Collaborative on Health and the Environment's Fertility/Reproductive Health Working Group



E-Bulletin February 28, 2011

This e-bulletin lists news and journal articles, organizational reports, calls for proposals, upcoming events and other items related to fertility, reproductive health and the environment. E-bulletins are archived and searchable on our website: http://www.healthandenvironment.org/fertility

CHE-Fertility Highlights

New CHE-Fertility Partners

CHE-Fertility welcomes the following new members to the group:

- · Seulgi Gu, MPHc, Seoul, Korea
- · Candace Cabbil, ND, MSOD, Georgia
- · Marion Olek, MPH, MS, Pennsylvania
- Nancy Sasaki, California
- · Margaret Sullivan, MD, MPH, North Carolina
- · Zhang Jianhai, PhD, China

Your opinion counts. The CHE-Fertility survey wil be closing tonight at 11:59 p.m. The purposes of the survey are to guage members' interests, plan future educational offerings, and explore additional mechanisms of collaborating. Preliminary results reveal favorite topics as: fetal origins of adult disease, adverse pregnancy outcomes, and translating research into policy. The survey is only 10 questions long and should take about 5 minutes to complete. Please provide your input today on the survey site.

<u>Documentary: The Human Experiment.</u> "The Human Experiment" is following seven individuals who believe chemicals are responsible for detrimental changes in their health. These people are on a quest to make chemical companies accountable for their products, so that the public is no longer an unwitting subject in this giant human experiment. If you are interested in telling your story, please contact producer <u>Dana Nachman</u>.

New Website for Nurses: EnviRN.

EnviRN is not just a website - it's an active learning environment for essential environmental health information from experts, connecting with nursing researchers, and creating personal blog posts on areas of interest to you. It's also the web home for the Alliance of Nurses for Healthy Environments: the on-line gathering place for environmental health and nursing education, practice, research and/or advocacy/policy. Register, add your profile and picture, and start connecting with nurses around the country on environmental health.

New Science

A sampling of new research articles that are available on-line are gleaned from <u>Environmental Health News</u>, and presented here.

Serum Concentrations of PCBs in Relation to IVF Outcomes.

Friday, February 25, 2011

Polychlorinated Biphenyls (PCBs), an environmental pollutant present in most humans, can significantly lower the chances of a woman conceiving via in vitro fertilization, according to new research, a finding that also may extend to women trying to conceive naturally. Environmental Health Perspectives.

Epigenetics meets endocrinology.

Friday, February 25, 2011

A review of the current understanding of epigenetics in endocrinology, specifically, the regulation by epigenetics of the three levels of hormone action (synthesis and release, circulating and target tissue levels, and target-organ responsiveness) and the epigenetic action of endocrine disruptors. The authors also discuss the impacts of hormones on epigenetics, proposing a three-dimensional model (genetics, environment, and developmental stage) to explain the phenomena related to changes in endocrine functions. Journal of Molecular Endocrinology.

Analysis of contaminants in food packaging.

Monday, February 07, 2011

Although some regulations exist to encourage safe food packaging, the current system does not address concerns posed by multiple endocrine disrupting chemicals, nor does it acknowledge the potential additional hazard of mixtures. Journal of Steroid Biochemistry and Molecular Biology.

Polyunsaturated fatty acids & PCOS.

Thursday, February 03, 2011

Polycystic ovary syndrome (PCOS) is characterized by an adverse metabolic profile. This study examined the effects of dietary polyunsaturated fatty acid supplementation on levels of circulating androgens and lipids in young women with PCOS. American Journal of Clinical Nutrition.

Ovarian dysgenesis syndrome.

Monday, January 31, 2011

Researchers evaluated the existing scientific literature on environmental exposures, particularly endocrine disrupting chemicals, in relation to developmental origins of gynecological disease. Findings support the theory of in utero origin of gynecologic outcomes. Journal of Developmental Origins of Health and Disease.

Newswire and Useful Resources

Below you will find recent news, science, and other resources, gleaned from the <u>CHE</u> <u>Fertility Online Library</u>, hosted by <u>Environmental Health News</u>, and the <u>CHE daily news</u> <u>feed</u>.

Female mice disabled by parents' pesticide intake.

Monday, February 28, 2011

Research reveals that female mice whose mothers were exposed during pregnancy to the insecticide chlorpyrifos are slow learners. The same exposure, comparable to what people encounter in the environment, leaves males unaffected.

Resource: Belly Armor Thursday, February 24, 2011 Low levels of radiation are ubiquitous in our environment, emitting from sources such as computers, cell phones, televisions, and power lines. Belly Armor offers products designed to shield against everyday radiation during periods of heightened risk, such as during pregnancy.

Americans have twice as much BPA in their bodies as Canadians.

Thursday, February 24, 2011

Canadians and Americans are alike in so many ways, but when it comes to levels of the plastic-making compound bisphenol A in their bodies, there is a huge difference. Toronto Globe and Mail.

The high price of beauty.

Wednesday, February 23, 2011

Are girls increasing their risk of breast cancer by wearing blush, or their chances of reproductive abnormalities by applying lip gloss? Right now, new legislation is being introduced to close what legislators call "major loopholes" in a federal law that they say leaves Americans unknowingly exposed to potentially harmful mystery ingredients. Providence WPRI TV, Rhode Island.

'Chemical body burden' researchers and advocates raise questions.

Sunday, February 20, 2011

Awareness of "chemical body burden," or the presence of hazardous chemicals and their residues in humans, is rising in the public sphere, and more Americans are obtaining laboratory results for the extent of chemicals lingering in their bodies. Scientific American.

New tests reveal many pesticides block male hormones.

Tuesday, February 15, 2011 Thirty out of 37 pesticides tested by the University of London blocked male hormones, including 16 that had no known hormonal activity until now. Most are fungicides applied to fruit and vegetable crops, including strawberries and lettuce. Environmental Health News.

Doctors warn women against hot drinks with plastic covers.

Sunday, February 13, 2011

Doctors have warned people, women in particular, against sipping hot beverages through the small holes in plastic cup covers which, when heated, may release the harmful compound bisphenol A (BPA).

Where there's smoke, there's trouble.

Sunday, February 13, 2011 Where there is wood smoke, there is fire - as well as invisible toxins you could be inhaling. A little soot exposure probably isn't harmful to most people, pulmonologists say, but a new Danish-led study suggests regular exposure could damage DNA.

Maryland bills would ban BPA form children's food containers.

Friday, February 11, 2011

State lawmakers banned the chemical bisphenol-A, or BPA, from children's sippy cups and baby bottles last year, and now they want to go even further by banning it in children's food containers.

Resource: Text4Baby may help reduce pre-term births.

Tuesday, February 08, 2011 The patient education program, Text4Baby, offers advise to pregnant women on nutrition, smoking cessation, prenatal care and more. The program, run by the National Healthy Mothers, Healthy Babies Coalition, utilizes evidence-based recommendations to improve pregnancy outcomes.

BP oil spill's health effects will be felt for generations.

Sunday, February 06, 2011

Months after diving in Gulf waters fouled by BP crude oil and the oil dispersant Corexit, a man in his 40s has more than five times the normal amount of ethylbenzene in his blood. New Orleans Times-Picayune, Louisiana.

A better understanding of BPA metabolism. Saturday, February 05, 2011 Much of the hesitation to regulate bisphenol A up to now has stemmed from uncertainty about whether health effects reported in laboratory animals are relevant to people because of possible differences in metabolism. Recent findings now suggest that humans metabolize BPA at rates similar to rodents, raising the possibility that the animal effects may be relevant. Environmental Health Perspectives.

New database: Health Effects Spreadsheet and Summary.

Tuesday, February 01, 2011

The Endocrine Disruption Exchange (TEDX) maintains a publicly available database of the potential health effects of chemicals used during natural gas operations. In the summary analysis of the database, developmental and reproductive health effects are subsumed under the category of endocrine disruption.

Antioxidants fall from grace.

Thursday, January 27, 2011 Antioxidants in supplement form may not do any good. In fact, they may actually be causing harm. Many of the free radicals that are neutralized by antioxidants perform valuable functions in the body. Newsweek.

Announcements & Grant Opportunities

A daily news feed with these announcements is now available on CHE's website: http://www.healthandenvironment.org/news/announce.

Request for Proposals: 2011 Environmental Health Science Innovation Fund

Deadline: March 16, 2011

Sponsor: Passport Foundation The Passport Foundation's Science Innovation Fund aims to expand knowledge of the impacts of environmental contaminants on human health to inform and advance, first and foremost, chemicals regulation and risk assessment reform; and secondarily, public health and clinical care policies and practices. The fund, which launched in 2009, provides grants for small-scale scientific (laboratory, epidemiological, clinical) research that has a likelihood of being published in peer-reviewed scientific or medical journal literature and will generate novel data and insights to fill specific data gaps and reduce critical uncertainties standing in the way of effective public policy making, public health/clinical care practices, and funding decisions in the US related to environmental health. Award: \$5,000 - \$50,000

Request for Applications: Lifestyle Interventions in Overweight and Obese Pregnant Women Consortium

Application Receipt Date(s): March 24, 2011

National Institute of Diabetes and Digestive and Kidney Diseases, National Center for Complementary and Alternative Medicine, National Heart, Lung, and Blood Institute, Eunice Kennedy Shriver National Institute of Child Health and Human Development. (U01) (RFA-DK-10-014).

Request for Proposals: Environmental Justice Small Grants Program.

Application Receipt Date(s): March 31, 2011

The EPA is now accepting grant applications for \$1.2 million in funding to support projects designed to research, educate, empower and enable communities to understand and address local environmental and public health issues.

Request for Applications: Dietary Influence on the Human Health Effects of Environmental Exposures (R21).

Application Receipt Date(s): April 21, 2011

National Institute of Environmental Health Sciences (RFA-ES-11-002)

The goal of this research program is to produce new research findings that will expand our understanding of how environmental toxicants and diet/nutrition interact to influence human health and enable the development of effective primary prevention and

intervention strategies to mitigate environmentally-induced diseases.

Request for Proposals: Developing High-throughput Assays for Predictive Modeling of Reproductive and Developmental Toxicity Modulated through the Endocrine System or Pertinent Pathways in Humans and Species Relevant to Ecological Risk Assessment

Deadline: Thursday May 5, 2011

Sponsor: US Environmental Protection Agency EPA is seeking applications for research in development of high-throughput assays for use in analyzing chemicals or mixtures of chemicals to explain how exposure can be causally related to adverse, apical outcomes related to development and reproduction. These applications can address toxicity modulated by chemical effects on the endocrine system or via a variety of other pathways. Assay systems of interest are those relevant to humans and other species relevant to human health and/or ecological risk assessment. Potential funding per award is up to a total of \$1.2 million, including direct and indirect costs, with a maximum duration of three years.

Calendar of Events & Submission Deadlines

Online Calendar. These and more upcoming events and abstract deadlines are listed in the <u>CHE-Fertility searchable calendar</u>.

Conference: 50th Annual Meeting Society of Toxicology

March 6 - 10, 2011 Washington, DC

More than 7000 scientists from industry, academia, and government from various countries around the globe are expected to attend this conference. Offerings include a plenary opening lecture, special lectures, a wide range of symposia sessions and continuing education courses that cover the basic and the advanced topics of the day, workshops, thematic sessions that complement the symposia, round tables, poster sessions, and award presentations.

<u>Teleconference/Webcast: Healthy Aging Starts at Conception: Promoting Health Across the Lifespan</u>

March 11, 2011

11:00 a.m. Pacific / 2:00 p.m. Eastern time

Beginning in the womb and continuing throughout life, environmental factors are strong determinants of throughout the lifespan. This call will discuss how we can advance a more positive path if we understand and address the interrelationships of health and the environment throughout life, and explore commonsense and also innovative approaches that may prevent chronic disease, foster health and sustain local and global economies.

Conference: Environmental Epigenomics and Disease Susceptibility.

March 27-April 1, 2011

Organization: Keystone Symposia

Asheville, North Carolina

Session titles include "Fetal Origins of Adult Disease Susceptibility", "Postnatal Epigenetic Programming of the Brain", "Epigenetics and Complex Diseases" and "Epigenetic Transgenerational Inheritance" and others.

Conference: 6th Copenhagen Workshop on Endocrine Disrupters.

April 26-29, 2011

Copenhagen, Denmark

The field of endocrine disrupting chemicals (EDC) is continuously expanding as scientific evidence of new health effects of xenobiotics appears. EDCs effect the thyroid gland,

pancreas, the nervous system, breast tissue, the prostate and the reproductive organs may be sensitive to EDC exposure. Additionally, the foetal basis of adult disease turns the focus towards the impact of EDCs exposure during vulnerable stages of development. The overall aim of the workshop is to improve our understanding of the role of EDCs for human health, and to share results, information, doubts and ideas.

<u>Call for Abstracts: American Society of Reproductive Medicine</u>

Online Abstract Submission: February 1 - May 2, 2011

Sponsor: American Society of Reproductive Medicine

The ASRM is a non-profit organization whose members must demonstrate the high ethical principles of the medical profession, and evince an interest in infertility, reproductive medicine and biology. The 67th Annual Meeting will take place in Orlando, Florida on October 15-19, 2011.

Conference: 75th Annual Educational Conference & Exhibition

June 15 - 18, 2011

Sponsor: National Environmental Health Association

The conference is designed to educate and inform people who have an interest or career in environmental health and protection, as well as to build a professional network of environmental health colleagues, exchange information, and discover new and practical solutions to environmental health issues.

<u>Conference/Seminar: 2011 National Healthy Homes Conference</u>

June 20 - 23, 2011

Denver, Colorado Sponsor: US Department of Housing and Urban Development. This year's theme, "Leading the Nation to Healthy Homes, Families, and Communities," reflects the growing demand for building and sustaining housing and communities that are healthy, safe and green for America's families. The conference will offer over 100 educational sessions covering eight topic areas.

<u>Conference: 6th International Conference on the Impact of Environmental Factors on Health</u>

July 25 - 27, 2011

Riga, Latvia

Sponsor: Wessex Institute of Technology and the Journal of Saftey and Security Engineering. Health problems related to the environment have become a major source of concern all over the world. The health of the population depends upon good quality environmental factors including air, water, soil, food and many others. The interaction between environmental risk and health is often complex and can involve a variety of social, occupational and lifestyle factors. This emphasies the importance of considering an interdisciplinary approach.

<u>Conference: World Congress on Controversies in Obstetrics, Gynecology & Infertility (COGI)</u>

November 17-20, 2011

Paris, France

The groundbreaking series of COGI Congresses provide a unique platform to discuss controversial issues in all fields of Obstetrics, Gynecology and Infertility. The ability to discuss only controversial topics with emphasis on clinical solutions in cases where no agreed-upon answers or consensus exist, provides clinicians with an insight and a takehome message that ameliorates treatment in the most difficult situations.

The Collaborative on Health and the Environment offers this information as a service but does not endorse any of the events, articles or announcements.

Please email Karin Russ, CHE's Fertility/Reproductive Health Working Group Coordinator, at karin@healthandenvironment.org with any questions, comments, or suggestions.

If you would like to join the Collaborative on Health and the Environment (CHE) and the Fertility/Reproductive Health Working Group, please complete the application on the CHE website: http://www.healthandenvironment.org/application. Joining CHE means receiving up to four email messages a month from the CHE National listserv. CHE costs nothing to join and the benefit is shared information and opportunities for further engagement, if you choose. Be sure to mark that you want to join the CHE Fertility/Reproductive Health Working Group at the bottom of the application.

Karin Russ

Collaborative on Health and the Environment

Join Our Mailing List!