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"EARLY" Breast Cancer Screening Bill Gains Traction Among Jewish Groups

By Paul Goldberg

In recent weeks, several prominent scientists and public health experts attempted to explain to Rep. Debbie Wasserman Schultz (D-Fla.) and Sen. Amy Klobuchar (D-Minn.) that their bill to introduce breast cancer screening in junior high school could do more harm than good.

These experts included the chief physician of the American Cancer Society, an NIH cancer prevention expert, and a prominent breast cancer epidemiologist, who attempted to acquaint these lawmakers and their staff members with the fundamentals of epidemiology.

Now it seems all that education failed to stick.

In a conference call organized by the Washington office of the United Jewish Communities/Jewish Federations of North America on June 16, both Wasserman-Schultz and Klobuchar reiterated their sales pitch for the bill,

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In the Cancer Centers:

Mayo Clinic Cancer Center Wins $28 Million, Five-Year Renewal Of NCI Support Grant

MAYO CLINIC CANCER CENTER received an additional five years of NCI funding as well as re-designation as a comprehensive cancer center.

"The NCI renewal of Mayo's Cancer Center Support Grant ensures the continuity of research programs that contribute to improvements in medical options for each cancer patient who comes to Mayo Clinic," said MCCC Director **Robert Diasio**. "This NCI grant is key in Mayo Clinic's role to provide the best care for cancer patients."

The NCI Cancer Center Support Grant to totals more than $28 million over five years to provide infrastructure and administrative support for MCCC researchers across the three sites. The current NCI award increases CCSG funding to MCCC by 10 percent, to $5.76 million per year through 2013. This renewal is the seventh consecutive five-year CCSG awarded to Mayo Clinic.

A unique and significant characteristic of the MCCC is that it is the only NCI-designated comprehensive cancer center that conducts research at distinct locations across the U.S. The MCCC is headquartered in Rochester, with research campuses in Scottsdale and Jacksonville. With the approval of the NCI in 2003, MCCC incorporated its cancer research activity at its

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Legislators Ignore Concerns About Risks Of Screening

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called Education and Awareness Requires Learning Young and abbreviated as EARLY.

The bill would give $45 million to Centers for Disease Control and Prevention to launch educational campaigns that would include promoting regular breast self-exams to secondary school students, even though the intervention has been shown ineffective in randomized trials.

Participants on the UJC call were not told that screening at an early age can cause harm and that there are no evidence-based messages that can be imparted on young women reached through the educational and outreach programs Wasserman Schultz and Klobuchar advocate. In fact, no information on the down side of screening was presented, and the EARLY bill was described as a sensible outreach effort to Jewish and African American young women.

"One of the things I didn't know when I got involved was how targeted this disease is with certain groups of women in the Jewish community as well as in the African American community," Klobuchar said on the call. "And what I like so much about this bill is that it gives the CDC the ability to target groups for more education, ones that are most likely to get breast cancer at a young age."

Speaking with Jewish activists, Wasserman Schultz sounded the note of urgency, stating that Jewish women are at "astronomically" higher risk of carrying a genetic mutation that predisposes them to breast cancer and claimed that the bill would improve survival of young women with breast cancer.

"The education campaign that I included in this bill—would raise awareness in higher-risk populations," Wasserman Schultz said. "For example, African-American young women are more likely to be diagnosed with very aggressive breast cancer. They don't have a greater likelihood of being a gene mutation carrier, but many young black women don't know that they are at greater risk."

Breast cancer in women under age 40 is rare. According to the NCI Surveillance Epidemiology and End Results program, a 10-year-old girl has a 0.49% risk of being diagnosed with breast cancer by the time she reached the age of 40. The table is posted at http://seer.cancer.gov/csr/1975_2006/browse_csr.php?section=4&page=sect_04_table.16.html.

Prospectively defining at-risk groups is anything but straightforward. BRCA mutations are found in fewer than 1 percent of all women. Though prevalence among Ashkenazi Jewish women is higher, no major medical group is recommending screening all Jewish women for the mutation.

"There are two sides to this story, and what is presented is that this is something wonderful for women, no downsides," said Leslie Bernstein, a breast cancer epidemiologist and director for cancer etiology and dean for faculty development at City of Hope. "What is missing is presentation of evidence that it will also produce some harm. We don't have evidence to support doing breast self-examination, nor do we have an evidence basis that changing risk factors at a young age will alter young women's risk of breast cancer."

Bernstein was one of the scientists who attempted to present Epidemiology 101 to members of Klobuchar's and Wasserman Schultz's staff. Barnett Kramer, director of the NIH Office of Disease Prevention, similarly made a teaching stopover in the offices of the two legislators.

"I gave them fundamentals of issues concerning screening and talked about the specific principles as they relate to breast self-examination and the available evidence from randomized trials," Kramer said in an interview. "No screening test can have benefits unless it's linked to a subsequent intervention, and all therapies can have harms. In breast cancer, harms have to be explicitly understood."

NIH has taken no position on the legislation.

"Unfortunately the bill as introduced is a public

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health bill that does not recognize public health as a legitimate scientific discipline," Otis Brawley, chief medical officer of the American Cancer Society, wrote in a letter explaining to volunteers why the society is concerned about the bill. Brawley had met with Wasserman Schultz to discuss the bill, Capitol Hill sources said.

Support from UJC comes at a crucial time for the EARLY bill. After it was introduced in March, the bill (HR 1740) rapidly amassed 360 co-sponsors in the House, more than enough to pass should it get to the floor. Supporters include all of Democratic leadership and all Jewish members of the House, including the lone Jewish Republican, Eric Cantor, of Virginia.

However, the number of co-sponsors for the Senate version (S994) is small—just 14—and it's by no means certain that the measure would get through committees now that skeptics have made their case increasingly public. Opposition to the measure was spearheaded by the National Breast Cancer Coalition, which sent out letters to Senate members, put together a detailed critique of the bill, and dispatched experts and patients to explain the bill's flaws to lawmakers (The Cancer Letter, April 10).

On the UJC conference call, Wasserman Shultz urged Jewish grassroots activists to focus their efforts on the Senate members and the leaderships of committees that will be considering the bill.

"At this point, it's very likely that your member of Congress is a co-sponsor since we have 360, but check and see," Wasserman Schultz said on the conference call. "Also, communicate with those members of Congress and particularly the leadership of the committees that consider healthcare legislation—Energy & Commerce House and the Health Education Labor and Pensions Committee in the Senate—to give the bill a hearing and mark it up."

On the call, Wasserman-Schultz said she recently met in person with members of the UJC rabbinic executive committee. "Hopefully, they will fan out across the country to speak to their synagogues and encourage other synagogues [to become] aware of the bill and of the risk," she said.

William Daroff, head of UJC's Washington office, said the rabbis would be effective in generating further political support for the measure. "Those rabbis who are in Washington on a mission right now make up hundreds of rabbis from across the U.S., who are leaders in their local federations and leaders in the rabbinic movements, and that word will be spread from bema to bema," he said on the conference call.

At the telephone conference, Wasserman-Schultz credited breast self-examination with saving her life. Randomized studies haven't demonstrated a survival benefit for breast self-exams.

"I didn't find my tumor early because of luck," she said. "I found my tumor early because of knowledge and awareness. I knew that I should perform breast self-exams. I was aware of what my body was supposed to feel like."

Now, her goal is to "reduce the death rate of young women diagnosed with breast cancer," she said. "We need to ensure that every young woman in America can rely on more than just luck. Because I believe their survival depends on it."

"Just talking about it at the school bus stop, with your kids, or around the dinner or the coffee table, that would give us the fuel that we need to pass the EARLY act, and increase early diagnoses and save lives," she said.

While the bill may be bad public health policy—especially at the time when health care reform focuses the country's attention on the problem of overtreatment—supporting it is good politics.

Wasserman Schultz, 42, is a rising star in the Democratic party. She is the chief deputy whip and a member of appropriations and judiciary committees. Since the EARLY bill arises from personal experience, critics of the measure surely realize that there may be hell to pay for their actions.

By embracing the bill, UJC faces the risk of having directed the lobbying might of American Jewish organizations toward a fundamentally flawed public health measure and exhibiting spectacular ignorance about science.

On the June 16 conference call, no one seemed to object when UJC's Daroff argued that breast cancer risk among Jewish women is analogous to the risk for Tay Sachs Disease, a genetic disorder found in Ashkenazi Jews.

"The key is, much like when I was married, my rabbi insisted that we have a genetic test for Tay Sachs and other genetic disorders," Daroff said. "The earlier you know you are at risk, the more options you have, so you can beat the cancer or beat the risk of having cancer."

This is wrong, experts say:

—"It's horrible to make this comparison," said Bernstein. "Tay Sachs is a genetic disease, and breast cancer is not. If we were to screen as we do for Tay Sachs, we would screen both young men and young women. Tay Sachs, we knew, occurred primarily

within the Askenazi Jewish population and the disease is fatal when onset occurs in infancy and childhood. With BRCA, the proportion of the general population carrying a mutation is is less than one percent. It's rare, even among Askenazi Jewish women. Every medical geneticist who runs a high-risk clinic will tell you that there are specific criteria that are used to select women for BRCA testing."

—"Argument by analogy can oversimplify complicated issues," said Kramer. "It is certainly true that Ashkenazi Jews are screened for Tay Sacks carrier status, but this is not relevant to breast cancer screening. These disease have dramatically different biology, dramatically different meaning of screening tests, dramatically different penetrance and fatality of the condition, and dramatically different interventions."

—"To compare this to Tay Sachs actually shows an amazing amount of ignorance as to how complicated this issue is," ACS's Brawley said in an interview.

Recently, Brawley sent a letter to ACS volunteers, explaining the society's reasons for not supporting the bill.

The text of the letter follows:

I want to put in writing my concerns regarding the EARLY Bill. So many emotions are flying, some folks can better understand if they have something in writing. You might use this letter to at least help people understand where I am coming from. This is an opportunity for dialogue and an opportunity to do something positive. I truly would like to work with others to make a bill that is scientifically sound.

The authors of the bill clearly want to do the right thing and that should not be doubted. As I do not question the good intentions of those writing this bill, I ask that people not question my good intentions.

Unfortunately the bill as introduced is a public health bill that does not recognize public health as a legitimate scientific discipline. It applies diagnostic information from the American Cancer Society and National Comprehensive Cancer Network websites as if it is screening information. It calls for an advisory committee with expertise in every discipline having to do with breast cancer except public health and screening.

This bill is unfortunate in that it represents a wasted opportunity to do good for a population that deserves attention, the very population that the authors want to help. If implemented as written, it can actually cause harm. If implemented, a number of women will seek genetic testing and find out that they have "mutations of unknown significance." Some of these women will seek a bilateral mastectomy. Many of these women will in reality have mutations of no significance, but our science cannot determine most of these yet. There are already scientific data to show that many women getting these messages will suffer significant emotional and mental harms.

The overall tone of the bill makes the problem of breast cancer in young women and genetic causes of breast cancer seem far simpler than it is. It accepts as fact things that public health experts think of as research questions. For example, my public health colleagues would overwhelmingly agree that we do not know if screening programs using examination, mammogram, magnetic resonance, or genetics save the lives of young women (less than age forty) with breast cancer. Fooling ourselves into accepting that these interventions have been proven to save lives does a disservice to young women with breast cancer.

This program, if implemented, will diminish the effect of more pertinent public health messages on tobacco avoidance, good nutrition and physical activity. These are messages that have the potential to save far more lives than a breast cancer awareness campaign. These messages aimed at young women can save far more lives from cancer compared to a breast cancer awareness campaign and will prevent deaths from diabetes and cardiovascular disease. The doubling of the obesity rate in young women over the past thirty years is the greatest threat to their health.

I do realize the desire to do something in breast cancer and I accept the need to do the right thing regarding breast cancer. We need far more psychological and medical support for young women who have breast cancer. We have data to show that there are women who need treatment and cannot get it. We need more research to develop and validate the lifesaving abilities of screening technologies. Please note, I stress validate the lifesaving abilities of screening technologies, because too much emphasis has been put on early diagnosing disease and not on if that diagnosis saves lives. Of course, we also need to find and validate ways of preventing the disease. All we can do now is encourage early pregnancy and do bilateral mastectomy. Neither is one hundred percent effective. I will also agree that most physicians do not understand the complexities of the issue.

I have consulted a number of experts in breast cancer screening, diagnosis, treatment and outcomes in coming to my opinion. I realize that I will be criticized for not supporting this bill. I will be criticized primarily by those who refuse to realize I am truly concerned about

the health of young women and I really want to do the right thing. Too often I have seen the easy, feel-good path in medicine result in harm.

NIH News:

Program To Develop Therapies For Rare, Neglected Diseases

NIH is launching the first integrated, drug development pipeline to produce new treatments for rare and neglected diseases. The $24 million program jumpstarts a trans-NIH initiative called the Therapeutics for Rare and Neglected Diseases program.

TRND creates a drug development pipeline within the NIH and is intended to stimulate research collaborations with academic scientists working on rare illnesses. The NIH Office of Rare Diseases Research will oversee the program, and TRND's laboratory operations will be administered by the National Human Genome Research Institute, which also operates the NIH Chemical Genomics Center, a principal collaborator in TRND. Other NIH components will also participate in the initiative.

A rare disease is one that affects fewer than 200,000 Americans. NIH estimates that, in total, more than 6,800 rare diseases afflict more than 25 million Americans. However, effective pharmacologic treatments exist for only about 200 of these illnesses. Many neglected diseases also lack treatments.

"NIH is eager to begin the work to find solutions for millions of our fellow citizens faced with rare or neglected illnesses," said NIH Acting Director Raynard Kington. "The federal government may be the only institution that can take the financial risks needed to jumpstart the development of treatments for these diseases, and NIH clearly has the scientific capability to do the work."

Studies suggest that it currently takes more than a dozen years and hundreds of millions of dollars to take a potential drug from discovery to the marketplace. The failure rate is high.

"This initiative is really good news for patients with rare or neglected diseases," said ORDR Director Stephen Groft. "While Congress has previously taken important steps to help these patients, such as providing incentives for drug companies under the Orphan Drug Act, this is the first time NIH is providing support for specific, preclinical research and product development known to be major barriers preventing potential therapies from entering into clinical trials for rare or neglected disorders. While we do not underestimate the difficulty of developing treatments for people with these illnesses, this program provides new hope to many people world-wide."

Typically, drug development begins when academic researchers studying the underlying cause of a disease discover a new molecular target or a chemical that may have a therapeutic effect. Too often, the process gets stuck at the point of discovery because few academic researchers can conduct all the types of studies needed to develop a new drug. If a pharmaceutical company with the resources to further the research does get involved, substantial preclinical work begins with efforts to optimize the chemistry of the potential drug. This involves an iterative series of chemical modifications and tests in progressively more complex systems—from cell cultures to animal tests—to refine the potential medicine for use in people. Only if these stages are successful can a potential treatment move to clinical trials in patients.

Unfortunately, the success rate in this preclinical process is low, with 80 to 90 percent of projects failing in the preclinical phase and never making it to clinical trials. The costs are high: it takes two to four years of work and $10 million, on average, to move a potential medicine though this preclinical process. Drug developers colloquially call this the "Valley of Death."

TRND will work closely with disease-specific experts on selected projects, leveraging both the in-house scientific capabilities needed to carry out much of the preclinical development work, and contracting out other parts, as scientific opportunities dictate. Its strategies will be similar to approaches taken by pharmaceutical and biotechnology companies, but TRND will be working on diseases mostly ignored by the private companies. TRND will also devote some of its efforts to improving the drug development process itself, creating new approaches to make it faster and less expensive.

If a compound does survive this preclinical stage, TRND will work to find a company willing to test the therapy in patients. There are several stages to the clinical trials process that can take several years before the safety and efficacy of a new drug is determined. FDA will only approve a drug for general use after it passes these trials. The clinical trials process is also expensive, but the failure rate is lower at this stage.

"NIH traditionally invests in basic research, which has produced important discoveries across a wide range of illnesses," said NHGRI Acting Director Alan Guttmacher. "Biotechnology and pharmaceutical

companies have enormous strength and experience in drug development, but to maximize return-on-investment work primarily on common illnesses. TRND will develop promising treatments for rare diseases to the point that they are sufficiently "de-risked" for pharmaceutical companies, disease-oriented foundations, or others, to undertake the necessary clinical trials. NIH's goal is to get new medications to people currently without treatment, and thus without hope."

NIH already has many components of the drug development pipeline within its research programs. TRND will begin its work in collaboration with the NIH Chemical Genomics Center, a center initially developed as part of the NIH Roadmap for Medical Research. NCGC has developed a robotic, high-throughput screening system and a library of more than 350,000 compounds that it uses to make basic discoveries and probe cellular pathways. NCGC also has developed a team of researchers skilled in developing assays representing disease processes that can be tested in its screening system, and has extensive experience building collaborative projects with investigators from across the research community. Molecules with potential therapeutic properties that emerge from the NCGC screening process could be fed into the TRND drug development pipeline.

"With this new funding, TRND will develop teams of scientists who can do the hard work of optimizing chemicals that we or others discover that may treat rare diseases and turn them into actual drugs," said NCGC Director Christopher Austin, who is also the senior advisor for translational research to the NHGRI director. "This will still be hard work and it will take time and produce failures. Unlike traditional drug development, however, where only successes are published, we will publish our failures as well, so everyone in the drug development community can learn from them. That alone could be revolutionary."

If all the preclinical hurdles can be crossed, a possible treatment must still be tested in a series of clinical trials. TRND will seek to take advantage of several NIH resources that can help launch human studies, including the NIH Clinical Center, the NIH Rapid Access to Interventional Development, and the Clinical and Translational Science Awards program.

Numerous obstacles impede the development of new drugs for rare and neglected diseases. In addition to the reluctance of private companies to risk their capital on a potentially low return, relatively few basic researchers study rare diseases, so the underlying cause of the illness frequently remains unknown. And, because rare diseases are rare, researchers often have difficulty recruiting enough people with the disorder to participate in a clinical trial once a candidate compound reaches the stage where it can be tested in people. Moreover, for many rare diseases, the natural history of the disease is poorly understood, so researchers lack the needed clinical measures (such as blood pressure) that can demonstrate whether a treatment is working.

To address these difficulties, TRND will seek a wide range of collaborations with academic researchers, as well as partnerships with patient advocacy organizations, disease-oriented foundations and others interested in treatments for particular illnesses. TRND's leaders hope that the collaborations will help lay the groundwork for clinical trials once that point in drug development is reached.

TRND is currently setting up an oversight process to help it decide which projects that address thousands of rare and neglected diseases will be pursued. Leadership currently envisions a small number of diseases being studied each year, with strict criteria used to determine which molecules will be studied for which diseases. NIH expects to use existing intellectual property policies to transfer licenses for TRND-discovered drugs to private companies or others for development, clinical testing and marketing.

In the Cancer Centers:

Roswell Park Receives $1.3M In Federal Stimulus Funding

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Minnesota, Arizona, and Florida sites into a single, integrated institution.

"The NCI designation of 'comprehensive cancer center' implies a robust research institution that approaches cancer with a full spectrum of basic, translational and clinical studies leading to improved choices and opportunities for patients and their physicians to address each individual's cancer," Diasio says. "With our research teams in Florida, Arizona and Minnesota, the Mayo Clinic Cancer Center is poised to find improvements for each cancer patient's condition."

The 450 member scientists and physicians of the MCCC faculty across all three sites are organized into programs that focus on 12 key cancer research themes, including Women's Cancers, Neuro-Oncology, Hematologic (blood borne) Malignancies, Gene and Virus Therapy, Developmental Therapeutics, Genetic Epidemiology and Risk Assessment, Immunology and

Immunotherapy, Gastrointestinal Cancers, Prostate Cancer, Cell Biology, Cancer Imaging, and Cancer Prevention and Control.

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ROSWELL PARK CANCER INSTITUTE and the University at Buffalo will receive $1.3 million in research funding through federal stimulus grant dollars. The funding from NIH comes through the American Recovery and Reinvestment Act. Grants include: $356,346 for a Roswell research project on overcoming therapy resistance for lymphoma patients; $145,399 for a Roswell study that looks at race and patterns of how parents navigate the health care community after a child is diagnosed with cancer; $335,208 for Roswell researchers to study of biomarkers in cancer prognosis, progression and metastasis; $297,488 for a Roswell study on allergic airway inflammation and drug development; $191,544 for a study at UB that tests whether patient race or gender affect immunosuppression drug responses in kidney transplant recipients; and $20,478 to UB for student and/or teacher summer research at NIH funded labs. **Candace Johnson**, Roswell's deputy director and senior vice president for translational research, said many of these grants were previously submitted and just missed the cut-off. Without the stimulus dollars, these researchers would likely not have been funded. In April, the two organizations received a combined $2.2 million in stimulus grants for research and technology initiatives. . . . **ERIC HORWITZ**, acting chairman of the radiation oncology department at Fox Chase Cancer Center, was elected president of the American Brachytherapy Society. Horwitz was elected as vice president of the ABS in 2008 and served a one-year term. Currently, brachytherapy is being used primarily to treat prostate, breast, and cervical cancers. Horwitz is recognized for his expertise in treating prostate cancer. At Fox Chase, he has developed advanced programs using intensity-modulated radiation therapy, image-guided radiation therapy and brachytherapy. These include high-dose-rate brachytherapy for prostate cancer, a treatment using temporary radiation implants. . . . **FOX CHASE CANCER CENTER** has promoted **C-M Charlie Ma** to vice chairman of the department of radiation oncology. Ma joined Fox Chase in 2001 and is director of radiation physics. Ma is an expert in the physics of intensity modulated radiation therapy and image-guided radiation therapy. . . . **GISELA SANCHEZ-WILLIAMS**, an advanced practice nurse in the University of Texas M. D. Anderson Cancer Center's Department of Neurosurgery spine program, was named recipient of the 2009 Ethel Fleming Arceneaux Outstanding Nurse-Oncologist Award. A committee representing M. D. Anderson's clinical faculty, patient care administration and nursing staff reviewed nominations from peers and patients before selecting Sanchez-Williams for the annual award. The Brown Foundation Inc. established the honor in 1982. Sanchez-Williams received an award of $15,000. Two years ago, Sanchez-Williams began a support group for spine tumor patients and recently obtained funding to enhance the program with a four-part rehabilitative series and a "toolbox" of educational and rehabilitative resources. . . . **LAWRENCE BOISE** joined Emory University's Winship Cancer Institute as professor of hematology and medical oncology. Boise comes to Emory from the University of Miami Miller School of Medicine where he was a professor in the Department of Microbiology and Immunology and director of that department's graduate program. With longstanding funding by NCI and the Multiple Myeloma Research Foundation, Boise's research team studies how therapeutic agents such as arsenicals and proteasome inhibitors work to kill myeloma cells.

* * *

UNIVERSITY OF SAN PABLO CEU, an academic and research institution in Madrid, Spain, presented **Margaret Foti**, CEO of the American Association for Cancer Research, with an honorary doctorate in medicine. Foti has been CEO of the AACR since 1982.

"Margaret Foti exemplifies the social leadership and management needed worldwide for the prevention and treatment of cancer. Her tireless efforts on behalf of patients and scientists are now visible through the impressive resources that AACR is providing today to the international scientific community," said **Fernando Vidal-Vanaclocha**, professor at Basque Country University.

NCI Programs:

Cancer Prevention Fellowship Program Seeks Applicants

The Cancer Prevention Fellowship Program at NCI is accepting applications for 2010 Fellows from now through Sept. 1.

The fellowship program is a postdoctoral training opportunity that provides training in public health and mentored research with world-renown investigators at the NCI. The goal of the CPFP is to provide a strong foundation for clinicians and scientists to train in the field of cancer prevention and control.

As part of the program, NCI offers training toward

an M.P.H. degree at an accredited university during the first year, followed by mentored research with investigators at the NCI. Opportunities for research cut across a wide range of methodologies: basic science laboratory studies, clinical studies, epidemiologic studies, community intervention trials, studies of the biological and social aspects of behavior, policy studies, and research on the ethics of prevention.

The CPFP provides competitive stipends, paid health insurance, reimbursement for moving expenses, and a travel allowance to attend scholarly meetings or training.

The typical duration in the CPFP is four years (year 1: master's degree; years 2-4: NCI Summer Curriculum in Cancer Prevention and mentored research). To be eligible, applicants must possess an M.D., Ph.D., J.D., or other doctoral degree in a related discipline (e.g., epidemiology, biostatistics, ethics, philosophy, or the biomedical, nutritional, public health, social, or behavioral sciences) or must be enrolled in an accredited doctoral degree program and fulfill all degree requirements by June 21, 2010.

Foreign education must be comparable to that received in the U.S. Applicants must also be U.S. citizens or permanent residents and have no more than five years relevant postdoctoral experience. For further information and application procedures, see http://cancer.gov/prevention/pob or contact cpfpcoordinator@mail.nih.gov.

Funding Opportunities:

Young Investigator Research Grants In Lung Cancer

The National Lung Cancer Partnership announced its fifth annual research grant competition.

Four, two-year $100,000 awards are available to clinical and basic science fellows and junior faculty to advance their research in lung cancer etiology, prevention, early detection, treatment, and symptom management. Three grants will be co-funded with the LUNGevity Foundation, with the assistance of Genentech and sanofi-aventis, and one grant will be funded by the North Carolina Lung Cancer Partnership.

The purpose of these awards is to drive forward research that will increase understanding of lung cancer risk, biology, and response to treatment, in an effort to fulfill the Partnership's mission of decreasing deaths due to the disease and helping patients live longer and better lives.

At the time of application, an applicant must hold a doctoral degree (MD, PhD, DO, DrPH, or equivalent), and be a post-doctoral fellow or within the first five years of a faculty appointment at a not-for-profit institution in the United States or Canada. Applications addressing sex differences in lung cancer are particularly encouraged. Applicants will be judged on the merits of their research proposal, career development plan, and research environment.

For application eligibility and instructions, see www.NationalLungCancerPartnership.org. The application deadline is September 8, 2009. Awards will be announced on or before January 1, 2010.

NIH Funding Announcements

Announcing New Business Processes and Confirming the Transition of Individual National Research Service Award Fellowship Applications to Electronic Submission. http://grants.nih.gov/grants/guide/notice-files/NOT-OD-09-106.html

Ruth L. Kirschstein National Research Service Awards for Individual Predoctoral MD/PhD and Other Dual Doctoral Degree Fellows (F30) (PA-09-207). http://grants.nih.gov/grants/guide/pa-files/PA-09-207.html

Ruth L. Kirschstein National Research Service Awards for Individual Predoctoral Fellows (F31) (PA-09-208). http://grants.nih.gov/grants/guide/pa-files/PA-09-208.html

Ruth L. Kirschstein National Research Service Awards for Individual Predoctoral Fellowships (F31) to Promote Diversity in Health-Related Research (PA-09-209). http://grants.nih.gov/grants/guide/pa-files/PA-09-209.html

Ruth L. Kirschstein National Research Service Awards for Individual Postdoctoral Fellows (F32) (PA-09-210). http://grants.nih.gov/grants/guide/pa-files/PA-09-210.html

Ruth L. Kirschstein National Research Service Awards for Individual Senior Fellows (F33) (PA-09-211). http://grants.nih.gov/grants/guide/pa-files/PA-09-211.html

Exploratory Grant Award to Promote Workforce Diversity in Basic Cancer Research (R21) (PAR-09-162). http://grants.nih.gov/grants/guide/pa-files/PAR-09-162.html

Feasibility Studies for Collaborative Interaction for Minority Institution/Cancer Center Partnership (P20) (PAR-09-201). http://grants.nih.gov/grants/guide/pa-files/PAR-09-201.html

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