

Collaborative on Health and the Environment



eNewsletter - September 2013

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Human Genome + Human Exposome = Your Health

In the push towards personalized medicine, unlocking the human genome is often lauded as the key to developing individualized medical plans for those who have genes indicating they are at risk of certain diseases or disabilities.

Those plans often include developing and using more and more pharmaceuticals. The increasing mixture of pharmaceuticals ending up in soil and waterways is associated with a growing number of environment and health problems, a situation expected to be made worse with climate change as reported this month in the <u>Journal of Toxicology and Environmental</u> <u>Health</u>.

Even more important, this view overlooks the fact that epigenetic markers, influenced by a range of environmental factors, are also crucial to understanding a person's susceptibility to disease. Given this, a number of researchers have recently pressed for a significant investment in mapping the human exposome--that is, all environmental exposures starting from conception, including nutritional, chemical, psychosocial, etc. These researchers include Christopher Wild, PhD, a cancer epidemiologist who coined the term 'exposome', and others at various institutions in the US, such as the National Institutes of Health, Centers for Disease Control and Prevention, University of California-Berkeley, Emory University, and so forth. Granted this is a much more complex undertaking than mapping the human genome because

of the multiple interacting environmental factors that can influence gene expression and, in turn, health across the lifespan. But without a dedicated effort to explore the exposome, we will continue to focus solely on the genome, which is only part (and likely just a small part) of the equation when understanding human health.

On the other hand, if health professionals not only know a person's DNA, but what that person has been exposed to in terms of stress, chemicals, diet, etc. as well, then they will be far better able to reduce risk and prioritize prevention. For example, widespread use of electronic health records provides an opportunity to develop standardized questions about people's exposures. Since early life development influences health across the lifespan, obstetric records might be a good place to start. Not only would this enhance health professionals' ability to make recommendations early on, it would provide a database for studying correlations between exposures and diseases that appear later in life--and in turn, radically increase options for improving individual and public health.

To learn more about the current scientific understanding of the human exposome, please join us and our research experts on CHE's Partnership call to be held Wednesday, Sept. 18th. For details and to RSVP, please see: http://www.healthandenvironment.org/ partnership_calls/12489.

As the days shorten and the leaves enliven the ground with their golden tones, I look forward to staying in touch and deepening our collaborative efforts this fall.

With warm regards,

Elise Miller, MEd CHE Director

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CHE Partnership Calls

CHE Partnership call: Endocrine Disrupting Chemicals: Exposure, Research and Regulation

Thursday September 12, 2013 at 9:00 am Pacific / noon Eastern

RSVP for this call

Assessing the profound significance of exposures to endocrine disrupting chemicals requires the incorporation of principles of endocrinology into traditional toxicology protocols. This call, jointly hosted by CHE and The Endocrine Disruption Exchange (TEDX), will feature Dr. Jerrold Heindel, Scientific Program Administrator at the National Institute of Environmental Health Sciences, presenting an overview of an historically important meeting in Berlin that brought toxicologists and endocrinologists together in September 2012, to begin the mapping of such an incorporation. Dr. Laura Vandenberg, Assistant Professor, University of Massachusetts, Amherst, School of Public Health, will then discuss non-monotonic dose response, one of the possible effects of EDCs that can be overlooked in traditional toxicological risk assessment, and Gwynne Lyons, Director, CHEM Trust, will describe the current European Union negotiations concerning EDC regulation.

CHE Partnership call: The Exposome: Measuring Multiple Factors Impacting Our

Health

Wednesday September 18, 2013 at 10:00 am Pacific / 1:00 pm Eastern

RSVP for this call

The 'exposome' is a measure of the effects of environmental exposures (including lifestyle factors) on health from conception throughout life and is a key determinant of chronic disease. The term was first coined by Dr. Christopher Wild, a cancer epidemiologist, in a 2005 article entitled "Complementing the Genome with an 'Exposome': The Outstanding Challenge of Environmental Exposure Measurement in Molecular Epidemiology." Several initiatives focusing on the exposome have been launched in the US over the last couple years. The National Academy of Sciences hosted a meeting in December of 2011 entitled "Emerging Technologies for Measuring Individual Exposomes." The Centers for Disease Control and Prevention developed an overview, "Exposome and Exposomics", which outlines the three priority areas for researching the occupational exposome as identified by the National Institute for Occupational Safety and Health. The National Institutes of Health (NIH) has made investments in technologies that support exposome-related research, including biosensors, and supports research on gene-environment interactions. In May, 2013, the National Institute of Environmental Health Sciences (NIEHS) awarded a Core Center Grant to Emory University that is focused on the exposome. The idea of a Human Exposome Project, analogous to the Human Genome Project, has been proposed and discussed in numerous scientific meetings, but has not yet been launched.

This call will feature two leading national experts, Dr. Stephen Rappaport and Dr. David Balshaw, who will provide an overview of what we currently understand about the exposome, the challenges of measuring it, and some highlights of the emerging research in this exciting new field.

CHE Partnership call: Preconception Risk Reduction

Hosted by the CHE Fertility and Reproductive Health Working Group Thursday October 3, 2013 at 10:00 am Pacific / 1:00 pm Eastern

RSVP for this call

The US Centers for Disease Control and Prevention's National Health and Nutrition Examination Survey(CDC NHANES) provides data showing women of reproductive age carry a body burden of hundreds of industrial chemicals and toxicants. Recent evidence links many of these contaminants with infertility, early pregnancy loss, and negative impacts on embryonic and fetal development. Clinicians caring for women of reproductive age are seeking guidance on effective counseling for clients to reduce exposure to toxic substances and optimize health before becoming pregnant. This call will examine available data in support of recommendations to minimize toxic exposures, highlight data gaps, and explore future directions in preconception risk reduction.

Merry-K. Moos of UNC, Chapel Hill will present information from the CDC Preconception Health and Health Care Initiative, its evidence-based review of preconception care emphases for the clinical setting and the soon-to-be-released clinical toolkit. Traci Townsend, formerly of Planned Parenthood Mar Monte, will present data from a project on pesticide risk reduction and reproductive health in agricultural families. Dr. Victoria Maizes of the Arizona Center for Integrative Medicine will provide a clinical approach to reducing exposure to environmental hazards based on existing scientific evidence.

Special Announcements

CHE colleagues selected as Reach the Decision Makers fellows

The University of California San Francisco's Program on Reproductive Health and the Environment has selected the Reach the Decision Makers fellows for the 2013-3014 cycle. The Reach the Decision Makers Fellowship trains scientists, community groups and health care providers to effectively promote science and health-based policies at the US EPA. CHE congratulates three of our colleagues who serve on CHE's core advisory committee that have been selected for this year's PRHE fellowship: Sarah Howard, coordinator of CHE Diabetes-Obesity Spectrum working group, Sharyle Patton, director of Commonweal's Biomonitoring Resource Center, and Karin Russ, coordinator of CHE Fertility & Reproductive Health. For more information, see the PRHE Reach the Decision Makers page.

CHE's recommended environmental health video list

If you missed CHE's summer list of recommended videos relating to environmental health you can still view the list and watch the videos by visiting CHE's blog.

CHE's Chemical Policy Reform webpage

On July 31, 2013 Barbara Boxer, D-Calif., led a <a href="https://example.com/heart-selection-number-selectio

Resources from recent CHE calls:

If you missed any of the following CHE calls, you may listen to MP3 recordings and find supporting materials at the following links:

- July 16, 2013: Policy and Practice: The US Food System and Health
- June 27, 2013: <u>National and International Perspectives on Nutrition, Food, Food</u>
 <u>Security, and Agricultural Systems: Reconnecting the Personal, Public and Environmental Health</u>
- June 20, 2013: <u>The Rise of the US Environmental Health Movement: A Conversation</u> with Kate Davies

You can subscribe via podcast to receive notifications of new call recordings added to the CHE archives. View a list of past calls and subscribe to the podcast.

CHE Working and Regional Group Updates

Stay in touch with CHE through social media:

Visit CHE's blog to read recent posts.

Visit CHE's Facebook page.

Join CHE on <u>Twitter</u>. CHE now tweets during most Partnership calls. Join the online conversation by following CHE on Twitter.

CHE Asthma

~ coordinated by Genon Jensen, info@healthandenvironment.org

~ Study: Air pollution causes 200,000 early deaths in US

Air pollution causes about 200,000 early deaths each year in the United States, according to a new study from the Massachusetts Institute of Technology (MIT).

Read more

CHE Climate Change

~ coordinated by Genon Jensen, info@healthandenvironment.org

~ EU Environmental Impact Assessment (EIA) Directive

In July, a coalition of environment and health NGOs sent a letter to members of the European Parliament and members of the Environment, Public Health and Food Safety Committee asking them to support the inclusion of all unconventional fossil fuels (UFF) activities in the Environmental Impact Assessment (EIA) Directive which is currently being reviewed by the European Parliament.

Read more

~ What we're seeing now: Air pollution and climate change

Using model simulations, the research team found that climate change will exacerbate air pollution and its associated health effects globally. The impacts are especially keen in heavily populated--and polluted--regions of East and South Asia and North America. The increased health risks, they found, are largely driven by an increase in fine particulate matter, or soot. Daily Climate.

Read the study

~ EPA releases new climate change video series

The new video series supports the President's Climate Action Plan by encouraging American families to reduce the amount of energy they consume, cutting down on their utility bills and protecting people's health.

Read more

~ New book: Fevered: Why a Hotter Planet will Hurt Our Health--And How We Can Save Ourselves

From spiraling rates of asthma and allergies and spikes in heatstroke-related deaths to swarms of invasive insects carrying diseases like dengue or West Nile and increases in heart and lung disease and cancer, the effect of rising temperatures on human health will be farreaching, and is more imminent than we think.

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~ Article: Rebranding Climate Change as a Public Health Issue

An article in *Time* explores why medical professionals may be the best messengers for global warning right now.

Read more

CHE Diabetes-Obesity

- ~ coordinated by Sarah Howard, sarhow@gmail.com
- ~ New articles and research published in academic and scientific journals Valvi D, Mendez MA, Garcia-Esteban R et al. Prenatal exposure to persistent organic pollutants and rapid weight gain and overweight in infancy. Obesity (Silver Spring). 2013 Aug 20.

Eng DS, Gebremariam A, Meeker JD et al. <u>Bisphenol A and Chronic Disease Risk Factors in US Children</u>. Pediatrics. 2013 Sep; 132(3):e637-45.

Wei Y, Zhu J, Nguyen A. <u>Urinary concentrations of dichlorophenol pesticides and obesity among adult participants in the U.S. National Health and Nutrition Examination Survey</u> (NHANES) 2005-2008. Int J Hyg Environ Health. 2013 Jul 8.

Gray SL, Shaw AC, Gagne AX, Chan HM. <u>Chronic Exposure to PCBs (Aroclor 1254)</u> <u>Exacerbates Obesity-Induced Insulin Resistance and Hyperinsulinemia in Mice</u>. J Toxicol Environ Health A. 2013;76(12):701-15.

Kim JH, Park HY, Bae S et al. <u>Diethylhexyl Phthalates Is Associated with Insulin Resistance via Oxidative Stress in the Elderly: A Panel Study</u>. PLoS One. 2013 Aug 19;8(8):e71392.

Pan WC, Kile ML, Seow WJ et al. <u>Genetic Susceptible Locus in NOTCH2 Interacts with Arsenic in Drinking Water on Risk of Type 2 Diabetes</u>. PLoS One. 2013 Aug 14;8(8):e70792.

CHE Working Group on Electromagnetic Fields

- ~ coordinated by Antoinette Stein, nettestein@gmail.com
- ~ Health, consumer groups call for new cell phone radiation standards
 Citing the soaring number of wireless devices in the hands of children, long-standing flaws in federal cell phone radiation standards and new science raising questions about cell phone safety, 12 public health and consumer groups are calling on the government to revamp the standards to better protect both young people and adults.

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CHE Fertility and Reproductive Health

- ~ coordinated by Karin Russ, karin@healthandenvironment.org
- ~ Recent reproductive health news

<u>Study shows China's rising infertility rate due to air pollution.</u> A new national study tackling China's rising infertility rate has deduced that the nation's 40 million infertile women may have environmental pollution to blame. South China Morning Post, China.

<u>Scientists prevent preterm birth caused by gene-environment interactions in mice.</u> New research in the Journal of Clinical Investigation provides evidence that gene-environment interactions are a major contributor to preterm birth and that using a combinatory treatment

strategy can prevent preterm delivery in a mouse model. PR Newswire.

New study suggests "universal fetal exposure" to BPA. A new study in California found bisphenol A in all samples of umbilical cord blood obtained from pregnant women, suggesting universal fetal exposure. More than one-third of the samples had levels comparable to or higher than levels associated with health effects in animals. Environmental Health News.

<u>California bill would warn pregnant women about prenatal chemical exposures.</u> Senate Bill 460 mandates that information about environmental health be provided to women during their prenatal care. Existing law requires that medical professionals in California provide pregnant women with a pamphlet on prenatal testing. If SB 460 passes, this pamphlet would include an insert about toxic chemical exposures. Breast Cancer Fund.

Federal report finds decline in infertility among married women. The rate of infertility among married women in the U.S. dropped from 8.5% in 1982 to 6% between 2006 and 2010, researchers from the National Center for Health Statistics said. The report found that 4.9% of unmarried women with a male partner were infertile. USA Today.

~ New articles and research published in academic and scientific journals MMRW study: Notes from the field: investigation of a cluster of neural tube defects-- Central Washington, 2010-2013. No statistically significant differences were identified between cases and controls, and a clear cause of the elevated prevalence of anencephaly was not determined. MMRW.

Predictors and consequences of global DNA methylation in cord blood and at three years. Researchers found that pre-pregnancy BMI was negatively predictive of both infant cord blood and three-year old off-springs' DNA methylation, even after statistical adjustment to account for the correlation between cord blood and three-year DNA methylation. PlosOne.

<u>Perinatally administered Bisphenol A as a potential mammary gland carcinogen in rats.</u> These findings suggest that developmental exposure to environmentally relevant levels of BPA during gestation and lactation induces mammary gland neoplasms in the absence of any additional carcinogenic treatment. Environmental Health Perspectives.

A cohort study evaluation of maternal PCB exposure related to time to pregnancy in daughters.

This empirical method can generate hypotheses about mixture effects and mechanisms and overcomes some of the limitations of standard regression techniques. Environmental Health.

Association of autism with induced or augmented childbirth in North Carolina Birth Record (1990-1998) and Education Research (1997-2007)databases. This work suggests that induction/augmentation during childbirth is associated with increased odds of autism diagnosis in childbood. JAMA Pediatrics.

Association of gestational maternal hypothyroxinemia and increased autism risk. Transient gestational hypothyroxinemia in rodents induces cortical neuronal migration brain lesions resembling those of autism. Findings are concordant with epidemiological, biological, and experimental data on autism. Annals of Neurology._

Bisphenol-A and human oocyte maturation in vitro. To our knowledge, this is the first study

investigating the effect of BPA on oocyte meiotic maturation, spindle morphology and chromosome alignment in human oocytes. Together with prior animal studies, the data support the negative influences of BPA on oocyte maturation. Human Reproduction.

<u>Serum PFOA & PFOS Concentrations in relation to birth outcomes in the Mid-Ohio Valley,</u> 2005-2010.

Results provide some evidence of positive associations between measured serum perfluorinated compounds and pregnancy-induced hypertension and a negative association between PFOS and birth weight among full-term infants. Environmental Health Perspectives.

~ Announcement: <u>FOA: Developmental Mechanisms of Human Structural Birth</u> <u>Defects (P01)</u>

This Funding Opportunity Announcement (FOA) encourages innovative, multidisciplinary, interactive, and synergistic program project (PO1) grant applications from institutes/ organizations that propose to integrate basic, translational, and clinical approaches to understanding the developmental biology and genetic basis of congenital structural human malformations. Open date: August 25, 2013.

CHE Healthy Aging and the Environment Initiative

~ coordinated by Maria Valenti, mvalenti@igc.org

CHE's <u>Healthy Aging and the Environment Initiative</u> continues to bring information about environmental influences on health across the lifespan to new audiences.

~ Recent and Upcoming Events

On August 1st we participated in a multi-sector presentation on environmental health, *Rachel Carson and Silent Spring at 50* at the <u>Generations United 17th International conference in Washington DC</u>. The lively session focused on the connections between air, water, and earth, and included walking to sites relating to each, such as an indoor waterfall. Speakers addressed the legacy of pioneering scientist Rachel Carson, the dramatic changes over the

past century to the multiple environments that affect our health, and how we can all live healthier lives. Speakers included organizer Kathy Sykes, EPA Aging Initiative; Dr. Peter Whitehouse, The Intergenerational Schools; and Maria Valenti, CHE. Participants joined in interactive activities and dancing, led by artists Maria Genne, Kairos Alive!; Jennie Smith-Peers, Elders Share the Arts; and surprise guest violinist Anthony Hyatt, Moving Beauty. After sharing thoughts on health and environments, and the importance of intergenerational collaborations, one attendee said "I thought I knew a lot about the environment. This session showed me how much I don't know."



Participants simulate the flow of water at the Generations United conference interactive session on environmental health.

See the <u>Rachel Carson Sense of Wonder finalists</u> in a contest organized by EPA's Aging Initiative, Generations United, and the Rachel Carson Council, Inc., the Dance Exchange and the National Center for Creative Aging.

In upcoming events, we will provide a presentation on *Healthy Aging and the Environment* at the Atlanta Regional Commission's 2013 Lifelong Community Summit: Aging, Health and the



Environment.

This summit will take place September 17, 2013 at the Atlanta Botanical Gardens. For agenda, or to register, visit the summit's webpage.

Boston University Superfund Research Project (BU SRP)

CHE is a partner in the <u>BU SRP Research Translation Core (RTC)</u>. Our next CHE Partnership call in partnership with BU SRP will focus on environmental justice issues, and will be held October 24th. It will feature three Superfund Research Project leaders including Dr. Phil Brown from Brown University, Dr. Denise Moreno from the University of Arizona, and Dr. Margaret Reams from Louisiana State University. They will each address their collaborative work on environmental justice with community partners. Attorney Staci Rubin, from BU SRP community partner Alternatives for Community and Environment, will act as the discussant.

BU SRP has developed with partners a <u>Health Studies Guide</u> to assist individuals and community groups in understanding community health studies and when they may be valuable in their communities. The first four chapters are now available online.

CHE Regional Working Groups Updates

CHE Alaska

- ~ coordinated by Pamela Miller, pamela@akaction.org
- ~ CHE Alaska call: Asking the Right Questions: Are Women of Childbearing Age at Risk of Exposure to Multiple Pollutants

Wednesday September 18, 2013 at 9:00 am Alaska / 10:00 am Pacific / 1:00 pm Eastern.

RSVP for this call



In a recent analysis of thousands of U.S. women of childbearing age, Brown University researchers found that most exceeded the median blood level for two or more of three environmental pollutants that could harm brain development of fetuses and babies: lead, mercury, and polychlorinated biphenyls. Join lead author of the study Dr. Marcella Remer Thompson of Brown University to learn more about women's chemical body burden and the need to look at health outcomes for multiple environmental chemical co-

exposures.

CHE HEAL

- ~ coordinated by Lisette Van Vliet, <u>lisette@env-health.org</u>
- ~ Better health through a healthy environment: Celebrating 10 years of HEAL Since its founding in 2003, HEAL has brought the unique voice of the health and environment community into the decision-making process in Europe and beyond. Join us on September 25th to hear about new horizons for better health and environment-friendly lives.

 Read more
- ~ France opens public consultation on report for future EDC plan

The <u>report (available here in French)</u> proposes intensifying research efforts, with a focus on the effects of EDCs on health and biodiversity and on possible replacement options. It also

calls for at least five substances each year that are assessed on their endocrine disrupting effects. The <u>consultation</u> is open until 20 September and the results will feed into a national strategy on EDCs.

Read more

~ Network on environmental health economics launched

Health economic evidence is not used to its full potential in decisions on environment and health in Europe. This is why the World Health Organization's Regional Office for Europe has initiated the Environmental Health Economics Network (EHEN).

Read more

~ New joint publication: Non-communicable diseases and environmental determinants

Civil society groups, in cooperation with UNEP, recently released a joint publication on non-communicable diseases and environmental determinants. NCDs are now the leading cause of preventable morbidity and related disability, and thus significantly affect the well being of many individuals and workers' daily lives.

Read more

~ Public consultation on the authorization of DEHP, BBP, DBP, DIBP The European Chemicals Agency (ECHA) has launched an eight weeks period for public consultation on alternatives for several uses of four phthalates (DEHP, BBP, DBP, DIBP). Third parties (companies, trade associations, NGOs, trade unions, scientists and scientific bodies, authorities, etc.) can send information on alternative substances or technologies to the use(s) applied for; risks, technical feasibility and costs of alternatives.

Information on how to submit information on alternatives can be found at: http://echa.europa.eu/web/guest/addressing-chemicals-of-concern/authorisation

~ Smart Fox: ToxFox-App helps consumers detect EDCs in cosmetics
The smart phone app is based on a study that German group BUND carried out using the data-bank of the Swiss Code-Check.info-platform.

Read more

CHE Washington

- ~ coordinated by Steve Gilbert and Aimee Boulanger, info@healthandenvironment.org
- ~ CHE-WA Children's Environmental Health Working Group meeting

The next CHE-WA Children's Environmental Health Working Group meeting will take place on Thursday September 12, 2013, 9:30 to 11:30 am. The meeting will be hosted by the Institute of Neurotoxicology & Neurological Disorders (INND). Dr. Steve Gilbert, Director and Founder of INND, will speak. Dr. Gilbert has published *A Small Dose of Toxicology: The Health Effects of Common Chemicals*, a free e-book at www.asmalldoseof.org. He also founded Toxipedia (www.toxipedia.org), a wiki-based website designed to connect science and people by placing scientific information in the context of history society and culture.

Dr. Gilbert will discuss the concerns about the health effects of nanoparticles, which have a long history of human use, dating as far back as 9th century Mesopotamia, where gold and copper nanoparticles were used to add luster and 'glitter' to pottery. But it is only recently that nanotechnology has been put into widespread consumer and industrial use. Growing from a theoretical field to a large and well-funded industry, nanoparticles are now

found in a huge variety of household items.

RSVP to gail.gensler@kingcounty.gov or call 206-263-3082.

Location: The Good Shepherd Center, Room 202, 4649 Sunnyside Avenue N, Seattle, WA 98103

Phone access: Since conference call access to this site is likely to be of poor quality, we advise coming in person. However, you can try dialing in at 1-866-756-1071, and use participant passcode: 9016859#

Announcements and News Highlights

EPA to withdraw 2 high-profile regulations --sources

US EPA is set to withdraw two prominent chemical regulations, including a list of materials recommended for increased enforcement that had stalled under executive review for more than three years, according to two sources briefed by the Obama administration on the decision.

Read more

Health and Environment publishes most popular articles from last 5 years

After 5 years and 60 editions of Health and Environment, they look back at their most popular articles including concerns that talking about causes of cancer can cause cancer; the difficulties of defining "endocrine disruptor"; shedding light on the obesogen hypothesis; and more.

Read more

EHN and its sister site, The Daily Climate, offer a wealth of valuable information each day at no cost to subscribers. The daily email subscriptions and the 350,000-item news archive have recently been supplemented by a Facebook page and Twitter feed.

Environmental Health News: email, Facebook, Twitter and a website archive Visit the website

Visit the EHN archives page

<u>Sign up for EHN's free weekly e-newsletters</u> focused on children's health and energy and health

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September 2013 issue of *Environmental Health Perspectives* available online Read more

September 2013 issue of *Environmental Factor* available online Read more

CHE maintains a <u>news feed</u> of environmental health related news announcements and events collected from a multitude of sources on CHE's website.

Reports, Resources and Other Updates

New Breast Cancer Fund report reviews scientific literature on prenatal BPA exposures, prompts food companies to get BPA out of canned food



The Breast Cancer Fund has published a new report , which summarizes more than 60 peer-reviewed animal and human studies on prenatal BPA exposure, many of which demonstrate increased risk for breast cancer, prostate cancer, metabolic changes, decreased fertility, early puberty, neurological problems and immunological changes. It also explores why the developing fetus is particularly sensitive to the effects of BPA-especially during the first eleven weeks of pregnancy, when many women don't yet know they're pregnant. Learn more at: www.breastcancerfund.org/disrupteddevelopment.

DNA changes during pregnancy persist into childhood

Few studies have examined DNA methylation changes within an individual over time and all of these studies have been conducted in adults. In this study, the Columbia Center for Children's Environmental Health (CCCEH) aimed to characterize how global DNA methylation changes from birth to age three within a longitudinal birth cohort study and to determine whether there are consistent predictors of DNA methylation levels measured three years apart.

Read more

EPA launches ChemView

The US Environmental Protection Agency (EPA) has launched a web-based tool, called ChemView, to significantly improve access to chemical specific regulatory information developed by EPA and data submitted under the Toxic Substances Control Act (TSCA). Read more

EPA launches new online mapping tool for environmental impact statements

The US Environmental Protection Agency (EPA) launched an interactive web-based mapping tool that provides the public with access and information on Environmental Impact Statements (EIS) filed with EPA for major projects proposed on federal lands and other proposed federal actions. When visiting the website, users can click on any state for a list of EISs, including information about the potential environmental, social, and economic impacts of these projects.

Read more

New edition of San Francisco Medicine focuses on food

The new edition of the *San Francisco Medicine*, the journal of the San Franciso Medical Society, is titled Food: Too Much, Too Little, Too Bad: Nutrition Progress, Policy and Pitfalls and features articles co-authored by several CHE Partners including Dr. Ted Schettler, Steve Heilig, MPH, and Dr. Pete Myers.

Read more

CHE lists hundreds of reports, books, videos, databases and other resources in a searchable Portal to Science on CHE's website.

Thank you for taking the time to read the latest about CHE. As always, we welcome your questions and suggestions. Please direct comments to Elise Miller, Director of CHE, at elise@healthandenvironment.org.

Best wishes,

Elise Miller, MEd, Director

Steve Heilig, Director of Public Health and Education at San Francisco Medical Society and CHE

Erika Sanders, Administrative Coordinator

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