



**CASE IN POINT:** A team of Dartmouth students—three undergrads, an M.D. student, and an M.D.-M.B.A. student—finished in the top four in a global health case competition at Emory. The 20 teams had to develop recommendations for a fictional scenario involving refugees in Africa.

THEN & NOW

A reminder of the pace of change, and of timeless truths, from a 1991 history of Mary Hitchcock Hospital:

“Hospital births—which had declined during the depths of the Depression, as women had fewer babies and delivered those they had at home—rose from 177 in 1936 to 316 in 1940.” In 1946, a 41% increase in the number of births at MHMH signaled the start of the baby boom.



1,108

Births at DHMC in 2010

1940

Year Hitchcock acquired its first incubator

1974

Year DHMC opened a neonatal intensive care unit

30

Number of beds in DHMC’s NICU today

Play is an opening act for alcohol initiative

In 1898, I left home for Dartmouth College. Drink soon cured my shyness. I had an enormous capacity for the stuff!”

Those are among the opening lines spoken by a character named Dr. Bob in the play *Bill W. and Dr. Bob*, which recently came to Dartmouth. A play about two alcoholics from the early 1900s may seem like an odd way to kick off

a 2011 initiative to combat binge drinking.

But the themes in *Bill W. and Dr. Bob* resonate even today.

**Sober:** Despite being an alcoholic, the real Dr. Bob—Robert Smith, a 1902 Dartmouth graduate—became a surgeon and practiced in Akron, Ohio. He struggled with his addiction for years until, one day in 1935, he met Bill Wilson, also an alcoholic. Together, the two discovered they could stay sober by sharing their stories with each other and with other alcoholics. Soon after, they founded Alcoholics Anonymous.

But the play isn’t just about addiction; it’s also about “the danger of isolation and the healing power of connection,” says one of its authors, Dr. Stephen Bergman. Bergman, a psychiatrist, writes under the pen name Samuel Shem and is best known for the 1978 novel *House of God*, an exposé of residency training at one of Boston’s top teaching hospitals.

People drink to feel connected, Bergman argues, to feel like they belong. But alcohol creates

“only the illusion of connection,” he says, “and can lead to all kinds of trouble.”

About 1,800 college students in the U.S. die each year from alcohol-related injuries, and an estimated 600,000 are injured, according to the National Institute on Alcohol Abuse and Alcoholism (NIAAA). Close to 40% of college students engage in

**The play is about addiction and also “the healing power of connection.”**

binge drinking (that is, having more than five drinks on at least one occasion in the past month), almost 30% admit to driving drunk, and 2% report being sexually assaulted or date raped by another drinking college student, according to a 2009 NIAAA study in the *Journal of Studies on Alcohol and Drugs*.

**Binge:** “People ask me all the time what keeps me up at night as president,” Dr. Jim Yong Kim, the president of Dartmouth College, recently told the *Wall Street Journal*.

“My answer is really pretty straightforward: I think a lot about the possibility of losing one of our students to binge drinking, and I think about all the harms that can happen, everything from injuries to sexual assaults.”

Instead of just worrying about binge drinking, Kim decided to join forces with 13 other universities around the country. The schools have formed a group called the Learning Collaborative on High-Risk Drinking, which will study, implement, and test the most effective ways to curb excessive drinking on college campuses.

**Evaluate:** The Learning Collaborative will draw on the evaluation and measurement expertise of the Dartmouth Institute for Health Policy and Clinical Practice. It will also use techniques developed by the Institute for Healthcare Improvement (IHI) that have been used repeatedly to make improvements in clinical medicine, public health, and other fields. In keeping with IHI methodology, any efforts that are tried will be evaluated based on their ability to produce measurable changes. The collaborative expects to publish its findings sometime after 2012.

Given Kim’s background as a



BROADWAY PALM DINNER THEATER

**The fact that alcohol creates “only the illusion of connection” is a key point of this play, which recently came to Dartmouth.**

For a **WEB EXTRA** to the story below, including videos of Bergman's lecture at DHMC and of scenes from the play, see [dartmed.dartmouth.edu/su11/we07](http://dartmed.dartmouth.edu/su11/we07).

cofounder of the international nonprofit Partners in Health and then as director of the World Health Organization HIV/AIDS program, it's not surprising that the collaborative is taking a population-health approach to tackling this issue.

**Leery:** Most college presidents are leery of talking about the problem of binge drinking because they don't want to damage the reputation of their institution, Bergman said during a lecture at DHMC that was offered in conjunction with the play's run at Dartmouth. DMS's Koop Institute helped fund the production's visit, and one of the six performances was targeted to medical professionals, with a discussion afterward on how to recognize and intervene in cases of addiction.

Binge drinking is common on nearly all college campuses. "Isolation—Dr. Bob's 'shyness'—is often acutely felt by college students in many ways, especially in the first years of leaving home and high school," wrote Bergman and his wife and coauthor, Janet Surrey, in the playbill for *Bill W. and Dr. Bob*. "Often students try to break through their isolation and social anxiety by turning to drink or drugs, to feel 'connected.'"

**Framework:** Only true connections and community can heal, they explain. "All of our initiatives must be undertaken within this framework." That's just the kind of framework—mixed with proven methodologies—that the members of the new Learning Collaborative hope to build.

JENNIFER DURGIN

## INVESTIGATOR INSIGHT

In this section, we highlight the human side of biomedical investigation, putting a few questions to a researcher at DMS-DHMC.

**Juliette Madan, M.D.**

**Assistant Professor of Pediatrics**

*Madan studies perinatal nutrition, specifically the probiotic effects of breast milk and the potential use of probiotics in vulnerable infant populations to prevent or treat disease. She joined the faculty in 2008.*

**How did you decide to become a scientist?**

I was one of those children who felt inspired to go into medicine at about 12 (after wanting to be an archaeologist). My physician at the time told me I'd have 17 more years of school, which didn't deter me—and it turned out I actually had 20 more years of training.

**What's hot in your field right now?**

I love neonatology and neonatal research because it's such a new field it's never not hot. Everything we do is new and innovative and changes frequently. I think our microbiome research is particularly exciting because we are studying this at the beginning of life when our patients are a blank slate.



**Are there any misconceptions people have about your field?**

People tend to get very sad when they ask about working with sick new-

borns. I try to reassure them that one of the reasons I chose neonatology is because we can save lives and most of our patients do well.

**What's your favorite nonwork activity?**

Being a farmer with my children, playing with our chickens, rabbits, and horses.

**What do friends give you a hard time about?**

Having too many kids. My husband and I now have five beautiful children and a very full life!

**What's the last book you read?**

*Ten Apples Up on Top* by Dr. Seuss. My favorite recent books were *Middlesex* by Jeffrey Eugenides and *The Immortal life of Henrietta Lacks* by Rebecca Skloot. I love reading Pulitzer Prize-winning novels like *Middlesex*; I'm trying to read all of them. *Middlesex* is a beautiful story about a boy with 21 alpha-hydroxylase deficiency who grew up as a girl. The story about *Henrietta Lacks* is a non-fiction work, about how her life affected science and how a cell line called HeLa came to be.

**What three people would you like to have over for dinner?**

My husband's grandparents. I did not get to meet them before they died. They lived through the partition in India and raised their six children in New Delhi. He was an internist and she was the center of their family. I would also like to have dinner with Gloria Steinem or Betty Friedan or any of the other mothers of the feminist movement. I so admire people who are brave enough to be the spearhead for movements that change history. I'm quite sure I wouldn't have the opportunities I do without women like them having led the way.

**What is stressful for you?**

Flying on airplanes to go to conferences and managing my carpool. It is also hard sometimes to juggle clinical work with research responsibilities, but I wouldn't have it any other way.

**What is a talent you wish you had?**

I wish I were a marathon runner.

**What was your first paying job?**

I was a camp counselor, and in my next life I want to be a camp director.

**What's the best piece of advice you were ever given, and who gave it to you?**

My godmother told me that actions speak louder than words. This has been hugely important in my role as a physician, working with the families I serve, as well as in my research and teaching roles, and it's been very, very important in my role as a mother.

