1. SAMe therapy ALD
- 2. SAMe therapy NASH
- 3. Biochemical profile NASH
- 4. Cytokine response NASH
- 5. Cytokine/Trental Rx in ALD

# McClain Research Animal Studies

- 1. Obesity NAFLD
- 2. Drug therapy NAFLD/ASH

#### **Article/Chapters**

- 1. Nutrition Liver Disease
- 2. Therapy for Alcoholic Hepatitis
- 3. HAART Hepatotoxicity

#### Research

Richard Redinger, M.D.

#### **Redinger Research**

- Publications in preparation
  - Cholesterol catabolism advances in its understanding
  - The conundrum of common but complex polygenesis obesity

#### Research

John Wo, M.D.

# Wo Research Investigator-Initiated Trials

- Gastroparesis
  - Idiopathic gastroparesis registry to define severity, treatment response and prognosis using a predominant-symptoms classification
  - Underlying causes of vomiting-predominant symptoms of unclear etiology
  - Domperidone

#### Wo Research Investigator-Initiated Trials

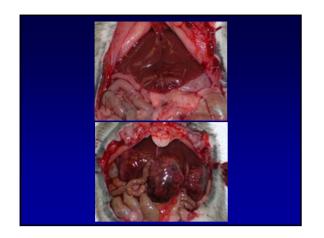
- High Resolution Esophageal Manometry
  - Correlation with symptoms
- · Barrett's Esophagus
  - Registry, Biorepository
  - Evaluation of curcumin in patients with dysplastic Barrett's esophagus

#### Wo Research Industry-Sponsored Trials

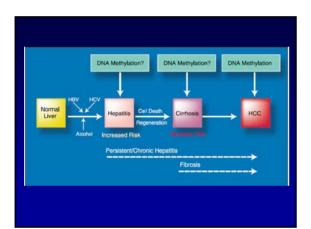
- Diarrhea-predominant IBS with K opiod agoinist
- Prevention of diverticulitis recurrence with 5-ASA

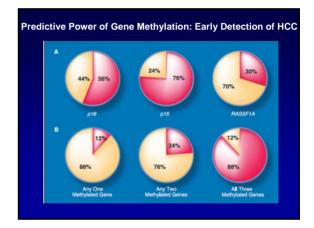
#### Research

Shirish Barve, PhD









### Research

Tad Dryden, MD, MSPH, MSc

### Novel Endoscopic Overtube

- Currently undergoing development of prototype
- Animal trial anticipated in 2-3 months
- Will need assistance with recording, analysis, writing of abstract/manuscript
- Assistance with regulatory paperwork

# Novel Endoscopic Bariatric Device

- Will begin work on prototype in 2-3 months
- Funded for development of prototype
- · Funded for acute animal trial
- Will need assistance with development, animal trial, analysis, abstract/manuscript production

# Anti-TNF Therapy to Reduce Colon Tumor Formation

- Animal study using AOM/DSS in WT animals
- Animals regularly treated with anti-TNF antibody during course of inflammation
- Undergo periodic endoscopy
- Analyze for macrophage phenotype, angiogenesis markers
- Will need assistance with any aspect

# Adipose-Derived Mesenchymal Stem Cells for Fistulizing CD

- Active IACUC
- Currently evaluating stem cell infiltration into matrix plug vs electrospun fibrinogen
- Anticipate animal trial within 3-4 months
- Will need assistance with data collection, analysis, abstract/manuscript preparation

#### **Industry Sponsored Trials**

- Vedolizumab for moderate to severe ulcerative colitis
- Vedolizumab for moderate to severe Crohn's disease

## **Investigator Initiated Trials**

 Green tea polyphenol extract in mild to moderate ulcerative colitis

#### Research Resources

- CREST program
  - http://louisville.edu/sphis/
  - http://louisville.edu/sphis/documents-andpdfs/UofL%20CREST%20Student%20Handb ook%20-July%202009.pdf
- Division of Infectious Disease Research Program
  - http://www.iduofl.us/index.php?option=com\_d ocman&Itemid=87

## **Research Requirements**

- BRAAN
  - https://braanprod.louisville.edu/default.aspx
  - COI
- HIPAA
  - http://security.louisville.edu/training/HIPAA/log on.html
- CITII
  - http://louisville.edu/research/humansubjects/tr aining/human-subjects-training-citi.html

## **Research Requirements**

- Animal Safety
- Chemical and Radiologic Safety
- Blood Born Pathogens