Nuclear Receptors in Liver and Digestive Diseases: A Research Workshop

Hilton Hotel Rockville, MD November 7 – 8, 2007

Draft Agenda

Organizers: Ronald Evans, Saul Karpen, Joel Lavine, Ronald Margolis, Edward Doo, and Patricia Robuck

Day 1—Wednesday, November 7, 2007

8:00 a.m. – 8:15 a.m. Welcome

Griffin Rodgers, Director, National Institute of Diabetes and Digestive and Kidney

Diseases (NIDDK)

Workshop Goals

Ronald Margolis, NIDDK

8:15 a.m. – 8:45 a.m. Nuclear Receptors: Overview

Ronald Evans, The Salk Institute for Biological Studies

8:45 a.m. – 10:05 a.m. Session 1: Basic Biology of Nuclear Receptor Action

Moderator: Bert O'Malley, Baylor College of Medicine

8:45 a.m. Nuclear Receptors as Lipid Receptors

David Mangelsdorf, The University of Texas (UT) Southwestern Medical Center

9:05 a.m. Nuclear Co-Regulator Mechanisms in Disease

Bert O'Malley, Baylor College of Medicine

9:25 a.m. The Nuclear Receptor Signaling Atlas (NURSA)

Ronald Margolis, NIDDK

9:45 a.m. Discussion

10:05 a.m. - 10:25 a.m. Break

10:25 a.m. – 11:45 a.m. Session 2: Nuclear Receptor Physiology

Moderator: David Mangelsdorf, UT Southwestern Medical Center

10:25 a.m. Nuclear Receptors and Fibroblast Growth Factors in the Liver

Steve Kliewer, UT Southwestern Medical Center

10:45 a.m. Nuclear Receptor Regulation of Drug Disposition

Chris Liddle, The University of Sydney, Sydney, Australia

11:05 a.m. Bile Acid Signaling From Nuclear Receptors to G-Protein Coupled Receptors

Johan Auwerx, Institut de Génétique et de Biologie Moléculaire et Cellulaire and

Institut Clinique de la Souris, Strasbourg, France

11:25 a.m. Discussion

11:45 a.m. – 1:00 p.m. Lunch (on your own)

1:00 p.m. – 2:20 p.m. Session 3: Integration of Nuclear Receptors and Homeostasis

Moderator: Chris Glass, University of California (UC) at San Diego

1:00 p.m. Nuclear Receptors and the Metabolic Syndrome

Mitch Lazar, University of Pennsylvania

1:20 p.m. Nuclear Receptors, Inflammation, and Metabolic Disease

Chris Glass, UC at San Diego

1:40 p.m. Metabolic Control Through the PGC-1/SIRT1 Transcriptional Complex Activity

Pere Puigserver, Dana Farber Cancer Institute

2:00 p.m. Discussion

2:20 p.m. – 2:40 p.m. Break

2:40 p.m. – 3:10 p.m. Clinical/Translational Challenges: Overview

Saul Karpen, Baylor College of Medicine

3:10 p.m. – 4:50 p.m. Session 4: Hepatic Pathophysiology of Nuclear Receptors

Moderator: Michael Trauner, Medical University of Graz

3:10 p.m. Molecular Regulation of Hepatic Fibrosis and the Role of Nuclear Receptors

Scott Friedman, Mount Sinai School of Medicine

3:30 p.m. *Nuclear Receptors and Hepatotoxicity*

Wen Xie, University of Pittsburgh Medical College

3:50 p.m. *Cholestasis*

Michael Trauner, Medical University of Graz

4:10 p.m. *Late-Breaking Story*:

Identification of Heme as the Ligand for the Orphan Nuclear Receptors Rev-Erba and

Rev-ErbB

Thomas Burris, Pennington Biomedical Research Center

4:30 p.m. Discussion

5:00 p.m. – 7:00 p.m. Poster Session

Day 2—Thursday, November 8, 2007

8:00 a.m. – 9:40 a.m. Session 5: Disease States and Nuclear Receptors

Moderator: Joel Lavine, UC at San Diego

8:00 a.m. Isolated Genetic Defects in Nuclear Receptors

Krishna Chatterjee, Cambridge University

8:20 a.m. Nuclear Receptors and Inflammatory Bowel Disease

Frank Gonzalez, National Cancer Institute

8:40 a.m. Non-Alcoholic Steatohepatitis

Joel Lavine, UC at San Diego

9:00 a.m. Gallstones

Alan Hofmann, UC at San Diego

9:20 a.m. Discussion

9:40 a.m. - 10:00 a.m. Break

10:00 a.m. - 10:45 a.m. Session 6: Late-Breaking Stories

Moderator: Ronald Margolis, NIDDK

10:00 a.m. Decreased Histone H3K9 Acetylation at Bile Acid Transporter Gene Promoters During

Rat Liver Development and Obstructive Cholestasis Meena Ananthanarayanan, Mount Sinai Medical Center

10:15 a.m. Farnesoid X Receptor, the Bile Acid Activated Nuclear Receptor, Attenuates Colon

Cancer Development in Mice

Grace Guo, University of Kansas Medical Center

10:30 a.m. A Randomized, Placebo-controlled Trial of the PPARy Ligand Rosiglitazone for Active

Ulcerative Colitis

Gary Wu, University of Pennsylvania

10:45 a.m. – 12:45 p.m. Session 7: Translation

Moderator: Erin Schuetz, St. Jude's Hospital for Children

10:45 a.m. *Pharmacogenomics*

Erin Schuetz, St. Jude's Hospital for Children

11:05 a.m. The Design and Development of PPARdelta Ligands for the Treatment of Metabolic

Syndrome

Rich Heyman, Kalypsys, Inc.

11:25 a.m. Diabetes, Drug Metabolism, and Vice Versa

David Moore, Baylor College of Medicine

11:55 a.m. Nuclear Receptors and NASH: Bench to Bedside

Anna Mae Diehl, Duke University

12:15 p.m. Discussion

12:45 p.m. – 1:00 p.m. Open Discussion: Meeting Summary and Future Directions

Panel: Meeting Organizers

1:00 p.m. Adjourn