Groundbreaking Ceremony. OCPL worked closely with staff from the Office of Management to organize a groundbreaking event on April 15 for a new secure, net zero energy warehouse that will be built on the NIEHS campus. Local officials were invited to participate, including Durham Mayor Pro Tempore Cora Cole-McFadden, who represented Durham Mayor Bill Bell, and Congressman David Price, D-N.C., whose district includes NIEHS. Senator Richard Burr, R-N.C., was represented by staff member Betty Jo Shepheard. A Factor story and a story for the local media were also developed.

Climate Change and Human Health Assessment. On April 4, NIEHS was front and center for the White House release of a new report, “The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment.” NIEHS played a vital role in the development of the new report. NIEHS and NTP Director Linda Birnbaum moderated one of the panels. OCPL worked with John Balbus, M.D., NIEHS senior advisor for public health, and Kimberly Thigpen Tart, J.D., NIEHS program analyst in the Office of Policy, Planning, and Evaluation, to bring attention to the report and the NIEHS role in climate change research efforts. Some examples include the development of a Factor story, a new fact sheet, social media, supporting webcast outreach, and facilitating media interviews. The NIEHS Climate Change and Environmental Exposures Challenge web pages were also updated. Following is a sampling of media stories about climate change and health.

- April 22, American Lung Association of Minnesota included quotes from Balbus in their story, “Protecting our climate and health on Earth Day.
- April 6, Vogue magazine quoted Balbus in the story, “4 ways that climate change will directly impact your health – and what you can do about it.”
- April 4, WDBJ-TV featured one of the NIEHS climate change challenge winners in the story, “New technology provides data for first responders ahead of disasters.”
- April 4, News and Observer mentioned NIEHS in the story, “New climate change report predicts that thousands will die or get sick.”
- February 24, Indian Express wrote, “Experts call for close collaboration between meteorology, public health,” which included quotes from Balbus.
- February 9, Climatewire wrote, “Experts praise Zika funding but call for climate research,” which included quotes from Balbus.
Women's Health Awareness Day. OCPL worked closely with Joan Packenham of DIR to proactively promote attendance for an April 2 local women's health awareness event she was leading with local partners. This preparation included working with Packenham for an on-camera TV interview with local ABC affiliate WTVD Channel 11, helping develop materials for the conference and website, and staffing an NIEHS exhibit at the event. This second annual event attracted nearly 600 women, men, and children to the campus of North Carolina Central University (NCCU) in Durham, North Carolina. The event provided a wealth of activities to educate and inspire the diverse group of people of all ages who participated. A Factor story was developed. Packenham was also featured by a local columnist, Barry Saunders, in the Raleigh News and Observer on March 31.

NIEHS Celebrates 50 Years of Environmental Health Research at NIH. OCPL has taken the lead in leading a committee that is planning NIEHS 50th anniversary events. Committee members continue to meet regularly to plan and implement a yearlong calendar of activities. The festivities kicked off on January 21, with many other events planned and implemented, and will include a big celebration on November 1. A special web page at www.niehs.nih.gov/50 highlights all the upcoming events and recaps past events. NIEHS also announced the launch of a time capsule. Council members, researchers, staff, and members of the public are invited to nominate items for the capsule before it is sealed for 25 years. Nominations are due by June 30. Also, T-shirts and other commemorative products are available for purchase through the First Environments Early Learning Center site at http://bit.ly/1MpdAoo. A few examples of recent events related to our 50th anniversary celebration are noted below.

Science in the Cinema. On April 24, more than 200 kids and parents gathered at Marbles Kids IMAX Theatre for the movie WALL-E, and then participated in science activities related to themes within the movie. Scientists representing DIR, NTP, and DERT worked together to plan and implement the activities. A Factor story was also developed.

RTP-180 Community Forum. On February 18, more than 300 people from the Raleigh-Durham area joined Birnbaum and four other local scientists for evening talks and discussion on gene-environment interactions. OCPL helped promote the event, led social media efforts, and developed a Factor story.

The National Institute of Environmental Health Sciences: 50 years of research and training to improve global health. The Fogarty International Center, part of NIH, highlighted global health efforts by NIEHS in the April issue of Global Health Matters.
Society of Toxicology (SOT) meeting. NIEHS and NTP staff played a leading role in presenting science sessions and posters at the annual SOT meeting March 13-17 in New Orleans. The combined NIEHS, NTP, and Environmental Health Perspectives (EHP) exhibit booth, staffed by OCPL and others, was a focal point for attendees to get information and receive hands-on experience on some new resources, including Tox21 data mining. The event drew more than 6,800 toxicologists from more than 50 countries, and nearly 350 exhibitors.

Two Factor stories were developed to highlight the meeting and some of the cutting edge science from NIEHS and NTP.

- Society of Toxicology meeting to feature sessions led by NIEHS and NTP
- Cutting edge talks, awards, and more at annual toxicology meeting

II. NEWS COVERAGE

News Coverage of NIEHS Science, Researchers, and Activities

February 2016 — 429 stories
March 2016 — 474 stories
April 2016 — 2184 stories
May 2016 — 557 stories (as of May 11)

Press Releases

May 3, NIEHS press release, “NIH statement on World Asthma Day 2016,” highlighted research related to asthma supported by NIEHS, the National Institute of Allergy and Infectious Diseases, and the National Heart, Lung, and Blood Institute.

April 25, NIEHS posted a link to a Johns Hopkins Medical School press release, “Despite recent increases in reported food allergy, study finds no change in antibody levels associated with food allergy,” which highlighted work by our grantees.

April 15, NIEHS press release, “Greenness around homes linked to lower mortality,” highlighted work supported by NIEHS that was published in EHP by scientists at Harvard T.H. Chan School of Public Health and Brigham and Women's Hospital in Boston. Bonnie Joubert, Ph.D., of DERT, and Birnbaum served as NIEHS spokespeople. The paper and press release generated more than 300 stories. Some key examples of press coverage included the following.

- Deseret News Online featured quotes by Birnbaum in the story, “The 4-point blueprint for a healthy house.”
- The Daily Free Press story, “Living near greenery may increase lifespan, study finds,” included quotes from Joubert.

April 12, NIEHS posted a link to a USC press release, “Southern California's reduction in smog linked to major improvement in children's respiratory health,” which highlighted work by NEIHS grantees published in JAMA.
March 31, NIEHS posted a link to a UNC press release, “Could a new class of fungicides play a role in autism, neurodegenerative diseases?” that highlighted work by our grantees at UNC School of Medicine.

March 28, NIEHS posted a link to a University of Arizona press release, “UA-led team investigating effects of Gold King Mine spill,” that highlighted NIEHS supported research.

March 1, NIEHS press release, “NIEHS funds five early career researchers for innovative science,” highlighted the new awardees for the Outstanding New Environmental Scientist program. A Factor story was also developed for the March issue. On May 17-18, grantees will participate in the Outstanding New Environmental Awardee Symposium at NIEHS.

Highlights from Newspapers, Trade Papers, and National Magazines

May 6, the People’s Pharmacy column, “Aspirin reduces sister’s risk of breast cancer,” in the Atlanta Journal-Constitution highlighted findings from the NIEHS Sister Study.

May 3, the MIT News Office generated information about a new study showing a link between asthma and DNA damage in the journal Allergy and Clinical Immunology. The story included a quote from Michael Fessler, M.D., of DIR.

May 2, the Washington Post developed a story, “The Oscars for civil servants: Meet this year’s finalists,” which included Allen Wilcox, M.D., Ph.D., of DIR as a finalist for his role in pioneering the epidemiologic study of human reproduction that helped change both scientific and public understanding of fertility and pregnancy.

May 2, a story in GW Today, “Children’s health problems stem from ‘a soup of exposures,’” included quotes from Birnbaum.

April 27, a story by Daily Environment Report, “Cobalt expected to cause cancer, final NTP analysis says,” highlighted findings from the National Toxicology Program.

April 25, Congressional Quarterly wrote a lengthy story, “Damage control,” that focused on the BP rig explosion in the Gulf of Mexico. A component of the story focused on an interview with Dale Sandler, Ph.D., of DIR, and NIEHS efforts in leading the Gulf Study.

April 22, North Carolina Health News wrote, “New testing technique could make identifying potentially hazardous chemicals easier,” which included quotes from Scott Auerbach, Ph.D., of NTP.

April 20, UNC Greensboro Campus Weekly reported on a visit from NIEHS staff.

April 19, Tufts Magazine, included a lengthy feature article on one of its alumni in the story, “The Toxin Avenger.” The story focuses on David Malarkey, Ph.D., of NTP.

April 19, a New York Post story, “Four ways to fight the worst allergy season ever,” included quotes from Darryl Zeldin, M.D., of DIR.

April 14, U.S. News & World Report featured several quotes from Birnbaum in the story, “Chemical profile: reduce hazards lurking in the products you consume.”
April 14, Co Exist also featured Birnbaum in the story, “Another reason not to eat fast food: it exposes you to really bad chemicals.”

April 13, Scoop, a New Zealand media outlet, wrote a story, “Mandatory nationwide fluoridation by stealth,” which included quotes from Birnbaum and highlighted efforts by NTP.

April 12, the NIH Director’s Blog highlighted research by Stephanie London, M.D., Dr. P.H., of DIR, and colleagues focused on how mother’s smoking can change a baby’s epigenome.

April 11, a Science Development story, “Health risks from Peruvian oil spills still unclear,” included quotes from Richard Kwok, Ph.D.

April 5, the Genetic Literacy Project wrote, “Can epigenetics explain the negative effects of smoking during pregnancy?” which included quotes from London.

April 1, Alt Tox Digest included quotes form Cynthia Rider, Ph.D., in the story, “Botanical Dietary Supplement Safety Assessment and Challenges.”

April 1, Scientific American developed a lengthy story, “Mother’s smoking during pregnancy affects baby’s DNA,” which included quotes from London. Med Page Today also ran a story, “Smoking during pregnancy alters Fetal DNA,” which also included quotes from London.

March 31, Davis Patch wrote, “UCD professor awarded for research development of aspirin, Advil, ibuprofin, and Motrin,” which highlighted work by Bruce Hammock, Ph.D., NIEHS grantee. Zeldin is quoted in the article.

March 31, WRAL.COM and other outlets carried a story, “New Mexico’s plan to use pesticide on fish makes some uneasy,” which included quotes form Freya Kamel, Ph.D., of DIR.

March 24, a Science article, “Basic science: Bedrock of progress,” was co-authored by the NIH Director and all institute directors, including Birnbaum.

March 22, CNN Online reported, “Common chemicals linked to endometriosis, fibroids – and healthcare costs,” which included quotes from Birnbaum. U.S. News and World Report also wrote, “What is endometriosis?” which quoted Birnbaum.

March 22, MedPage Today wrote, “Endocrine disruptors may cost billions in health effects: Report,” which included quotes from Birnbaum.


February 25, USA Today wrote, “Studies mixed on link between talcum powder, ovarian cancer,” which mentioned NTP.
February 21, Harvard Crimson wrote, “Public health forum calls for more regulation of contaminants,” which included quotes from Kimberly Gray, Ph.D., of DERT.

February 18, Popular Science wrote, “Your exposome is the sum of every place you’ve ever been,” which highlighted quotes from David Balshaw, Ph.D., of DERT.

February 17, the story, “Report renews concern about asbestos-like minerals at sites in arid West,” by Fair Warning, included quotes from Chistopher Weis, Ph.D., of OD.

February 16, a Pensacola Voice story, “National Institute of Environmental Health Sciences visits Avant Training Center,” highlighted a visit by Sharon Beard of DERT.

February 12, the Wall Street Journal wrote, “Are antibacterial soaps safe?” which mentioned work by NTP on triclosan.

February 3, a story by Voice of America, “Less Alzheimer’s seen in elderly who consumed fish,” included quotes from Cindy Lawler, Ph.D., of DERT.

III. PUBLIC INFORMATION AND OUTREACH

NIEHS Social Media Efforts

In accordance with popular trends, NIEHS continues to expand its use of social media in an effort to reach new audiences with its environmental health message. At present, NIEHS posts content through the following platforms:

- Facebook (targeted to a more general audience)
- Twitter (targeted to both the general public and science community)
- LinkedIn (targeted primarily to those in the environmental health career field)

Note: NIEHS has previously maintained a company page on Google + (G+). However, due to the platform’s recent overhaul as the result of dwindling user support, OCPL has elected to cease posting there until such time as G+ becomes a viable competitor in the social media marketplace. This decision was made after first consulting with multiple other ICs, most of whom have arrived at the same conclusion and course of action.

Growth Trends

The early months of 2016 saw continued growth in NIEHS social media followership.

Twitter — From January 1 to May 1, the NIEHS Twitter feed (@NIEHS) increased by an average of 100 followers per month, bringing its total number of followers from 12,100 to just under 12,600.

Facebook — During the same timeframe, the NIEHS Facebook page increased by more than 100 “likes” per month, bringing its total followership from 11,200 to more than 11,900.

LinkedIn — Finally, the NIEHS LinkedIn page grew by roughly 60 followers per month, rising in total followership from 1,386 to just over 1,600.
Early 2016 Social Media Highlights

*Climate and Health Assessment (Facebook)*: On April 4, several members of NIEHS, including Birnbaum and Balbus, participated in the White House announcement of the 2016 Climate and Health Assessment. NIEHS promoted this across all social media platforms, including Facebook, where the subsequent post drew some of our highest numbers of the year.

As of May 1, the post had reached nearly 4,300 users with 103 interactions (comments and or “shares”), 67 likes, and 63 page clicks.

NOTE: “Page clicks” are recorded any time a user “clicks” the link embedded within a Facebook post — in this instance, to access the Climate and Health Assessment report in which NIEHS is credited.

*NTP Tweets (Twitter)*: NIEHS continued its use of the official National Toxicology Program hashtag (#NTP_NIEHS) in an effort to better track NTP coverage on Twitter. From January 1 through May 1, the NTP hashtag was used 47 times for a maximum impression rate of 402,958.

NOTE: “Impressions” are possible users who may see the content, either directly through the NIEHS Twitter feed or through the feeds of others whom they follow that might “re-tweet” or “favorite” NIEHS content.
Environmental Factor tweets (Twitter): NIEHS continued to grow readership for the institute’s newsletter, the *Environmental Factor*, by tagging related tweets with the hashtag, #EnvironmentalFactor. From January 1 through May 1, this hashtag was posted 174 times for a maximum impression rate of 1,182,766.

Environmental Factor. In January, the *Factor* launched a fully redesigned site. The newsletter continues to remain popular with its thousands of subscribers.

Many of the stories in the Factor are selected and used by other publications, including the NIH Record (reaches out to all of NIH), NIH Catalyst (geared toward intramural researchers), NIH Research Matters (for the general public), NTP Update (for NTP followers), and others.

A few examples are illustrated below.

- The March-April issue of the NIH Catalyst published 2 DIR articles.
  - Research Briefs featured work by Perry Blackshear, M.D., D.Phil.; Sonika Patial, D.V.M.; Ph.D.; Wi Lai, Ph.D.; Debbie Stumpo, Ph.D.; and Gordon Flake, M.D., all of DIR. They found that naturally produced protein tristetraprolin significantly reduced or protected mice from inflammation, which may lead to effective therapies.
  - Francesco DeMayo, Ph.D., of DIR, received tenure.
- The May-June issue of the NIH Catalyst highlighted Janet Hall, M.D., of the Clinical Research Branch in the Colleagues: Recently Tenured section.

Patient Recruitment for Clinical Studies

OCPL works closely with staff at the NIEHS Clinical Research Unit (CRU) to develop materials and recruit patients for studies.
Outreach materials for the Body Weight and Puberty Study is helping to recruit healthy girls, aged 8-14, to join the study.

New recruitment materials for the Epigenetic Biomarkers of Smoking Study, or E-Cigs and Smoking Study, were also developed. A Factor story, local media stories, and social media outreach are all being used to recruit volunteers. OCPL and CRU are also working to recruit women in North Carolina for a clinical study on black cohosh, a dietary supplement used by many women.

Materials were also developed to recruit patients for the Inhaled Nanosilver Study, which will assess the impact of inhaled silver nanoparticles on the lung, and for the Blood Vessel Study, which will look at how certain genes impact the inner lining of blood vessels. In the NIEHS-EPA Pilot Study of Exposure to Chemicals in Consumer Products, the EPA and NIEHS are working together to determine how chemicals in products come in contact with consumers.

Web and Materials Development

Redesigned Kids Site. In April, OCPL launched a redesigned kids site at http://kids.niehs.nih.gov/. The website is a great resource for kids, parents, and teachers to find fun and educational materials related to health, science, and the environment. It features a fresh new look and improved format, specially designed for viewing on cell phones, tablets, and other mobile devices. Social media posts, an email to all NIEHS staff, a new kid-focused bookmark noting the url for the newly redesigned site, and Factor story were some of the ways OCPL created awareness about the new site.

Fact Sheets and Web Pages

Updated a fact sheet, and developed and updated several web pages since the last report to Council.
- Worked with program staff to launch a more engaging appearance and user experience for the Global Environmental Health Newsletter.
- Completed new web pages to highlight efforts led by intramural staff.
  - Pregnancy and Childhood Epigenetics (PACE) — This international consortium is led by London. A Factor Story was also developed to highlight the new consortium.
  - Office of the Scientific Information Officer — David Fargo, Ph.D.
Conferences

- **Endocrine Society Annual Meeting.** OCPL staffed the NIEHS exhibit at the Endocrine Society 2016 meeting in Boston, April 1-3. NIEHS will also exhibit at the American Thoracic Society meeting in San Francisco May 14-18.

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