Heavy Smoking Linked to Type 2 Diabetes Mellitus

One third of the world’s cigarettes are smoked in China, where nearly 70% of men smoke and at least one million annual tobacco deaths occur. There is increasing evidence that cigarette smoking is an independent risk factor for type 2 diabetes and numerous studies suggest that smoking and nicotine contribute to abdominal obesity, increased insulin resistance and decreased insulin secretion from β cells. Dr. Sean P. David, MD, DPhil, Clinical Associate Professor of Family Medicine, has been studying the association between variation in the gene responsible for the major hepatic metabolic enzyme for nicotine (cytochrome p450 2A6) (CYP2A6) and smoking behavior. In a recent study currently in press, David and colleagues explored interactions between smoking and CYP2A6 genotypes on type 2 diabetes mellitus (T2DM) and potential pathways contributing to the pathogenesis of T2DM.

In a cross-sectional study, 1,344 smokers from Guangzhou and Zhuhai in China were interviewed from July 2006 to June 2007 with a structured questionnaire about socio-demographic status and daily cigarettes consumption. Overnight fasting serum glucose, insulin, cotinine were measured. Smokers were classified according to CYP2A6 genotypes into normal, intermediate, slow or poor metabolizers of nicotine. The results indicated that heavy smoking was significantly associated with T2DM, and this association was moderated by CYP2A6 genotypes and mediated by serum cotinine, abdominal obesity, insulin resistance and insulin secretion. This research, if replicated, may have implications for primary care and prevention of T2DM. The development of signs of insulin resistance and obesity in heavy smokers may be indicative of an even greater need for urgent intervention through smoking cessation, exercise and weight control to prevent T2DM.
The Stanford University School of Medicine’s Health Careers Opportunity Program (HCOP) is back, with new collaborators and a sharper focus, but the same objective: To enhance diversity in the health professions. After shutting down the program in 2007 for three years because of a lack of federal funding, HCOP has returned to Stanford thanks to a three-year, $3 million grant from the Health Resources and Services Administration, part of the U.S. Department of Health and Human Services. Instead of just reinstituting Stanford’s previous version of HCOP, the new funding enables the school’s Center of Excellence in Diversity in Medical Education to partner with UC-Berkeley’s School of Public Health, San Francisco State University and other organizations. Additionally, rather than drawing students from throughout the nation for the summer program, the new HCOP calls for the educational institutions and clinical internship programs to work together to reach students in four Bay Area counties: Alameda, San Francisco, San Mateo and Santa Clara.

**Student Quotes**

“We’ve really covered all bases these past six weeks…Here, we’ve learned that we have the capacity to lead, the strength to combat issues that are important, and the passion to engage others.”  - Onyemaechi Anoruo

“I’m having fun, digging deep and dreaming big. I owe it to myself to make my days here count. If there’s a time to take chances in making a difference to go on a journey, to set on something worth doing. It begins here and...” - Hagop Rouchanian

“Only a program this epic can prove that our disadvantages are advantages...It is an environment...where people believe in you so much that it is not if you go to medical school, it’s WHEN you go to medical school.” - Juliet Barnia

“Not only did we...create a new world with each other, we also threw ourselves into the world of medicine.” - Praneeth Kollareddy

The 23 students in the program this year are an inspired and inspiring group. Fifteen percent have a parent whose highest level of education is elementary/middle school; forty-four have a parent whose highest level of education is high school. The participants speak 10 different languages. They represented local community colleges, CSU and UC schools. Several aspire to be surgeons and many are interested in combining their training in medicine with a degree in public health. All have an interest in addressing health inequities. *(This program is directed by Ron Garcia, PhD, Senior Lecturer in Family Medicine, Assistant Dean for Minority Affairs, Program Director of the Center for Excellence in Diversity in Medical Education)*

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**Sean David Chosen as Puffer/ABFM Puffer at the Institute of Medicine**

Sean David, MD, DPhil, Clinical Associate Professor of Family Medicine, has been selected as the 2011-13 James C. Puffer, M.D./American Board of Family Medicine Fellow at the Institute of Medicine. He was chosen for his work on smoking cessation and health promotion. David will work with researchers, policy experts and clinicians on initiatives convened by the IOM to provide nonpartisan, evidence-based guidance to national, state and local policymakers, academic leaders, health-care administrators and the public. Named in honor of James C. Puffer, president and chief executive officer of the American Board of Family Medicine, the fellowship program enables talented, early career health policy and science scholars in family medicine to participate in the work of the IOM and further their careers as future leaders in the field. David's research is aimed at advancing the science to help patients quit smoking. Working with an international multidisciplinary research team, David has led several pharmacogenetic clinical trials of bupropion and nicotine replacement therapy &functional neuroimaging studies of nicotine dependence. He has more than 50 publications, mainly on smoking cessation, genetics, genomics, and public health, and is a co-leader of the STOMP (Study of Tobacco Use in Minority Populations) Genetics Consortium.
Ginny Fowkes to Retire

Virginia Fowkes, FNP, MHS, Senior Research Scholar in Family Medicine, will retire September 21, 2011, after 41 years of academic service. During her tenure at Stanford, Ginny has assumed numerous leadership roles in education, research and administration including developing and directing for over 30 years the Stanford-Foothill Primary Care Associate Program (PA program), co-founding and developing the Stanford-South Bay AHEC (Area Health Education Centers Program), and co-founding, co-directing and developing educational resources for Family Medicine. She will be recalled part time to continue her scholarly activities, continuing to direct the evaluation for the California Statewide AHEC and developing education and evaluation for two state programs aimed at training and retaining health professionals in underserved areas.

Ginny’s distinguished career has included several other pioneering efforts. She was one of the founding teachers for the 1st PA training program in the nation at Duke University in 1965 and part of the founding team for the 2nd coronary care unit, also at Duke. In the early 1980s she elucidated factors influencing retention of primary care providers in rural California. In 1989 she was asked to evaluate the national nurse practitioner training program in Botswana. Also in the late ‘80s she co-directed the evaluation of the national AHEC program and subsequently worked with numerous states in developing and evaluating their AHEC programs. In the early 1990’s, she directed another national study from the Bureau of Health Professions (BHP), Department of Health and Human Services (DHHS) to assess PA, NP, and CNM training for meeting health care needs of the underserved. Throughout her career she has focused on developing and evaluating programs in medical education that train clinicians for medically underserved communities through academic-community partnerships. Countless individuals and communities have benefited from her work. Nearly anyone who has had contact with Family Medicine at Stanford over the past 40+ years has been touched by her mentoring and leadership.

Stanford Geriatric Education Center 2011 Webinar Series: Care of Diverse Elders and their Families in Primary Care

Stanford GEC developed and currently provides the “Care of Diverse Elders and their Families in Primary Care” Webinar Series in collaboration with the California Area Health Education Centers (AHECs), Natividad Medical Center, and the American Geriatrics Society. This series is running from February – December 2011. The target audience is health and social service professionals who wish to improve their capacity to assess common geriatric conditions and communicate strategies for managing chronic conditions among older adults from ethnically diverse populations. The series also aims to help health care professionals to recognize and treat stress related health conditions of the ethnic elders’ family caregivers. Topics that have been or will be addressed are ethnogeriatrics, diabetes, depression and mental health, fall prevention, emergency preparedness, arthritis, cardiovascular disease, dementia assessment in Latino and Chinese families, and diversity in end-of-life issues. Webinar presenters are expert faculty from universities across the nation. A total of 353 participants have attended the first six webinars (through July 2011). Most (90%) said it improved their level of confidence to work with ethnic elders and their families. Eighty percent of the participants said they are planning to use acquired knowledge and skills in their work.

There are 5 more Webinar scheduled through the end of this year. The 90 minute sessions are free unless you’d like to take them with CE or CEM credits ($25 for each webinar). For more information, to register and to view updates please visit: http://sgec.stanford.edu/events.html. You can also visit this page to access the archived recordings from the previous webinar sessions.

O’Connor Family Medicine Residency & Fellowship Graduates
On June 24, 2011, the O'Conner Family Residency and Sports Medicine Fellowship programs celebrated their graduates who have completed their training and are moving on to the next stage of their careers. The residency graduates (pictured on the left) are listed here with the location of their future practice: Jesse Rokicki-Parashar, MD, Indian Health Center, San Jose; Steven Kramer, MD, Kaiser Milpitas; Tina Wong, MD, North East Medical Services (NEMS), San Jose; Helen Wong, MD, NEMS, San Francisco; Ankita Shah, MD, Kaiser, Los Angeles; Elise Cheng Torres, MD, OB Fellowship, Santa Clara Valley Medical Center; Susan Carré, MD, Kaiser Gilroy (with daughter Gabby); Catherine Lin Dhanki, MD, Seattle.

Two Sports Medicine Fellows also completed training (shown on the right). Their names and where they will be practicing are: Jamie Nuwer, MD, Palo Alto Medical Foundation (Family Medicine) and Vinit Madhvani, MD, Cedar Sinai, LA (Emergency Medicine).

The O'Connor FM Residency has grown in recent years to 8-8-8: eight residents in each of the 3 years under the tutelage of 15 principal faculty members plus many other local physicians involved in the program. Robert Norman, MD, is the Residency Director. The program has trained over 160 local family physicians in the art and science Family Medicine. The Sports Medicine Fellowship is directed by Michael Henehan, DO, and has spots each year for one graduate from a primary care residency program and one graduate from an emergency medicine residency program.

**Eva Weinlander Receives Kaiser Teaching Award**

In June, Eva Weinlander, MD, Clinical Associate Professor of Family Medicine, was awarded the Kaiser Award for Excellence in Clinical Teaching at the School of Medicine’s annual commencement. This longtime award created by the Henry J. Kaiser Family Foundation is one of the top awards given each year for excellence in medical education. Dr. Weinlander is Director of the Continuity of Care Clerkship and also is a major contributor in the Core Family Medicine Clerkship, where her contraception workshop is especially well received. She also works with other faculty to amalgamate portions of videos taken of student-standardized patient encounters to formulate a "best practices" encounter. The students are encouraged to objectively analyze and constructively critique not only their own but other encounters. Participants see the different ways to get at important material, and come away with a clearer view of how they can be more effective within a patient encounter. It is an empowering experience. Dr. Weinlander also co-teaches the Mind Body Medicine course offering students a “tool box” of techniques. As they learn to incorporate stress reduction techniques into their patient care they also gain awareness and insight into what might be driving some of their own automatic and not so healthy behaviors.

Typical student comments about Dr. Weinlander’s teaching: “Showed me how to be a good doctor, how to create great relationships with patients.” “Gave positive and helpful feedback often.” “Really great for me to feel like I could discuss my thoughts with her.” “Super helpful, dynamic teacher.” “One of the best attendings I have ever worked with.” Currently, Dr. Weinlander is developing a new clerkship that will offer MSTP students ongoing clinical experience to maintain their clinical skills when they are doing research.

**Art Johnson Completes PhD in Psychology**
Art Johnson, Academic & Research Program Officer in CERFCM, recently completed his PhD in psychology. His thesis research was titled “An Investigation of Spiritual Mediators of Quality of Life and Mood Among Cancer Survivors Participating in Psycho-Spiritual Integrative Therapy.” It combined psychological and spiritual components to help cancer survivors manage mood distress including depression and stress. Pre- and post-measures using standard cancer and psychological scales were used to determine the amount of change in mood distress for the 31 participants in the PSIT training. When the factors of mood distress were regressed against quality of life, spiritual well-being was a significant mediator for stress and mood disturbances and a partial mediator for depression.

Erika Schillinger Elected Faculty Senate Alternate

Erika Schillinger, MD, Clinical Associate Professor of Family Medicine, was recently elected as an alternate representative to the Faculty Senate of the School of Medicine. The Senate provides a vehicle for the faculty of the Stanford University School of Medicine to participate in the deliberations and decision-making of the school, formulate the curriculum for its students and promote communication between faculty, students and administrative officers. The Senate represents the will and opinion of the faculty of the school. It is composed of Departmental Senators and Senators At Large, elected by members of the Faculty Council, one representative of the interdisciplinary programs and centers, and the Dean of the school as an ex-officio member. Dr. Schillinger’s election provides an opportunity for a greater Family Medicine voice in the deliberations of the faculty of the School.

2011 Research Publications & Book Chapters


Tell Us About Yourselves
Family Medicine has touched the careers of many students and residents through the years. We would love to hear about your own careers and suggestions you may have for our programs. Send information to: joeh@stanford.edu

Prior issues of this newsletter can be found at:
http://gmd.stanford.edu/news_events/fm_newsletters.html