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# PROGRAM AGENDA



**TUESDAY, JUNE 29, 1999**

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- 11:00 AM - 5:00 PM**      **Registration** – Shavano Foyer
- 12:00 PM - 6:00 PM**      **Council IA Meeting** – Ten Mile
- 1:00 PM - 5:00 PM**      **Education Course** – Torrey 2-4  
*Organ System Maturation and Functional Postnatal Development*
- 1:00 PM - 1:05 PM      WELCOME  
*Speaker: Anthony Scialli, President, Teratology Society*
- 1:05 PM - 1:15 PM      INTRODUCTION  
*Speaker: Melissa Tassinari, Pfizer Central Research*
- 1:15 PM - 2:00 PM      OVERVIEW: ASPECTS OF POSTNATAL GROWTH;  
ONTOGENY OF ORGAN SYSTEMS  
*Speaker: Joseph Holson, WIL Research Laboratories*
- 2:00 PM - 2:45 PM      GROWTH FROM BIRTH TO PUBERTY: DYNAMICS  
OF GROWTH AND SKELETAL DEVELOPMENT  
*Speaker: Rocky Tuan, Department of Orthopaedic Surgery,  
Thomas Jefferson University*
- 2:45 PM - 3:15 PM      BREAK
- 3:15 PM - 4:00 PM      CARDIOVASCULAR SYSTEM  
*Speaker: John DeSesso, Mitretek Systems*
- 4:00 PM - 5:00 PM      CENTRAL NERVOUS SYSTEM  
*Speaker: Robert Holson, Department of Psychology,  
New Mexico Tech.*
- 7:00 PM - 8:00 PM**      **President's Reception** – Gallery/Lakeside  
*(Sponsored by Elsevier Science, Inc.)*

## **WEDNESDAY, JUNE 30, 1999**

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- 7:00 AM - 12:00 PM**      **Council IB Meeting** – Ten Mile
- 7:30 AM - 5:00 PM**      **Registration** – Shavano Foyer
- 7:30 AM - 8:15 AM**      **Education Course Continental Breakfast** – Crestone 2-4 Foyer
- 8:00 AM - 12:00 PM**      **Golf Tournament** – Ranch Golf Course
- 8:15 AM - 12:00 PM**      **Education Course** (*continued*) – Crestone 2-4  
***Organ System Maturation and Functional Postnatal Development***
- 8:15 AM - 9:00 AM      **REPRODUCTIVE SYSTEM**  
*Speaker: Kimberley Treinin, Schering-Plough Research Safety Evaluation Center*
- 9:00 AM - 9:40 AM      **IMMUNE SYSTEM**  
*Speaker: Dwayne Hill, University of Michigan*
- 9:40 AM - 10:00 AM      **METABOLIC SYSTEMS—LIVER AND KIDNEY**  
*Speaker: Jeffrey Peters, National Institutes of Health, Metabolism Laboratories*
- 10:00 AM - 10:30 AM      **BREAK**
- 10:30 AM - 11:10 AM      **PEDIATRIC SAFETY ASSESSMENTS—VIEW FROM A CLINICIAN**  
*Speaker: TBA*
- 11:10 AM - 12:00 PM      **NON-CLINICAL SAFETY ASSESSMENTS—WHAT TO DO AND WHEN**  
*Speaker: Melissa Tassinari, Pfizer Central Research*
- 12:00 PM - 10:00 PM**      **Exhibits Open** – Shavano/Torreys
- 1:00 PM - 5:30 PM**      **March of Dimes Symposium** – Red Cloud Peak  
***HIV Infection During Pregnancy: Biology, Developmental Effects and Therapeutic Interventions***  
*Chairpersons: Richard K. Miller, Department of OB/GYN, University of Rochester, Rochester, New York and William Slikker, Jr., NCTR, Jefferson, Arkansas*
- 1:00 PM - 1:05 PM      **INTRODUCTION**  
*Speaker: Richard K. Miller, University of Rochester*
- 1:05 PM - 1:10 PM      **OVERVIEW**  
*Speaker: Michael Katz, Scientific Director, March of Dimes*
- 1:10 PM - 1:50 PM      **S1**      **BIOLOGY OF HIV—IMPACT OF CHEMOKINE RECEPTOR POLYMORPHISM ON VERTICAL TRANSMISSION**  
*Leonidas G. Kostrikis, Rockefeller University*

**WEDNESDAY, JUNE 30, 1999** (continued)

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- 1:50 PM - 2:30 PM    **S2**    THE ROLE OF THE PLACENTA IN HIV INFECTION FOR THE FETUS  
*Richard K. Miller, University of Rochester*
- 2:30 PM - 3:10 PM    **S3**    NEURO-DEVELOPMENTAL INFECTION AND OUTCOME  
*Leon G. Epstein, Northwestern University*
- 3:10 PM - 3:30 PM    BREAK
- 3:30 PM - 4:10 PM    **S4**    LONG TERM FOLLOW-UP OF CHILDREN—TOXICITY OF RETROVIRALS  
*Mary Glenn Fowler, CDC*
- 4:10 PM - 4:50 PM    **S5**    POTENTIAL TOXICITIES OF HIV THERAPEUTICS ON THE DEVELOPING INFANT  
*William Slikker, Jr., NCTR*
- 4:50 PM - 5:20 PM    ROUNDTABLE DISCUSSION
- 5:20 PM - 5:30 PM    CONCLUSIONS  
*Speaker: William Slikker, Jr., NCTR*
- 7:30 PM - 10:00 PM**    **Poster Session (Posters 1-40)** – Shavano/Torreys  
*(Refreshments sponsored by Shin Nippon Biomedical Laboratories, Ltd.)*

**THURSDAY, JULY 1, 1999**

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- 7:00 AM - 7:45 AM**    **Continental Breakfast** – Shavano Foyer
- 7:30 AM - 5:00 PM**    **Registration** – Shavano Foyer
- 7:45 AM - 8:00 AM**    **President's Welcome and Introduction** – Red Cloud Peak  
*Speaker: Anthony Scialli, President, Teratology Society*
- 8:00 AM - 8:45 AM**    **Warkany Lecture** – Red Cloud Peak  
*Improving the Science for Predicting Risks to Children's Health*  
*Speaker: Carole Kimmel, USEPA*
- 8:45 AM - 12:00 PM**    **NIEHS Symposium** – Red Cloud Peak  
*Oxidative Stress, Apoptosis and Abnormal Development*  
*Chairpersons: Jerry Heindel, NIEHS, Research Triangle Park, North Carolina; Alan Fantel, Central Embryology Laboratory, University of Washington, Seattle, Washington; and Thomas Knudsen, Department of Anatomy, Jefferson Medical College, Philadelphia, Pennsylvania*
- 8:45 AM - 9:30 AM    **S6**    FREE RADICALS, OXIDANTS AND ANTI-OXIDANTS: ORIGINS, TARGETS, CONSEQUENCES  
*Garry Buettner, University of Iowa*

**THURSDAY, JULY 1, 1999** (continued)

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- 9:30 AM - 10:15 AM    **S7**    THE CAUSE-EFFECT OF OXIDATIVE STRESS AND APOPTOSIS  
*James P. Kehrer, University of Texas at Austin*
- 10:15 AM - 10:30 AM    BREAK
- 10:30 AM - 10:55 AM    **S8**    FREE RADICAL IMBALANCE IN LIMB REDUCTION DEFECTS: A NEW MECHANISTIC MODEL OF VASCULAR DISRUPTION  
*Alan Fantel, University of Washington*
- 10:55 AM - 11:20 AM    **S9**    MITOCHONDRIAL TRANSDUCTION OF TERATOGENESIS: ROLE OF p53 AND BZRP GENES  
*Thomas Knudsen, Thomas Jefferson University*
- 11:20 AM - 11:55 AM    **S10**    ARSENIC FREE RADICALS AND DYSMORPHOGENESIS  
*E. Sidney Hunter, USEPA*
- 12:00 PM - 1:00 PM**    **Past President's Luncheon** – Crestone Peak 2  
*(By invitation only)*
- 12:00 PM - 10:00 PM**    **Exhibits Open** – Shavano/Torreys
- 1:30 PM - 3:00 PM**    **Platform I: OTIS/Teratology Society Joint Session** – Red Cloud Peak  
*Chairpersons: Elisabeth Robert, Institut Européen des Génomutations, Lyon, France and Kenneth Jones, Department of Pediatrics, Division of Dysmorphology and Teratology, University of California San Diego, La Jolla, California*
- 1:30 PM - 1:45 PM    **1**    PREGNANCY OUTCOME IN WOMEN WHO USE SERTRALINE  
*C.D. Chambers, L.M. Dick, R.J. Felix, K.A. Johnson, and K.L. Jones, Department of Pediatrics, Division of Dysmorphology and Teratology, University of California San Diego, La Jolla, California*
- 1:45 PM - 2:00 PM    **2**    NEUROBEHAVIORAL FOLLOW-UP OF CHILDREN PRENATALLY EXPOSED TO FLUOXETINE  
*S.N. Mattson, A.D. Eastvold, K.L. Jones, J.A. Harris, and C.D. Chambers, Center for Behavioral Teratology, SDSU, San Diego, California; Department of Pediatrics, Division of Dysmorphology and Teratology, UCSD, San Diego, California; and the California Birth Defects Monitoring Program, Emeryville, California*

**THURSDAY, JULY 1, 1999** (continued)

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- 2:00 PM - 2:15 PM      **3**      DISTRIBUTION OF MALFORMATIONS AMONG POPULATIONS LIVING AROUND NUCLEAR PLANTS: A REGISTRY STUDY  
*E. Robert, S.E. Vollset, J.C. Laborier, and O. Robert, Institut Européen des Génomutations, Lyon, France*
- 2:15 PM - 2:30 PM      **4**      NEURODEVELOPMENT OF CHILDREN EXPOSED *IN UTERO* TO MATERNAL BINGE ALCOHOL CONSUMPTION: A PROSPECTIVE CONTROLLED STUDY  
*I. Nulman, D. Kennedy, J. Rovet, J. Wolpin, C. Wasson, M. Loebstein, J. Gladstone, M. Levy, S. Freed, P. Pace-Asciak, and G. Koren*
- 2:30 PM - 2:45 PM      **5**      A PROSPECTIVE CONTROLLED MULTICENTRE STUDY OF LOPERAMIDE IN PREGNANCY  
*A. Einarson, P. Mastroiacovo, J. Arnon, A. Ornoy, A. Addis, A. Ritvanen, and G. Koren*
- 2:45 PM - 3:00 PM      **6**      THE SAFETY OF DEXTROMETHORPHAN IN PREGNANCY: A PROSPECTIVE CONTROLLED STUDY  
*A. Einarson, D. Lyszkiewicz, and G. Koren*

**3:00 PM - 4:15 PM**

**Platform II: Epidemiology** – Red Cloud Peak

*Chairpersons: Martha Werler, Slone Epidemiology Unit, Boston University School of Public Health, Brookline, Massachusetts and Gary Shaw, California Birth Defects Monitoring Program, Emeryville, California*

- 3:00 PM - 3:15 PM      **7**      MULTIVITAMINS AND DIABETES-RELATED BIRTH DEFECTS  
*A. Correa, L. Botto, and J. Mulinare, Centers for Disease Control and Prevention, Atlanta, Georgia*
- 3:15 PM - 3:30 PM      **8**      MATERNAL VITAMIN USE, INFANT MUTATION IN MTHFR AND CLEFT PALATE RISK  
*G.M. Shaw, R.H. Finnell, K. Todoroff, R. Rozen, and E.J. Lammer, California Birth Defects Monitoring Program, Emeryville, California*
- 3:30 PM - 3:45 PM      **9**      MATERNAL RED CELL FOLATE LEVELS, MTHFR GENOTYPE, AND RISK OF OROFACIAL CLEFT BIRTH DEFECTS IN THE PHILIPPINES  
*R. Munger, H. Sauberlich, S. Wong, S. Daack-Hirshch, D. Trembath, S. O'Brien, J. Murray, D. Hendricks, N. West, F. Solon, and W. Magee, Utah State University, Logan, Utah*

**THURSDAY, JULY 1, 1999** (continued)

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- 3:45 PM - 4:00 PM      **10**      PRECONCEPTION USE OF FOLIC ACID AMONG WOMEN OF CHILDBEARING AGE: THREE NATIONAL SURVEYS  
*D. Mattison, J. Petrini, C. Alter, K. Damus, and R.B. Johnston, Jr., March of Dimes Birth Defects Foundation, White Plains, New York*
- 4:00 PM - 4:15 PM      **11**      EFFECT OF PRENATAL EXPOSURE TO ANTIEPILEPTIC DRUGS ON DERMAL RIDGE PATTERNS OF FINGERS  
*A. Bokhari, B. Coull, and L.B. Holmes, Genetics and Teratology Unit, Pediatric Service, Massachusetts General Hospital and Department of Biostatistics, Harvard School of Public Health, Boston, Massachusetts*
- 4:30 PM - 6:00 PM**      **Business Meeting** – Red Cloud Peak  
*(Teratology Society members only)*
- 6:00 PM - 7:30 PM**      **Reproductive Toxicology Editorial Board Meeting** – Crestone 3-4
- 7:30 PM - 10:00 PM**      **Poster Session (Posters 41-64 and NBTS)** – Shavano/Torreys

**FRIDAY, JULY 2, 1999**

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- 7:00 AM - 7:45 AM**      **Continental Breakfast** – Shavano Foyer
- 7:00 AM - 8:00 AM**      **Exhibitor Breakfast** – Torreys Peak 1  
*(By invitation only)*
- 7:45 AM - 10:30 AM**      **Platform III: Student Plenary Session** – Red Cloud Peak  
*Chairpersons: Robert Parker, Primedica Argus Research Laboratories, Horsham, Pennsylvania and Carole Kimmel, USEPA, Washington, D.C.*
- 7:45 AM - 8:00 AM      **12**      CADMIUM-INDUCED STRESS SIGNALLING PATHWAYS IN MOUSE EMBRYO MIDBRAIN CELLS IN MICROMASS CULTURE  
*K.M.W. Haberstroh and C.M. Kapron, Watershed Ecosystems Graduate Program and Department of Biology, Trent University, Peterborough, Ontario, Canada*
- 8:00 AM - 8:15 AM      **13**      EXPOSURE OF MALE RATS TO CYCLOPHOSPHAMIDE (CPA) CHANGES CELL-CELL CONTACTS IN PRE-IMPLANTATION EMBRYOS  
*W. Harrouk, B. Robaire, and B. Hales, Department of Pharmacology & Therapeutics, McGill University, Montreal, Quebec, Canada*

**FRIDAY, JULY 2, 1999** (continued)

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- 8:15 AM - 8:30 AM      **14**      URINARY TRACT EPITHELIAL CELL RESPONSES TOTCDD IN AN *IN VITRO* MODEL  
*P.L. Bryant<sup>1</sup>, L.M. Reid<sup>2</sup>, E. Diala<sup>3</sup>, and B.D. Abbott<sup>4</sup>, <sup>1</sup>Department Environ. Sci. & Eng., <sup>2</sup>Department Cell & Molec. Physiol., <sup>3</sup>ACT Core, UNC, Chapel Hill, North Carolina, and <sup>4</sup>NHEERL, USEPA, Research Triangle Park, North Carolina*
- 8:30 AM - 8:45 AM      **15**      PHENYTOIN-INDUCED ALTERATIONS IN CRANIOFACIAL DEVELOPMENT: INVOLVEMENT OF THE RETINOIC ACID RECEPTORS  
*J. Gelineau-Van Waes, G.D. Bennett, and R.H. Finnell, Department of Veterinary Anatomy & Public Health, Texas A & M University, College Station, Texas*
- 8:45 AM - 9:00 AM      **16**      AMELIORATION OF ETHANOL-INDUCED DYSMORPHOGENESIS BY SOD1 PROTEIN AND ADENOVIRAL SOD1 OVER-EXPRESSION *IN VITRO*  
*J.B. Smith<sup>1</sup>, P.C. Hartig<sup>2</sup>, K.K. Sulik<sup>1</sup>, and E.S. Hunter<sup>2</sup>, <sup>1</sup>Department of Cell Biology and Anatomy, University of North Carolina at Chapel Hill, Chapel Hill, North Carolina, and <sup>2</sup>NHEERL, USEPA, Research Triangle Park, North Carolina*
- 9:00 AM - 9:30 AM**      **Warkany Tea – Red Cloud Peak Foyer**
- 9:30 AM - 9:45 AM      **17**      ANTI-TERATOGENIC ACTIVITY OF PK11195, A LIGAND OF THE PERIPHERAL-TYPE BENZODIAZEPINE RECEPTOR  
*R.J. Donahue, M.F. O'Hara, J.H. Charlap, and T.B. Knudsen, Department of Pathology, Anatomy and Cell Biology, Jefferson Medical College, Philadelphia, Pennsylvania*
- 9:45 AM - 10:00 AM      **18**      DNA NUCLEOTIDE EXCISION REPAIR GENE EXPRESSION DURING ORGANOGENESIS IN THE RAT EMBRYO  
*R. Vinson and B. Hales, Department of Pharmacology & Therapeutics, McGill University, Montréal, Québec, Canada*
- 10:00 AM - 10:15 AM      **19**      TUMOR NECROSIS FACTOR-ALPHA (TNF- $\alpha$ ) MEDIATES LIPOPOLYSACCHARIDE (LPS) EMBRYOLETHALITY  
*T.M. Leazer<sup>1,2</sup>, J.E. Andrews<sup>2</sup>, H. Nichols<sup>2</sup>, J.M. Rogers<sup>1,2</sup>, <sup>1</sup>Curriculum in Toxicology, University of North Carolina, Chapel Hill, North Carolina and <sup>2</sup>Reproductive Toxicology Division, USEPA, Research Triangle Park, North Carolina*

**FRIDAY, JULY 2, 1999** (continued)

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10:15 AM - 10:30 AM      **20**      CARDIAC ABNORMALITIES INDUCED BY ZINC DEFICIENCY ARE ASSOCIATED WITH ALTERATIONS IN THE EXPRESSION OF GENES REGULATED BY ZINC-FINGER TRANSCRIPTION FACTORS  
*J.Y. Duffy<sup>1</sup>, G.J. Overmann<sup>1</sup>, C.L. Keen<sup>2</sup>, and G.P. Daston<sup>1</sup>, <sup>1</sup>Procter & Gamble Company, Cincinnati, Ohio and <sup>2</sup>University of California, Davis, California*

**10:30 AM - 12:00 PM**

**Platform IV: Hazard and Risk Assessment – Red Cloud Peak**

*Chairpersons: Paul Foster, Chemical Industry Institute of Toxicology, Research Triangle Park, North Carolina and Patricia Bittner, Consumer Product Safety Commission, Washington, D.C.*

10:30 AM - 10:45 AM      **21**      REPRODUCTIVE RISKS OF IONIZING RADIATION: THE CONTRIBUTION OF ANIMAL STUDIES AND NEW CLINICAL STUDIES IN RESOLVING THE THRESHOLD DOSE FOR TERATOGENESIS AND THE RISK OF CANCER AND MENTAL RETARDATION  
*R.L. Brent, J.E. Pugarelli, and L.B. Fawcett, Alfred I. duPont Hospital for Children, Wilmington, Delaware*

10:45 AM - 11:00 AM      **22**      THE RESPONSE TO HYPERTHERMIA IN THE GD10 RAT EMBRYO IS DEPENDENT ON THE PATTERN OF TEMPERATURE INCREASE  
*C.A. Kimmel<sup>1</sup>, T.W. Claggett<sup>2</sup>, G.L. Kimmel<sup>1</sup>, R.R. Dugyala<sup>2</sup>, and M.E. Stratmeyer<sup>3</sup>, <sup>1</sup>National Center for Environmental Assessment, USEPA, Washington, D.C., <sup>2</sup>Pathology Associates International, Frederick, Maryland, and <sup>3</sup>Health Sciences Branch, DLS/OST, CDRH, FDA, Rockville, Maryland*

11:00 AM - 11:15 AM      **23**      THE PREDICTIVE VALIDITY OF FROG EMBRYO TERATOGENESIS ASSAY—XENOPUS (FETAX): UTILITY AND APPLICATION  
*D.J. Fort<sup>1</sup>, E.L. Stover<sup>1</sup>, D.R. Farmer<sup>2</sup>, and J.K. Lemen<sup>2</sup>, <sup>1</sup>The Stover Group, Stillwater, Oklahoma and <sup>2</sup>Monsanto Company, St. Louis, Missouri*

11:15 AM - 11:30 AM      **24**      INTERACTION OF EXTRANEIOUS VARIABLES ON DEVELOPMENTAL TOXICITY  
*B.K. Nelson, Division of Biomedical and Behavioral Science, NIOSH, Cincinnati, Ohio*

**FRIDAY, JULY 2, 1999** (continued)

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- 11:30 AM - 11:45 AM      **25**      DEVELOPMENTAL TOXICITY OF MIXTURES: THE WATER DISINFECTION BYPRODUCTS DICHLORO-, DIBROMO- AND BROMOCHLORO-ACETIC ACID IN EMBRYO CULTURE  
*J.E. Andrews, J. Schmid<sup>1</sup>, H. Nichols, E.S. Hunter, and G. Klinefelter, Reproductive Toxicology Division, <sup>1</sup>Research Support Division, NHEERL, USEPA, Research Triangle Park, North Carolina*
- 11:45 AM - 12:00 PM      **26**      CUMULATIVE RISK ASSESSMENT FOR DEVELOPMENTAL TOXIC AGENTS  
*S. Euling<sup>1</sup>, and C.A. Kimmel<sup>2</sup>, <sup>1</sup>AAAS Fellow and <sup>2</sup>National Center for Environmental Assessment, USEPA, Washington, D.C.*
- 11:30 PM - 1:00 PM**      **Student Luncheon** – Shavano Peak  
*(Sponsored by Merck Research Laboratories—Students only)*
- 1:30 PM - 5:30 PM**      **Wiley-Liss/SmithKline Beecham Symposium** – Red Cloud Peak  
**Skeletal Development**  
*Chairpersons: Karen Augustine, SmithKline Beecham, King of Prussia, Pennsylvania and Gary Schoenwolf, Department of Neurobiology and Anatomy, University of Utah, Salt Lake City, Utah*
- 1:00 PM - 1:10 PM      INTRODUCTION
- 1:10 PM - 1:55 PM      **S11**      GASTRULATION AND AXIAL PATTERNING DURING EARLY EMBRYOGENESIS (S11)  
*Speaker: Gary C. Schoenwolf, University of Utah School of Medicine*
- 1:55 PM - 2:40 PM      **S12**      MYOGENIC DETERMINATION AND ORPHOGENESIS  
*Speaker: Charles Ordahl, University of California at San Francisco*
- 2:40 PM - 3:00 PM      BREAK
- 3:00 PM - 3:45 PM      **S13**      Cellular and Genetic Events in the Formation of the Cartilaginous Skeleton  
*Speaker: Karen Augustine, SmithKline Beecham*
- 3:45 PM - 4:30 PM      **S14**      Genetics and Cellular Biology of Chondrodystrophies  
*Speaker: Robert Seegmiller, Brigham Young University*
- 6:30 PM - 7:30 PM**      **Banquet Reception** – Shavano Peak Foyer
- 6:30 PM - 7:30 PM**      **President's Circle Reception** – Crestone Terrace  
*(By invitation only)*
- 7:30 PM - 10:30 PM**      **Banquet** – Shavano/Torreys

## **SATURDAY, JULY 3, 1999**

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**7:00 AM - 7:45 AM**      **Continental Breakfast** – Shavano Foyer

**8:00 AM - 9:45 AM**      **Platform V: Teratogenic Mechanisms** – Red Cloud Peak  
*Chairpersons: Barbara Abbott, USEPA, Research Triangle Park, North Carolina and Terence Ozolins, Wyeth-Ayerst, Chazy, New York*

- 8:00 AM - 8:15 AM      **27**      MODULATION OF FOLATE RECEPTOR EXPRESSION *IN VITRO* BY ANTISENSE OLIGONUCLEOTIDES PRODUCES NEURAL TUBE DEFECTS IN MOUSE EMBRYOS  
*D.K. Hansen, T.F. Grafton, and R.D. Streck, National Center for Toxicological Research, Jefferson, Arkansas*
- 8:15 AM - 8:30 AM      **28**      INTERACTION BETWEEN DIETARY ADMINISTRATION OF HYPERVITAMINOSIS A AND A DEFICIENCY OF TRANSMETHYLATION PATHWAY CONSTITUENTS IN THE INDUCTION OF ANTERIOR NEURAL TUBE CLOSURE DEFECTS IN MOUSE WHOLE EMBRYO CULTURE  
*M. Collins<sup>1</sup>, T. Arnhold<sup>2</sup>, G. Mao<sup>1</sup>, J. Santos-Guzman<sup>1</sup>, S. Henning<sup>1</sup>, C. Wagner<sup>3</sup>, H. Nau<sup>2</sup>, and M. Swendseid<sup>1</sup>, <sup>1</sup>UCLA, Los Angeles, California, <sup>2</sup>Veterinary Medical University Hannover, Hannover, Germany and <sup>3</sup>Vanderbilt University, Nashville, Tennessee*
- 8:30 AM - 8:45 AM      **29**      TERATOGEN-INDUCED ACTIVATION OF MITOGEN-ACTIVATED PROTEIN KINASES (MAPKs) IN POSTIMPLANTATION MURINE EMBRYOS  
*K.L. Wilson, L.M. Cornel, and P.E. Mirkes, Department of Pediatrics, University of Washington, Seattle, Washington*
- 8:45 AM - 9:00 AM      **30**      EVIDENCE FOR A MITOCHONDRIAL CELL DEATH PATHWAY ACTIVATED BY THE SELECTED TERATOGENS, HYPERTHERMIA, CYCLOPHOSPHAMIDE, AND STAUROSPORINE  
*S.A. Little and P.E. Mirkes, Department of Pediatrics, University of Washington, Seattle, Washington*

**SATURDAY, JULY 3, 1999** (continued)

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- 9:00 AM - 9:15 AM      **31**      THE LOSS OF POLARIZING ACTIVITY AS A POTENTIAL MECHANISM OF TERATOGENIC ACTIVITY  
*S.M. Bell, C.M. Schreiner, and W.J. Scott, Children's Hospital Research Foundation, Cincinnati, Ohio*
- 9:15 AM - 9:30 AM      **32**      ANGIOGENESIS PATHWAY GENES ARE DOWNREGULATED IN PLACENTAE OF ARNT-DEFICIENT EMBRYOS  
*B.D. Abbott, T.A. Gillig, and A.R. Buckalew, Repro. Tox. Div., NHEERL, USEPA, Research Triangle Park, North Carolina*
- 9:30 AM - 9:45 AM      **33**      DEVELOPMENTAL TOXICITY OF AN ABAMECTIN IN MDR1A KNOCKOUT MICE  
*L.D. Wise, G.R. Lankas, D.R. Umbenhauer, T.R. Pippert, and D.M. Duchai, Merck Research Laboratories, West Point, Pennsylvania*
- 10:00 AM - 11:30 AM**      **Platform VI: Human Teratogenesis** – Red Cloud Peak  
*Chairpersons: Michael Cunningham, Central Embryology Laboratory, University of Washington, Seattle, Washington and Stephen Braddock, Department of Child Health, University of Missouri, Columbia, Missouri*
- 10:00 AM - 10:15 AM      **34**      EFFECT OF ANTIEPILEPTIC DRUGS (AED) ON FETAL GROWTH: ASSESSMENT AT BIRTH  
*S. Choulika, E.A. Harvey, and L.B. Holmes, The Genetics and Teratology Unit, Pediatric Service, Massachusetts General Hospital, Boston, Massachusetts*
- 10:15 AM - 10:30 AM      **35**      EPIDEMIOLOGIC ANALYSIS OF RISK FACTORS FOR AMNIOTIC BANDS  
*M.M. Werler, C. Louik, and A.A. Mitchell, Slone Epidemiology Unit, Boston University School of Public Health, Brookline, Massachusetts*
- 10:30 AM - 10:45 AM      **36**      FIRST TRIMESTER ULTRASOUND ASSESSMENT FOLLOWING EXPOSURE TO POTENTIAL TERATOGENS: ANY BENEFIT?  
*K. Filkins<sup>1</sup> and P. Chowdry<sup>2</sup>, <sup>1</sup>UCLA School of Medicine, Los Angeles, California and <sup>2</sup>Valley Perinatal Medical Group, Tarzana, California*
- 10:45 AM - 11:00 AM      **37**      BOSMA ARHINIA MICROPTHALMIA SYNDROME  
*J.M. Graham, Jr., Medical Genetics Birth Defects Center, UCLA School of Medicine, Cedars-Sinai Medical Center, Los Angeles, California*

**SATURDAY, JULY 3, 1999** (continued)

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- 11:00 AM - 11:15 AM      **38**      A STRUCTURAL VARIANT OF *HOXA1* ASSOCIATED WITH AUTISM  
*C.J. Stodgell, L.L. Knauber, J.L. Ingram, S.L. Hyman, D.A. Figlewicz, and P.M. Rodier, University of Rochester School of Medicine, Rochester, New York*
- 11:15 AM - 11:30 AM      **39**      INHIBITION OF APOPTOSIS: THE PATHOGENESIS OF SYNDROMIC CRANIOSYNOSTOSIS?  
*Y.I. Yasinskaya, G.M. Dry, J.K. Williams, G. Erhlich, R. Preston, J.S. Gruss, R. Ellenbogen, and M.L. Cunningham, Children's Hospital & Regional Medical Center and University of Washington, Seattle, Washington*
- 11:30 AM - 1:00 PM**      **Wilson Luncheon** – Shavano Peak
- 1:00 PM - 4:30 PM**      **Public Affairs Symposium** – Red Cloud Peak  
***Post-marketing Surveillance of New Drugs—Recognizing Teratogenic Effects in Humans***  
*Chairpersons: Jan Friedman, Department of Medical Genetics, University of British Columbia, Vancouver, British Columbia and Anne Pastuszak, Hospital for Sick Children, Toronto, Ontario*
- 1:00 PM - 1:10 PM      INTRODUCTION  
*Speaker: Jan Friedman, University of British Columbia*
- 1:10 PM - 1:40 PM      **S15**      THE PROBLEM WITH NEW DRUGS: A TERATOGEN RISK COUNSELLOR'S PERSPECTIVE  
*Beth Conover, University of Nebraska*
- 1:40 PM - 2:10 PM      **S16**      THE VALUE AND LIMITATIONS OF USE-IN-PREGNANCY REGISTRIES FOR NEW DRUGS  
*Janet Cragan, CDC*
- 2:10 PM - 2:40 PM      **S17**      USING TERATOGEN INFORMATION SERVICES TO STUDY OUTCOMES OF PREGNANCIES IN WHICH THE MOTHER WAS TREATED WITH A NEW DRUG  
*Anne Pastuszak, University of Toronto*
- 2:40 PM - 3:10 PM      BREAK
- 3:10 PM - 3:30 PM      **S18**      S.T.E.P.S. AND THE ACCUTANE PREGNANCY PREVENTION PROGRAM: MONITORING DRUGS WITH RECOGNIZED TERATOGENIC POTENTIAL  
*Carla van Bennekom, Boston University*

**SATURDAY, JULY 3, 1999** (continued)

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- 3:30 PM - 4:00 PM     **S19**     POST-MARKETING SURVEILLANCE OF  
NEWLY RELEASED DRUGS FOR  
TERATOGENIC EFFECTS  
*Evelyn Rodriguez, FDA*
- 4:00 PM - 4:30 PM     GENERAL DISCUSSION
- 4:30 PM - 6:00 PM     **Council II Meeting** – Torreys Peak 1

**SUNDAY, JULY 4, 1999**

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- 7:00 AM - 8:00 AM     **Continental Breakfast** – Torreys Peak Foyer
- 8:00 AM - 11:00 AM     **MARTA/ MTA Workshop** – Torreys Peak 1  
***Reproductive and Developmental Toxicity Testing***  
*Chairperson: Robert Parker, Primedica Argus Research Laboratories, Horsham, Pennsylvania*
- 8:00 AM - 11:00 AM     **Discussion Session** – Torreys Peak 2  
***Testing Strategies for Children's Health Effects***  
*Chairperson: Carole Kimmel, USEPA, Washington, D.C.*
- 8:00 AM - 12:00 PM     **Discussion Session** – Torreys Peak 3  
***Teratogen-Induced Alterations in Developmental Pathways Leading to Dysmorphogenesis: What Do We Know and Where Do We Go From Here?***  
*Chairpersons: Philip E. Mirkes, Department of Pediatrics, University of Washington, Seattle, Washington, and Jerry Heindel, NIEHS, Research Triangle Park, NC*
- 8:00 AM - 8:10 AM     WHAT DO WE KNOW?  
*Speaker: Philip E. Mirkes, University of Washington*
- 8:10 AM - 8:30 AM     CYCLOPAMINE, SHH SIGNALING, AND CNS  
DYSMORPHOGENESIS  
*Speaker: John Incardona, University of Washington*
- 8:30 AM - 8:50 AM     TCE, CALCIUM-MEDIATED PATHWAYS AND  
HEART DYSMORPHOGENESIS  
*Speaker: Ray Runyan, University of Arizona*
- 8:50 AM - 9:10 AM     5-FU, NUCLEOTIDE POOLS, AND  
CRANIOFACIAL/LIMB DYSMORPHOGENESIS  
*Speaker: Chris Lau, USEPA*
- 9:10 AM - 9:30 AM     TCDD, AHR/ARNT, AND PALATAL  
DYSMORPHOGENESIS  
*Speaker: Barbara Abbott, USEPA*

