Skin Cancer Research at MSK Addresses Risk, Behavior and Survivorship
Investigators Work Within and Across Disciplines to Answer Key Questions

With more than 75,000 new cases each year, melanoma is the fifth most commonly diagnosed cancer in the US. An additional estimated 3 million Americans are diagnosed with basal cell and squamous cell skin cancers yearly. While deaths due to skin cancer have been relatively stable over time, the incidence of skin cancer has more than doubled in the past 30 years. In the face of these trends, scientists at MSK are pursuing research within and across SOAR disciplines to reduce the morbidity, mortality, and costs of skin cancer.

SOAR investigator Allan Halpern, chief of the MSK Dermatology Service, oversees a broad research program in skin cancer risk, prevention, treatment and outcomes. He is Principal Investigator of the Study of Nevii in Children (SONIC), a population-based longitudinal study that enrolled a cohort of fifth graders more than a decade ago, collecting tissue samples from the children and risk information from them and their families. Irene Orlow (Epidemiology), a SOAR investigator, has published studies showing higher melanoma rates in individuals at risk of skin cancer and in survivors. In a recent study, Orlow and her colleagues, including Jaya Satgopan (Biostatistics), Susan Oliveria (Dermatology), Ashfaq Marghoob (Dermatology) and Halpern, identified single nucleotide polymorphisms associated with total nevus count, or number of acquired moles, and patterns seen on dermoscopic imaging. These findings support the existence of distinct biological subsets of melanocytic nevi, benign lesions associated with increased risk of melanoma.

Dr. Oliveria, an epidemiologist on the SONIC study, studies risk reduction and surveillance practices in individuals at risk of skin cancer and in survivors. In a recent study, Oliveria and her colleagues found that less than 80% of melanoma survivors, treated and followed at MSK, reported regular sun protection practices. Adults who were older, more educated and had greater skin sensitivity to sunlight were more likely to report regular skin protection practices. Jennifer Hay (Psychiatry & Behavioral Sciences) recently studied first-degree relatives of genetic test patients, using quantitative and qualitative methods to understand inconsistencies in skin protection practices. Her findings suggest that at the point of decision-making, context and convenience are critical. For example, individuals were less likely to apply sunscreen when shade was available, and more likely to apply sunscreen once their skin started to hurt or burn.

Investigators are also studying advances in technology to improve skin cancer detection and diagnosis. Dr. Marghoob, who is based at MSK’s Skin Cancer Center in Hauppauge, wanted to know whether a dermatoscope, a handheld device used by clinicians to view subsurface structures in skin lesions, could be used effectively by patients. He and his colleagues recruited 34 patients, and gave each participant a “mobile” dermatoscope attached to a smartphone. Of the 29 patients who completed the study, 28 were able to acquire evaluable baseline and follow-up images. Drs. Halpern and Marghoob also lead the International Skin Imaging Collaboration: Melanoma Project, which is studying digital and mobile imaging technologies for early self detection and professional diagnosis of melanoma. With academic and industry partners in the US, Europe and Australia, the collaboration is developing international consensus standards for skin lesion imaging and creating a public archive of skin lesion images.

Commenting on future directions in dermatology research, Dr. Halpern noted the burden of skin cancer on patients and the health care system. “Because non-melanoma skin cancer is seldom fatal, a better sense of the actual impacts of therapy on health, morbidity and patient reported outcomes is very important, and to date very poor,” he said. “On the other hand,” Halpern added, “melanoma is often fatal if not detected early, but because it is typically self detected, it is susceptible to overdiagnosis.”

Direct-to-Consumer Genetic Carrier Test Authorized by FDA
Agency Exempts Similar Tests from Premarket Review

For the first time, the US Food and Drug Administration authorized a direct-to-consumer (DTC) genetic test. The saliva-based DNA test is a carrier test for Bloom syndrome, an autosomal recessive condition associated with distinct physical features and increased risk of cancer and other diseases. Marketing authorization was granted in February, although the manufacturer, 23andMe, does not plan to offer it immediately, according to a company press release.

In addition to authorizing the Bloom syndrome carrier test, the FDA also classified carrier screening tests as Class II devices, exempting future genetic carrier tests from premarket review. Asked about the implications of this decision, SOAR investigators Jada Hamilton (Psychiatry & Behavioral Sciences) and Mark Robson (Medicine) noted the distinction between carrier tests and genetic tests for cancer susceptibility. Information about carrier status may influence reproductive decisions, but has little or no bearing on the health of the individual who is tested. In contrast, tests for disease susceptibility may yield information that affects a person’s future health and health care decisions.

Speaking about the benefits and risks of DTC genetic testing for disease susceptibility, Hamilton raised several concerns. Research by Hamilton and others suggests that distress related to genetic test results tends to be minimal and transient. However, comprehension of results is variable, and misinterpretation can have potentially serious consequences. Additionally, physicians without specialized training in genetic medicine have reported discomfort or lack of confidence discussing genetic test results with their patients.

The FDA’s review of the Bloom syndrome carrier test included evidence of the test’s accuracy, validity and user comprehension. The agency’s recent decision applies only to carrier tests, but it may not be long before the FDA is forced to consider a DTC genetic test for disease susceptibility. Previously, 23andMe offered a DTC genetic test, claiming it could identify genes and mutations associated with more than 200 diseases and conditions, including cancer. 23andMe was forced to cease marketing that test, following a FDA warning letter in November 2013.
SOAR Grants

Francesca Gany (Immigrant Health & Cancer Disparities) was awarded a grant from the Avon Pfizer Metastatic Breast Cancer Program for “Metastatic Breast Cancer Food Project.”

Francesca Gany (Immigrant Health & Cancer Disparities) received a grant from the United Hospital Fund for “Extending Affordable Care Act Enrollment into Care.”

Francesca Gany (Immigrant Health & Cancer Disparities) received a grant from the New York Community Trust for “Integrated Cancer Care Access Network.”

Lee Jones (Medicine) was awarded grants from AKTIV Against Cancer for two studies: “Preclinical Investigation into the Differential Response of Breast Cancer Subtypes to Aerobic Training” and “Effects of Aerobic Training on Breast Cancer Recurrence in a Model of Bone Metastasis Dormancy.”

Kenneth Offit (Medicine) and colleagues at Mt. Sinai received a grant from the LUNGevity Foundation for lung cancer research.

Dormancy.”

SOAR Seminars

Douglas Corley, Kaiser Permanente San Francisco Medical Center, presented Getting to Zero Deaths from Colorectal Cancer on February 3.

Steven Pearson, Institute for Clinical and Economic Review, presented Can We Afford the New Wave of “High Value” Health Care? on March 10.

SOAR Seminars

April 10
SOAR Program Retreat

April 14
SOAR Seminar
4:30PM
Moffitt Cancer Center

M-107

April

Can Cancer Disparities be Reduced by Translation Research?

Translational Research Symposium

April 22-25
Society of Behavioral Medicine Annual Meeting
San Antonio, TX

May 12
SOAR Seminar

Immaculata De Vivo, PhD
Harvard School of Public Health

Departments and Divisions Moving to Midtown

Several SOAR Groups Will Share New Space Near Grand Central

In March, faculty and staff from Epidemiology and Biostatistics, Immigrant Health and Cancer Disparities, Survivorship, Medical Physics and the Post Treatment Resource Program will begin relocating to offices in midtown Manhattan. The groups will occupy a newly renovated 54,200 square-foot space on the 2nd floor of 485 Lexington Avenue, between 46th and 47th streets. Amenities include a large conference room that comfortably fits over 30 people and two smaller conference rooms. The floor has a separate reception area, two pantries, and a dedicated lactation room.

The 32-story, 921,370-square-foot office building, built in 1956, is located several blocks from Grand Central Terminal. The building’s owner recently completed a major capital improvement program at the property, outfitting it with a new lobby, entryway, windows, elevators, corridors and façade, according to the Commercial Observer, a New York real estate publication.

Asked about the move, SOAR investigator Ann Zauber (Epidemiology), who commutes to Manhattan from her home in New Jersey, said she will miss her morning walk from Penn Station to East 63rd Street. Jaya Satagopan (Biostatistics) another New Jersey resident, said she’ll be pleased to have a shorter walk from Penn Station, and that she’s excited about views from her new office of one of the city’s most recognizable landmarks. “Those eagles, radiator caps, and Egyptian designs…If I’m late for a meeting, complain to Mr. Van Alen!” Satagopan said about the nearby Chrysler Building’s art deco architecture. Faculty and staff in the Center for Health Policy and Outcomes, currently located at the Breast and Imaging Center, said they are looking forward to being reunited with their Epidemiology and Biostatistics colleagues.

JetBlue to MSK’s main campus from 485 Lexington will be added to the current mid-town route, with pick-ups and drop-offs every 25 and 55 minutes past the hour. Subway service on the 6 line, and the M101/102/103 bus routes on Lexington Avenue and Third Avenue provide additional options for travel to and from main campus. The move to 485 Lexington should reduce commuting time for faculty and staff who use midtown’s major commuting hubs – Grand Central Terminal, Penn Station and Port Authority. For Manhattan and Brooklyn commuters, the relocation offers improved access to the city’s bicycle sharing program, with more than 10 Citi bike stations in a 5-block radius of the new offices.

The Department of Epidemiology & Biostatistics is scheduled to begin moving the week of March 20th, followed by the other groups. The moving process is expected to be completed by March 30th.

NIH Redesigns the Biosketch

New Format Required for Spring Applications

In 2014, NIH announced plans to change its long-standing biosketch format for extramural funding applications. Following pilot tests of the modified format and surveys of investigators and reviewers, the new biosketch will be required for NIH submissions on or after May 25th. Some other funding agencies are adopting the new format as well, and may implement it sooner. At the American Cancer Society, the new biosketch format will be required for principal investigators beginning with the April 1st grant submission deadline.

The new biosketch format emphasizes the significance of an investigator’s accomplishments and his or her specific contributions to a research project. According to NIH notice NOT-OD-15-032, “The new format extends the page limit for the biosketch from four to five pages, and allows researchers to describe up to five of their most significant contributions to science, along with the historical background that framed their research.”

Templates, instructions and additional information about the new biosketch format can be found on the NIH website. Grant specialists in MSK departments and in the Office of Research and Technology Management will be facilitating the transition to the new format.

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SOAR NEWS

ElenaElkin, PhD (Epidemiology & Biostatistics); Val Pires (Epidemiology & Biostatistics); NadaMubdhi, MPH (Epidemiology & Biostatistics); Rachel Henderson, MA (Psychiatry & Behavioral Sciences); Claudia Ayash, MPH (Immigrant Health & Cancer Disparities)

SOAR Honors

The Immigrant Health and Cancer Disparities Service’s Taxi Network was named a Program of Excellence in the 2015 Hospital Charitable Services Awards

Douglas Levine (Surgery) received the Department of Defense Ovarian Cancer Academy Assistant Dean Leadership Award