

We take the BS out of BBS.

In this issue

- 1 Investigative Report: Spouses & Partners
- 2 Op-Ed: "Social" Science
- 4 Nobel Prize
Merry Mutual Funds
- 6 In Press
- 8 Music Review
- 9 Movements in Food
- 10 Lifestyles of the Poor and Academic:
Tango, Classmates Who Cook
- 12 Buzz
B Contest: New Year's Resolutions

Student life in the Combined Program
in the Biological and Biomedical Sciences

Volume 6 Issue 4

December 2005



The Battle of the Bench has begun, and as the Ependwarves and the Pipelves fight to the death, we go to the mat to bring you lots of news, features, fun, and photos. Enjoy this last issue of 2005, and we'll see you next year. Have a safe holiday season.

Don't Forget the Trailing Partner

AN INVESTIGATIVE REPORT
BY C. MENDENHALL

The decision to move to New Haven meant leaving family, friends, maybe even a career behind. But most spouses are willing to take the plunge for such a great educational opportunity or the happiness of their 'better half'. While you are immersed in your environment as a graduate student, however, your trailing spouse or partner may have to handle the issues of making a home, getting the kids in school, finding new friends and adjusting. Moving is said to be one of the top five stress producers, but if you can communicate and take things one step at a time, you will prevail! Here are some good, commonsense suggestions:

1. Find a social club, gym, or place of worship (whatever you have used as an anchor in your life in the past) with your partner. Register with that club or organization. Urge your partner to introduce him or herself and say hello to people whenever they see them, but don't urge him/her to sign up yet for any extra activities (like committees, subcommittees or anything else that requires a regular commitment of time). Wait until you and your spouse have a feel for the new

rhythm of your life, before making any commitments. Be prepared to say 'no, not right now' and explain your decision, if asked. You don't want to take on too much and then break commitments.

2. Make sure that if your partner has any personal needs for fulfillment (such as donating time to a non-profit organization or advancing his or her education with lectures or classes), that those needs are being met. Getting involved with something new and enriching is a great way to reach out in your community and meet new people. Be sure to check out *Craigslist.com*, which now has a New Haven page, with a volunteers and classes section. Also, bring home the *Advocate* and the Yale newspapers, which have community and Yale events listed in an easy to navigate manner. The Yale Events Calendar is put into your mailbox each month- tape it to your refrigerator and highlight the events that look interesting.

3. Things to watch out for: apathy and burning bridges. If your partner is so sick and tired of moving so often that he/she has given up on making new friends altogether, urge him/her to reconsider. Being isolated is difficult, and in a city as diverse as New Haven there are undoubtedly others who share your same lifestyle.

continued on page 3

B MAGAZINE STAFF

THE TRACKS

<i>MCGD</i>	Khalid Fakhro Chris Mader
<i>Neuroscience</i>	Kristi Newhouse

THE DEPARTMENTS / PROGRAMS

<i>Cell Biology</i>	Mitch Kundel Jordan Yelinek
<i>C & M Physiology</i>	Ethan Anderson Michael Coggins
<i>Comp Bio & Bioinformatics</i>	Kevin Keating
<i>Genetics</i>	Molly Kottemann Chris Mason Catherine Mendenhall
<i>Immunobiology</i>	Nathanael McCurley David Peaper
<i>INP</i>	Nicole Horst Reba Rabenstein Jen Warner
<i>Microbiology</i>	Jean Publicover Jean Kuan
<i>MB&B</i>	Michael Seringhaus
<i>MCD B</i>	Jane Kim Alice Ly Carson Miller Richard M. Reznick Rafael Rosengarten
<i>Neurobiology</i>	Bilal Haider
<i>Pharmacology</i>	Sagar Kapadia Amanda Sleeper
<i>BBS Program</i>	John Alvaro

Special thanks to **Keith Corbino** for the photos on page 3. Thanks also to the **Yale Tango Club** for the story and photos on page 10.

YOUR OPINION

B magazine seeks Op-Ed pieces from members of the BBS community. Please submit your column (maximum length 600 words) by email or via the web.

BBS Program

SHM L-200

Bmail@yale.edu

785-3735

<http://info.med.yale.edu/bbs/B/>

OP-ED “Social” Science

BY A. SLEEPER

At last year’s Spring Teaching Forum, hosted by the McDougal Teaching Center, somebody made an observation that struck me as wholly improbable. The theme of the multidisciplinary event was balancing teaching with research, and during the course of an open discussion, someone stated that she envied the sciences, which were much more social disciplines than the humanities and social sciences. I felt myself turning in my chair to get a better look at the speaker. What sort of delusion could she be under? I thought of the stereotype of the scientist – the mad recluse pattering away alone at his bench into the wee hours of the morning. What could she mean by a more “social” discipline?

I contrasted this stereotype against my image of the non-science disciplines, the clusters of students I observed cozied around the tables at Koffee Too as I walked by on my way to Teaching Center events at HGS in time that always felt stolen from my bench. These are the people who attend all of the interesting-sounding lectures I see posted in the Graduate School’s monthly calendars but never have the time to attend. Theirs is the stereotypical bliss of academia, their graduate and faculty years spent in much the way I passed my well-rounded and well-nurtured undergraduate days, right? I thought wistfully to myself that I should have stuck with my other major in college, Spanish literature, and have been in a happier place now.

But she was saying more. The speaker said that science is largely a collaborative effort, where one rarely sees publications with just a single author. In the humanities and social sciences, though, publishing an article with a coauthor is a peculiarity. If you dare to include such a publication in your CV, you had best be prepared to justify why you needed help crafting the idea. I suddenly remembered a friend of mine in the Classics Department describing Ph.D. studies as, “a long and lonely time.” When he said it, I agreed with him whole-heartedly, but now I was starting to realize that he meant something I hadn’t fully understood.

My mind turned now to the everyday reali-

ties of my own studies. Each day I arrive at a lab inhabited by others. Sure, I may run my experiments on my own, but a colleague is always just across the room or around the corner. I thought of the lab banter, all of the science- and non-science-related conversations we’d shared while conducting our experiments. I thought of all the help my colleagues had given me with aspects of my project, and of all the hours spent in lab meetings discussing each of our work and sharing ideas on how to proceed next. I know the details of my labmates’ projects and how they are related to my own. But in other disciplines, maybe this wouldn’t be true. Data collection would be something much more solitary, conducted largely in the dim and drafty stacks of Sterling Memorial Library. When I emerged from there, I wouldn’t have a lab of people waiting to hear what I had discovered. The tedium of scientific progress started to seem not so bad.

Not only is our research conducted in a social environment, but it is also received in one. When I move on from the lab where I have conducted my dissertation studies, new people will be expanding on the work that I started. As a scientist, the research I publish will certainly have more than one author, and the publications will be better for it. Others will cite our work in publications that hopefully, in aggregate, will matter one day to society in a tangible benefit.

I don’t know who the woman was who made the observation about the “social” aspects of science, but I’ve been thinking about it ever since. I find it interesting that an outsider had to point it out to me, but now that I consider it, for all of the faults one can find in a scientific career, a sure benefit is that the stereotype of the solitary scientist is largely inaccurate.

B magazine publishes editorials by staff members and guest writers in the BBS community. The opinions expressed herein are those of the writer. B

Trailing Partner continued from page 1

Making friends can help you find your own comfortable niche in a new community. “Oh, it’s just a few years and then we move on” is not a true statement.

Here are some organizations that can help:

1. **Yale Medical Partners (YMP):** YMP is a Yale-sponsored organization for people associated with the medical school and their families. Their membership includes men and women, married and single, with and without children. YMP’s goal is to provide support by offering a diverse array of social and recreational activities. Events are scheduled throughout the year, and have included pizza parties, brunches, wine tasting, and apple picking. To join, please contact co-presidents Amy Johnson, abjohnson@aya.yale.edu, or Clare Gordiski, 203-732-5307 (leave a message).

2. **The Group with No Name.** Founded in 2000, this group has grown from a 10-person e-mail list to a Yahoo! Group online forum of about 200 young people working in New

Haven. Members of the group get together for monthly happy hours and collaborative events. I recently took a tour of the Long Island Sound on the freedom schooner Amistad with this group, which was a ton of fun and a very positive experience. To join, e-mail Janna Wagner at janna@aya.yale.edu.

3. **Random Dinners.** This Yale tradition facilitates the meeting of graduate and professional school students with those in disciplines outside their own through good company and good food. Random Dinners is an event sponsored by the GPSS (Graduate & Professional Student Senate). Wining and dining with an eclectic group of students from various backgrounds is bound to be interesting, so why not give it a try? Alice Ly, the GPSS Secretary, said to check the webpage often to see when the registration begins.

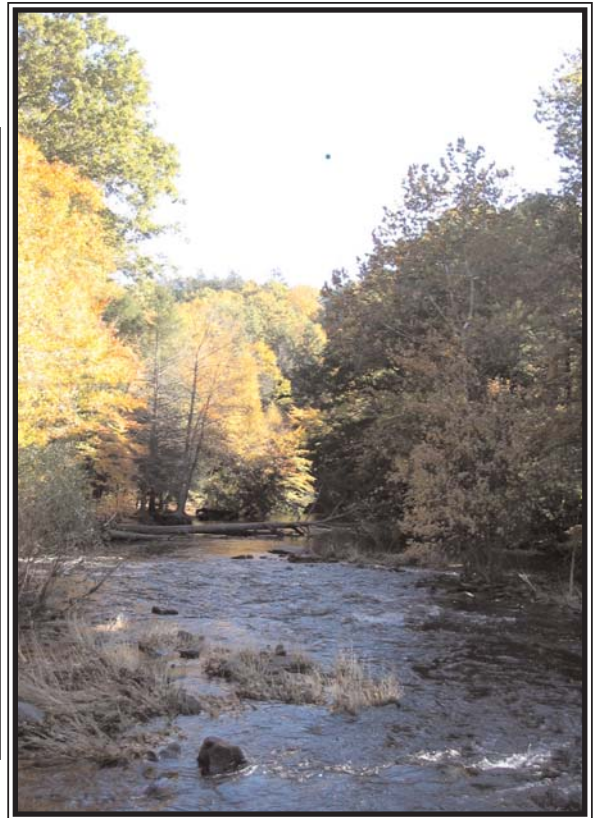
http://www.yale.edu/gpss/Activities/random_dinner.html

4. **The Young Pros (YP).** YP is a network through which young and young-thinking

professionals in the Greater New Haven area can meet and exchange ideas. The group’s ultimate goal is to help retain and attract talented young people to New Haven, sponsor networking events, function as an informal ‘job search’, and generally work to make New Haven a more attractive place for young professionals to live, work and play. <http://young-pros.org/>

5. **International Spouses & Partners at Yale (ISPY).** Affiliated with the Office for International Students and Scholars, ISPY is open to the spouses and partners of all graduate students, postdocs, and other Yale scholars. According to their website, <http://groups.msn.com/ISPYInternationalSpousesandPartnersatYale>, the organization offers social events, a support network, and information about community resources. To join their mailing list, send an email to L_SPY-subscribe@yahoogroups.com. **B**

The Granola Jerkies. Views of Sleeping Giant State Park in Hamden, CT during the Yale Granola Jerkies’ Fall Foliage Hike. To learn more about this hiking club, contact Keith.Corbino@yale.edu.



Photos courtesy of Keith Corbino.

And This Year's Prize Goes To...

BY R. REZNICK

On October 3, 2005, the Nobel Assembly at Karolinska Institutet awarded the 2005 Nobel Prize in Physiology or Medicine to Dr. J. Robin Warren, an Australian pathologist, and Dr. Barry J. Marshall, an Australian professor, for their discovery of the bacterium, *Helicobacter pylori*, and its role in causing stomach ulcers and gastritis.

Before the discovery of *Helicobacter pylori*, the prevailing theory asserted that stomach ulcers and gastritis resulted from stress, spicy foods, and excess acid production. During the late 1970's and early 1980's, Dr. Warren observed that a plethora of patients with inflammation of the stomach also possessed a small, curved bacterium in the same region as the inflammation. His collaborator, Dr. Marshall, later isolated the unknown bacterium detected by Dr. Warren. A series of subsequent experiments led the two doctors to hypothesize that the bacterium is responsible for the onset of stomach ulcers and gastritis.

Their revolutionary idea, that a bacterium could thrive in the acidic environment of the stomach and cause disease, was met with ridicule and scorn by the scientific establishment. These skeptics maintained that a bacterium could not survive in the stomach, let alone cause diseases there. In a classic experiment to prove their point, Dr. Marshall drank a glass of water with *Helicobacter pylori*. After developing gastritis, he cured himself with antibiotics and finally silenced the critics.

Now, the scientific community accepts the microbial origin of stomach ulcers and gastritis, and these once chronic and debilitating diseases are now treatable with a regimen of antibiotics and acid secretion inhibitors. *B*

Merry Mutual Funds

BY R. REZNICK

With the holidays comes traveling and visiting with family and old friends. If you venture home and find yourself out with your working buddies yet you can't contribute to the conversation on the recent capital gains distributions for mutual funds or the new contribution limits for Roth IRA's, then maybe this holiday season you should add an investment to your shopping list. For a comprehensive explanation about why you should start investing now and not wait until after you graduate, please refer to *A Wise Play For Your Stipend Raise* (By R. Reznick, *B Magazine*, Volume 4, Issue 3, August 2003). Once you agree that investing is a worthwhile endeavor for you and that starting early is critical to your success, you can begin shopping for a place to invest your money. This article examines the advantages and disadvantages and some of the key features of mutual funds, one of the most popular investment vehicles available today.

What is a mutual fund?

A mutual fund is an intermediate investment vehicle operated by an investment company (like Fidelity (www.fidelity.com) or Vanguard (www.vanguard.com)) (www.investorwords.com). The investment company pools money provided by a group of investors, termed shareholders, and entrusts a professional manager or professional management team to purchase assets (stocks, bonds, money-market instruments, real-estate, commodities, currencies, etc.) with the money in accordance with a stated set of objectives. A mutual fund is an intermediate because you contribute to the mutual fund, and the professional manager or professional management team of the mutual fund makes purchases on the markets. You can claim ownership in what the professional manager or the professional management team buys, though indirectly.

Mutual funds have become an enormously popular intermediate investment vehicle since their inception in Boston in 1924. They offer clear advantages for investors, including convenience, diversification, and low cost. Mutual funds provide convenience because a professional manager or professional management team chooses and monitors your investments for you, thus relieving you of the responsibility. In addition, mutual funds provide you with

instant diversification, which is best illustrated with an example. The Dodge & Cox Stock Fund (Trading symbol: DODGX) currently holds 89 stocks (www.morningstar.com). By purchasing shares of DODGX, you, the shareholder, become part-owner of these 89 companies. If one of these 89 companies were to lose 20% of its value during the year, you would still own 88 other companies that might compensate for the loss. In this way, diversification protects you from the risk that any one of the mutual fund's investments might fail and therefore reduces your overall investment risk, the greatest enemy of investors. Lastly, mutual funds generally operate under a lower cost structure than individual investors. Because mutual funds buy and sell enormous amounts of investments, they have more leverage than individual investors do to reduce brokerage commissions and other fees associated with trading. By participating in the mutual funds, you benefit from these cost-savings.

Despite their advantages, investment companies operate mutual funds at a cost they pass on to the shareholders. If you are not mindful of these costs, they can seriously reduce your annual returns. The most common type of cost is the expense ratio, which is the sum of all of the annual operating expenses expressed as a percentage of the mutual fund's value (www.investorwords.com). Operating expenses include the salaries of those running the mutual fund and advertising fees. Besides the expense ratio, investment companies charge a redemption fee to shareholders who redeem a mutual fund's shares that have been purchased and held for a short period of time, usually less than 90 days. Although a fee, the redemption fee is generally beneficial to long-term investors because it penalizes short-term traders for moving in and out of the mutual fund quickly, which is costly for all shareholders. Lastly, some investment companies charge a sales load, which is a fee charged to all shareholders who make purchases or redemptions of a mutual fund's shares. The sales load is assessed at the time of purchase (front-end load) or at the time of redemption (back-end load). This fee is controversial enough to have spawned a group of thought campaigning against its existence. This camp argues for the purchase of mutual funds without sales loads only, termed no-load

mutual funds. While you may freely choose mutual funds that charge a sales load or those that do not, recognize that mutual funds that charge a sales load must achieve better annual returns to compensate for their extra cost.

How do I choose a mutual fund?

Mutual funds can be divided into two broad categories: active and passive. Active mutual funds attempt to beat a benchmark index while passive mutual funds (also known as index funds) simply attempt to match a benchmark index. (The S&P 500 Index is an example of a common benchmark index used to gauge the performance of the broad U.S. stock market. It is not a mutual fund, nor are other indices such as the S&P MidCap 400 Index or the Russell 2000 Index. As you will see later though, mutual funds exist that imitate the composition and performance of indices.) The major benefit of owning active mutual funds is professional management. The major benefit of owning passive mutual funds is cost. The Dodge & Cox Stock Fund (DODGX), an active mutual fund, strives to outperform the S&P 500 Index, its benchmark index, which it has done handily over the last five years. (Contrast DODGX's trailing five-year return (12.50% annually) versus that of the S&P 500 Index (-0.20% annually) (www.morningstar.com.) On the other hand, the Vanguard S&P 500 Index Fund (VFINX), a passive mutual fund, tries simply to duplicate the return of its benchmark index, the S&P 500 Index, which it has done successfully over the last five years. (VFINX has returned -0.29% annually over the last five years, only 0.09% less than its benchmark, the S&P 500 Index (www.morningstar.com.)

Given these examples, you might wonder why anyone would choose a passive mutual fund over an active one. The reason is cost.

	DODGX	VFINX	AMRAX
Expense Ratio	0.53%	0.18%	3.65%
Initial Investment	\$500	\$500	\$500
Theoretical Rate of Return	11%	11%	11%
Holding Period	20 Years	20 Years	20 Years
Value After 20 Years	\$4063.13	\$4397.39	\$2018.31
Profit	\$3563.13	\$3897.39	\$1518.31
Expenses After 20 Years	\$180.43	\$40.35	\$822.86

http://apps.nasd.com/investor_information/ea/nasdmfief.aspx

Generally, investment companies charge more for their active mutual fund offerings than their passive ones because of the extra effort put forth to outperform an index. DODGX charges 0.53% for its expense ratio (www.dodgeandco.com) while VFINX charges 0.18% (www.vanguard.com). These numbers might seem small

and insignificant, but over the course of decades, the difference becomes striking.

For example, compare a \$500 initial investment in DODGX, VFINX, and American Growth A (AMRAX), whose expense ratio is 3.65% (www.morningstar.com), that returns 11% annually (equivalent to the annual return of the S&P 500 Index between 1926 and 2002 (www.morningstar.com)) for 20 years.

This example clearly illustrates how cost impacts performance. AMRAX's high expense ratio puts it at an enormous competitive disadvantage. To achieve comparable value after 20 years to DODGX and VFINX, AMRAX must return 14.5% and 14.8% annually, respectively. Only if you have complete confidence that the professional manager at AMRAX is capable of consistently outperforming DODGX and VFINX should you purchase it in favor of the other two. Given that DODGX's trailing five-year return is 12.50% annually, VFINX's is -0.29%, and AMRAX's is -11.40%, you shouldn't have that confidence nor should you purchase AMRAX (www.morningstar.com). In this example, you should also notice how DODGX's expenses are four-and-one-half times higher after 20 years than VFINX's expenses so even DODGX must outperform VFINX to justify its higher expense ratio. In the past, DODGX has done so, but historically, most active mutual funds have not been able to consistently outperform the benchmark indices to which passive mutual funds are tied. Given the difficulty in picking active mutual funds that consistently outperform, there is a strong case for choosing passive mutual funds that simply imitate benchmark indices and charge very little to do so. Lastly, the average expense ratio of mutual funds like DODGX, VFINX, and AMRAX is 1.43% (http://apps.nasd.com/investor_information/ea/nasdmfief.aspx). So you can see that the expense ratio's numerical value does not necessarily correlate with the quality of the mutual funds' annual returns.

What else should I consider when choosing a mutual fund?

Besides cost, you should consider the long-term annual returns of the mutual funds you are researching. Trailing five-year and trailing ten-year annual returns give you a better impression of how a mutual fund will perform five years from now than the trailing one-year annual return. For example, the trailing one-

year annual return for Janus Mercury (JAMRX) in 1999 was 96.2%. The following three years though, JAMRX returned -22.8%, -29.8%, and -29.0%, respectively (www.morningstar.com). Meanwhile, while DODGX returned 20.2% in 1999, it returned 16.3%, 9.3%, and -10.5% the following three years, respectively (www.morningstar.com). Just looking at the trailing one-year annual returns from 1999, you would have chosen JAMRX over DODGX, but over the four years from 1999-2002, DODGX clearly won out.

You should also review the record of the professional manager or the professional management team running the mutual fund. The professional management team at DODGX is composed of nine individuals, each with strong credentials and many with long tenures at the mutual fund (www.dodgeandco.com). Although credentials and experience do not guarantee future success, many of the best active mutual funds are led by professional managers or professional management teams who possess both.

Making A Choice.

Now you can begin looking for a mutual fund that suits you well. You probably noticed that Morningstar's website (www.morningstar.com) is referenced frequently throughout this article, because it has valuable tools to help you choose the best mutual fund for you. Specifically, Morningstar's website offers a mutual fund screener which can help you navigate the mutual fund universe by choosing from certain criteria you deem important. In addition, you can visit investment company websites like Fidelity (www.fidelity.com), Vanguard (www.vanguard.com), or Dodge & Cox (www.dodgeandco.com) to learn about their mutual funds and to make purchases. Unlike most stocks, you may purchase mutual funds through investment companies' websites at no cost, thus giving you just one more reason to add purchasing a mutual fund to your holiday shopping list.

Disclaimer

Investing involves inherent risk. Consider this article nothing more than a general guide to the basics of mutual funds. Also, none of the article's calculations take into account taxes or inflation so actual returns are likely to be less than listed above. B

A subset of BBS student 1st and 2nd author publications between April 1 and November 1, 2005.

I W P R E S S

Cell Biology

Anderson E, **Maday S**, Sfakianos J, Hull M, Winckler B, Sheff D, Folsch H, Mellman I (2005) Transcytosis of NgCAM in epithelial cells reflects differential signal recognition on the endocytic and secretory pathways. *J Cell Biol.* 170(4):595-605

Cellular and Molecular Physiology

Anderson EJ, Neuffer PD (2005) Type II skeletal myofibers possess unique properties that potentiate mitochondrial H₂O₂ generation. *Am J Physiol Cell Physiol.* Oct 26; [Epub ahead of print].

Djurisic M, Zecevic D (2005) Imaging of spiking and sub-threshold activity of mitral cells with voltage-sensitive dyes. *Ann N Y Acad Sci.* 1048:92-102.

Experimental Pathology

Ziegler EC, Ghosh S (2005) Regulating inducible transcription through controlled localization. *Sci STKE.* (284):re6.

Genetics

Moresco EM, Donaldson S, Williamson A, Koleske AJ (2005) Integrin-mediated dendrite branch maintenance requires Abelson (Abl) family kinases. *J Neurosci.* 25(26):6105-18.

Immunobiology

Shim JH, et al. (2005) TAK1, but not TAB1 or TAB2, plays an essential role in multiple signaling pathways in vivo. *Genes Dev.* Oct 31; [Epub ahead of print].

Peaper DR, Wearsch PA, Cresswell P (2005) Tapasin and ERp57 form a stable disulfide-linked dimer within the MHC class I peptide-loading complex. *EMBO J.* 24(20):3613-23.

Shiao SL, McNiff JM, Pober JS (2005) Memory T cells and their costimulators in human allograft injury. *J Immunol.* 175(8):4886-96.

Rush JS, Liu M, Odegard VH, Unniraman S, Schatz DG (2005) Expression of activation-induced cytidine deaminase is regulated by cell division, providing a mechanistic basis for division-linked class switch recombination. *PNAS.* 102(37):13242-7.

Christensen SR, Kashgarian M, Alexopoulou L, Flavell RA, Akira S, Shlomchik MJ (2005) Toll-like receptor 9 controls anti-DNA autoantibody production in murine lupus. *J Exp Med.* 202(2):321-31.

Interdepartmental Neuroscience Program

Abelson JF, **Kwan KY**, et al. (2005) Sequence variants in SLITRK1 are associated with Tourette's syndrome. *Science* 310:317-320.

Georgescu D, **Sears RM**, et al. (2005) The hypothalamic neuropeptide melanin-concentrating hormone acts in the nucleus accumbens to modulate feeding behavior and forced-swim performance. *J Neurosci.* 25:2933-2940.

Meltzer JA, Constable RT (2005) Activation of human hippocampal formation reflects success in both encoding and cued recall of paired associates. *Neuroimage* 24:384-397.

Narayanan NS, **Kimchi EY**, Laubach M (2005) Redundancy and synergy of neuronal ensembles in motor cortex. *J Neurosci.* 25:4207-4216.

Rabenstein RL, **Addy NA**, Caldarone BJ, Asaka Y, Gruenbaum LM, Peters LL, Gilligan DM, Fitzsimonds RM, Picciotto MR (2005) Impaired synaptic plasticity and learning in mice lacking beta-adducin, an actin-regulating protein. *J Neurosci.* 25:2138-2145.

Schafer JR, Kida I, Rothman DL, Hyder F, Xu F (2005) Adaptation in the rodent olfactory bulb measured by fMRI. *Magn Reson Med* 54:443-448.

Yao CA, Ignell R, Carlson JR (2005) Chemosensory coding by neurons in the coeloconic sensilla of the *Drosophila* antenna. *J Neurosci* 25:8359-8367.

Bhattacharjee A, **von Hehn CA**, Mei X, Kaczmarek LK (2005) Localization of the Na⁺-activated K⁺ channel Slick in the rat central nervous system. *J Comp Neurol* 484:80-92.

Ford JM, **Johnson MB**, Whitfield SL, Faustman WO, Mathalon DH (2005) Delayed hemodynamic responses in schizophrenia. *Neuroimage* 26(3):922-31.

Luczak A, **Narayanan NS** (2005) Spectral representation--analyzing single-unit activity in extracellularly recorded neuronal data without spike sorting. *J Neurosci Methods* 144:53-61.

Addy N, Pocivavsek A, Levin E (2005) Reversal of Clozapine Effects on Working Memory in Rats with Fimbria-Fornix Lesions. *Neuropsychopharmacology*.30, 1121-1127.

Narayanan NS, Prabhakaran V, Bunge SA, Christoff K, Fine EM, Gabrieli JD (2005) The role of the prefrontal cortex in the maintenance of verbal working memory: an event-related fMRI analysis. *Neuropsychology* 19:223-232.

Vourc'h P, **Lacar B**, Mignon L, Lucas PA, Young HE, Chesselet MF (2005) Effect of neurturin on multipotent

cells isolated from the adult skeletal muscle. *Biochem Biophys Res Commun* 332:215-223.

Dahanukar A, **Hallem EA**, Carlson JR (2005) Insect chemoreception. *Curr Opin Neurobiol* 15:423-430.

Hallem EA, Dahanukar A, Carlson JR. (2005) Insect odor and taste receptors. *Annu Rev Entomol.* 2005 Jul 19; [Epub ahead of print]

Microbiology

Starcevic D, Dalal S, Jaeger J, Sweasy JB (2005) The hydrophobic hinge region of rat DNA polymerase beta is critical for substrate binding pocket geometry. *J Biol Chem.* 280(31):28388-93.

Publicover J, **Ramsburg E**, Rose JK. (2005) A single-cycle vaccine vector based on vesicular stomatitis virus can induce immune responses comparable to those generated by a replication-competent vector. *J Virol.* 79(21):13231-8.

Lehmann MJ, **Sherer NM**, Marks CB, Pypaert M, Mothes W. (2005) Actin- and myosin-driven movement of viruses along filopodia precedes their entry into cells. *J Cell Biol.* 170(2):317-25.

Campononico EM, Chesnel L, Roy CR. (2005) A yeast genetic system for the identification and characterization of substrate proteins transferred into host cells by the Legionella pneumophila Dot/Icm system. *Mol Microbiol.* 56(4):918-33.

Watson RO, Galan JE. (2005) Signal transduction in *Campylobacter jejuni*-induced cytokine production. *Cell Microbiol.* 7(5):655-65.

Ferris HU, Furukawa Y, Minamino T, Kroetz MB, Kihara M, Namba K, Macnab RM. (2005) FLHB regulates ordered export of flagellar components via autocleavage mechanism. *J Biol Chem.* Oct 24; [Epub ahead of print]

MCDB

Bertone P, Snyder M. (2005) Advances in functional protein microarray technology. *FEBS J.* 272(21):5400-11.

Bertone P, Snyder M. Prospects and challenges in proteomics. *Plant Physiol.* 138(2):560-2.

Yi C, Deng XW. (2005) COP1 - from plant photomorphogenesis to mammalian tumorigenesis. *Trends Cell Biol.* 15(11):618-25.

Qin H, **Burnette DT**, Bae YK, Forscher P, Barr MM, Rosenbaum JL. (2005) Intraflagellar transport is required for the vectorial movement of TRPV channels in the ciliary membrane. *Curr Biol.* 15(18):1695-9.

Soosaar JL, **Burch-Smith TM**, Dinesh-Kumar SP. (2005) Mechanisms of plant resistance to viruses. *Nat Rev Microbiol.* 3(10):789-98.

Tsubouchi T, Roeder GS. (2005) A synaptonemal complex protein promotes homology-independent centromere coupling. *Science.* 308(5723):870-3.

Jiao Y, et al. (2005) A tiling microarray expression analysis of rice chromosome 4 suggests a chromosome-level regulation of transcription. *Plant Cell.* 17(6):1641-57.

Nakayama N, Arroyo JM, Sidorowski J, May B, Martienssen R, Irish VF. (2005) Gene trap lines define domains of gene regulation in Arabidopsis petals and stamens. *Plant Cell.* 17(9):2486-506.

Cabeen MT, Jacobs-Wagner C. (2005) Bacterial cell shape. *Nat Rev Microbiol.* 3(8):601-10.

Yi C, Li S, Chen X, Wiemer EA, Wang J, Wei N, Deng XW. (2005) Major vault protein, in concert with constitutively photomorphogenic 1, negatively regulates c-Jun-mediated activator protein 1 transcription in mammalian cells. *Cancer Res.* 65(13):5835-40.

Neurobiology

Hasenstaub A, Shu Y, Haider B, Kraushaar U, Duque A, McCormick DA. (2005) Inhibitory postsynaptic potentials carry synchronized frequency information in active cortical networks. *Neuron.* 47(3):423-35.

Ramos BP, Colgan L, Nou E, Ovadia S, Wilson SR, Arnsten AF. (2005) The beta-1 adrenergic antagonist, betaxolol, improves working memory performance in rats and monkeys. *Biol Psychiatry.* Jul 23.

Pharmacology

Massimine KM, Doan LT, Atreya CA, Stedman TT, Anderson KS, Joiner KA, Coppens I. (2005) *Toxoplasma gondii* is capable of exogenous folate transport. A likely expansion of the BT1 family of transmembrane proteins. *Mol Biochem Parasitol.* 144(1):44-54.

Li J, Stern DF. (2005) DNA damage regulates chk2 association with chromatin. *J Biol Chem.* 2005 280(45):37948-56.

Ackah E, et al. (2005) Akt1/protein kinase Balpha is critical for ischemic and VEGF-mediated angiogenesis. *J Clin Invest.* 115(8):2119-27.

Wittmack EK, Rush AM, Hudmon A, Waxman SG, Dib-Hajj SD. (2005) Voltage-gated sodium channel Nav1.6 is modulated by p38 mitogen-activated protein kinase. *J Neurosci.* 25(28):6621-30.

Anyatonwu GI, Ehrlich BE. (2005) Organic cation permeation through the channel formed by polycystin-2. *J Biol Chem.* 280(33):29488-93.

Murakami E, **Basavapathruni A**, Bradley WD, Anderson KS. (2005) Mechanism of action of a novel viral mutagenic covert nucleotide: molecular interactions with HIV-1 reverse transcriptase and host cell DNA polymerases. *Antiviral Res.* 67(1):10-7.

Donnelly ET, Liu Y, Paul TK, Rockwell S. (2005) Effects of motexafin gadolinium on DNA damage and X-ray-induced DNA damage repair, as assessed by the Comet assay. *Int J Radiat Oncol Biol Phys.* 62(4):1176-86.

Kapadia SU, Rose JK, Lamirande E, Vogel L, Subbarao K, Roberts A. (2005) Long-term protection from SARS coronavirus infection conferred by a single immunization with an attenuated VSV-based vaccine. *Virology.* 340(2):174-82. *B*

HALLOWEEN IN REVIEW



Photo courtesy of Chris Mader



Photos courtesy of Chris Mason

Immortal Technique: A Return to True Hip Hop

Introducing B readers to new styles of music.

By K. FAKHRO

Powerful, uncompromising and intellectually engaging, Immortal Technique flaunts his lyrical genius without focusing on the “materialistic” topics which so many of his commercialized mainstream counterparts have come to depend on. So what’s left to rap about? Lessons learned from everyday struggles, societal dilemmas and conspiracy theories are a few of this underground MC’s many topics. Additionally, Tech is a phenomenal battle MC, having obliterated many opponents with his brilliant lyrics and unique style. Technique’s songs come in the form of a lucid sociopolitical commentary articulated over all sorts of beats. The once incarcerated Peruvian’s direct approach to controversial issues borders what some may call insanity.

As a political activist, one of Tech’s main subjects of interest is the widespread phenomenon of hypocritical relationships, in which economic gain is the ultimate motive. He takes issue with the American government’s double standards in its foreign policies, either supporting or turning a blind eye to atrocities around the world, depending on which option is more economically beneficial. For example, *The Cause of Death, Bin Laden* and *The Fourth Branch (The Media)* all examine the history of relationships between Bin Laden, Saddam, and the U.S. government. The “then and now” approach towards these two situations is clearly hypocritical and can be best understood by examining the economic beneficiaries: “Colonialism is sponsored by corporations – that’s why Halliburton gets paid to rebuild nations.” To further this point, the government is described as a plutocracy, where the wealthy rule. On domestic policies, *Peruvian Cocaine* (a collaboration with several other underground hip hop artists), describes the levels of the well-organized drug trade involved in bringing narcotics to the streets: from the field worker, the boss, the Peruvian leader, to the American drug dealer, and the American government officials.

Another one of Tech’s major concerns is the commercialization of hip hop. In the soliloquy, *The Message and the Money*, he expresses his contempt for producers and A&Rs (Artists and Repertoire), claiming to fight for the rights of the aspiring artists they represent, but in reality exploiting them for the economic benefit of the corporation. Having been offered a major label deal – which he rejected due to the attempted censorship over the subjects of his albums – Tech speaks on this matter from personal experience.

On a more stylistic note, Tech is notorious for his similes and metaphors. His imagery, although sometimes cruel, paints a vivid picture: “Attempts to extinguish me don’t even bother me none – like retarded kids throwing ice cubes at the sun.” His vocabulary transcends the bounds of being born and raised in the ghetto; instead Tech makes intellectually appealing references that elude today’s commercialized rappers, frequently utilizing terms that one would more likely expect to hear during a lecture for the BBS program.

In conclusion, Immortal Technique’s aggressive and honest style is not merely political, it is relevant and street-wise. Another writer previously described Technique in a manner I find particularly apt: “If Howard Zinn or Noam Chomsky started ghostwriting for Tupac, the result might sound something like Immortal Technique.” In all honesty, I believe it would be extremely difficult to find a more informed MC who forbids revolutionary rhetoric to overpower his flow. Over the years, many MCs have surfaced who share certain characteristics with Immortal Technique; however, none have come as far in using hip-hop as a vehicle to enlighten listeners on the world around them. Tech fittingly describes his personal perspective in *The Poverty of Philosophy*: “People will look upon my attitude and sentiments, and look for hypocrisy in my words. My revolution is born out of love for my people, not hatred for others.”

Find out more about Immortal Technique’s past albums and upcoming projects on his website: www.viperrecords.com. B

MOVEMENTS IN FOOD

What's in a Bumper Sticker?

BY R. ROSENGARTEN

I leave my water bottles everywhere—in classrooms and lecture halls, on city busses and airplanes. You might be tempted to pick one up by its peculiar wrapping. You see, I stick bumper stickers to each bottle. “I Brake For Boiled Peanuts” I got from friends Matt and Ted Lee at BoiledPeanuts.com, and donated to Jet Blue. The bottle I use now broadcasts a more serious message: “Friends Don’t Let Friends Eat Imported Shrimp.” A fellow marine biologist asked me what conservation organization printed the sticker. I told him, “Not an environmentalist, a McClellanville shrimper!”

The foreign shellfish my townsman warns against are raised on shrimp farms in coastal South and Central America, and as far off as Southeast Asia, where old mangrove forests have been enclosed and converted into tidal pools. Shrimp raised on Purina fish food and pharmaceutical hormones are flash frozen and shipped around the world, distributed by the same seafood companies that broker with local fishermen. Eventually, restaurant menus feature “jumbo” shrimp cocktail, flavorless and tough, but useful as a delivery vehicle for the eponymous sauce of ketchup and horseradish. Even if you are not as snooty as I am about the flavor and body of your shrimp, the tragic environmental impact of shrimp farming should make your blood boil.

Ideally, shrimp farms would blend in with natural coastlines and play a productive role in the ecosystem. Shrimp would be raised at low densities requiring no food inputs beyond those contributed by the tides. Shrimp waste would fertilize surrounding mangroves instead of suffocating them with algal and bacterial blooms, and the shrimp themselves would be healthy and resist viral infection.

That’s the theory, the industry line, but the reality is different. Poorly regulated markets and greedy owners eschew low-density farms for intensive operations that produce environmental degradation and severe shrimp mortality. In the United States, shrimp farms pop up as aquaculture facilities—backed by loads of research by the National Oceanic and

Atmospheric Administration’s fisheries departments—that often have no direct contact with the natural marshes. Investments in shrimp farming in the early 1990s looked promising until disease devastated the Carolina and Georgia farms. New water filtration technologies are inspiring a modest comeback. I have my doubts, however, as to the gastronomic quality of the farmed “product,” and a deeper apprehension over a system that fosters pathogens that could infect wild populations.

The traditional local alternative to horticultural shrimp is less than ideal, but its effects on the environment are not as lethal. As etched into our imaginations by *Forrest Gump*, shrimp boats drag large trawling nets that catch everything in their path. The impact on marine habitats is not well understood, though optimistic reports suggest the muddy bottoms of

“If you want to enjoy shrimp salad in Des Moines, a more brutal method of harvesting shrimp will have to be employed.”

Southeastern shrimping waters are in constant natural flux and restore themselves. Regions off Florida and the Gulf of Mexico have restricted trawling around selected coral bottoms. The most obvious deleterious effect of net trawling is the killing of the by-catch. Tons and tons of fish come on board with the shrimp; most of it has no commercial value and is thrown overboard dead. Today, turtle exclusion devices (TEDs) and by-catch reduction devices (BRDs) moderate the losses. Turtles can thank Sonny Morrison, a boat captain and shrimper from McClellanville, for devising the trap door system that allows them to pass through the nets. Still, under pressure to net more shrimp, shrimpers stay out longer and spray their catch with sulfite preservatives to keep it looking fresh in the icy holds of the boats.

There is only one way I know of to catch shrimp that is eco-friendly—by throwing a “cast net,” a conical net with a weighted bottom and drawstrings that attach at the apex. Africans brought this ingenious tool to America

in the seventeenth century. When thrown properly, a net opens to its full diameter, lands on the water, and sinks, trapping the sea life beneath. Reeling in the net by a wrist cord pulls the drawstrings tight, which causes the weighted bottom to close. I’ve caught buckets of shrimp, striped and spot-tail bass, even the prehistoric looking gar fish, casting in the creeks behind my childhood home. One virtue of the cast net is that it causes minimal disturbance to the environment. Yet the most fortunate day casting could never satisfy the world’s appetite for shrimp. If you want to enjoy shrimp salad in Des Moines, a more brutal method of harvesting shrimp will have to be employed.

Several years ago I visited the Fulton Fish Market in Manhattan—the venerable market has recently moved to the Bronx. I got there at three in the morning, as the fishmongers and butchers were loading the trucks to supply a hungry city. I was thrilled to see the countless varieties of fish and shellfish. The cook in me was ready to fire-up the grill. But my delight subsided as I began to contemplate what it meant to devour such vast quantities of fish. I left the market knowing one thing for sure: if we take that much fish from the sea every day there won’t be any left for tomorrow.

How can we make a difference from the top of the food chain? First, by restricting our consumption of seafood to species from sustainable fisheries, such as Western Australia rock lobster and wild Alaskan salmon, or eco-friendly farming operations such as Prince Edward Island mussels and Bulls Bay clams from Livingston’s (McClellanville) Seafood. The Whole Foods Market grocery chain labels sustainably harvested seafood, “Fish Forever,” on the say-so of the Marine Stewardship Council (MSC), a London-based-non-profit that promotes an accreditation system for fisheries. Second, we can pay attention to the Audubon Society’s annual evaluation of world fisheries, *The Seafood Lover’s Guide*. Shrimp trawled or farmed in the U. S. get a yellow “be careful” rating. Imported farmed shrimp get a rating of red—“stay away from this stuff,” “don’t buy it,” “don’t eat it.” But if you have seen my water bottle, you know that already. *B*

MORE HALLOWEEN HIJINX

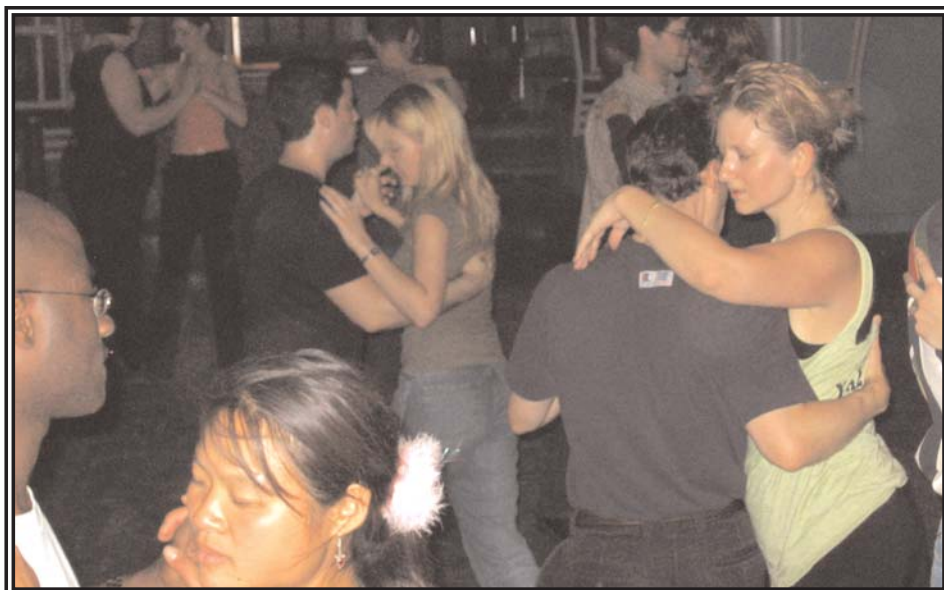


Photo courtesy of Chris Mader



Photos courtesy of Chris Mason

LIFESTYLES OF THE POOR AND ACADEMIC RHYTHM OF THE NIGHT CONTRIBUTED BY THE YALE TANGO CLUB



Every Sunday, the night air around the GPSCY shimmers with the call of the bandoneón, music to the ears of Yale's dancers of Argentine tango. Go upstairs to the ballroom, and you will see dozens of your fellow students and postdocs locked in the tango embrace, moving around the floor to the rhythms of the great tango orchestras of Buenos Aires in the 1930s to 1950s. But wait, now it's the Squirrel Nut Zippers, Norah Jones, Tom Waits, and without missing a beat, the dancers go with the flow. There's a gaggle of girls by the snacks table, seriously discussing tango shoes while occasionally looking up to scan the room, seeking to lock eyes and nod, the invitation to the dance. You spy the rotation student you remember from the gel camera line, now wearing a glittery tanktop, flouncy skirt, and 4-inch heels. On the dance floor, the nerdy postdoc from down the hall, crunching mints and entangling his legs with those of his partner, sending her legs whizzing and flying and yet, unbelievably, not crashing into the décor. The guys taking a break look on appreciatively, their eyes focused on the footwork of the dancers spinning by.

This is a meeting of the Yale Tango Club, and you may wish that everything that goes by the name of "meeting" looked like this. The Tango Club is the place to be on Sunday nights,

50 weeks a year. Dancers include graduate and professional students from around campus and the six continents, as well as undergrads, postdocs, some staff and faculty, and accomplished dancers from the region, who drive up to 100 miles to dance here every Sunday night.

For the novice, this looks exciting, but mighty challenging. Not to worry. It's easier than restriction enzyme cloning, and we should know. The Tango Club organizes classes and a Tango Bootcamp for total beginners, taught by experienced Yale tanguero volunteers and Celebrity Guest Instructors from New York, Montreal, and Buenos Aires. You don't need a partner or any dance experience. Admission to Sunday night dancing is always free, as are most classes, thanks to support from the Graduate and Professional Student Senate. Our next wildly popular Tango Bootcamp starts on January 15 (4 weekly classes). Registration will be announced mid-December, and this event is often fully booked within hours. To be sure of a spot, sign up for our email list at www.yaletangoclub.org. We look forward to dancing with you! *B*

The Yale Tango Club meets in the upstairs ballroom of the GPSCY, 204 York Street, on Sundays from 8:00 pm - ?. Visit the website for lessons and special events.

CLASSMATES WHO COOK

TRY THIS AT HOME

BY R. ROSENGARTEN

With my friends' lab work intensifying and social calendars overflowing, I haven't snagged an invitation to cook with anyone in a long while. Instead of my usual dinner party diary, then, I am going to supply a couple of my favorite recipes, perfect for entertaining friends and family around the holidays. I am notoriously bad at following recipes, but these two make my mouth water and my heart pound, so I make an exception. If you try them, drop me a line and let me know about the results.

This first recipe has been adapted from Chef Edna Lewis by my mother, Dale Rosengarten. At the end, I offer some of my own suggestions.

Ms. Lewis was born 80 years ago in Freetown, Virginia and currently lives in Atlanta, Georgia. A pioneer in many ways—as a woman and an African-American in an industry run by white males, and as a chef who demonstrated that southern African-American fare can surprise you with its delicacy and its universal appeal—Ms. Lewis was for several years the chef at the restaurant at Middleton Place, an opulent plantation near Charleston, South Carolina, now dedicated to tourism and education. That's where I first tried her cooking.

When I was a child, my family and neighbors raised hogs for about eight years and would render lard immediately after a hog-killing. My mother—and Ms. Lewis—swears there is no substitute for home-made lard for giving a lightness and natural sweetness to the crust.

Sweet Potato Pie (makes 2 10-inch or 3 7-inch pies)

Dough

3 cups plus 2 TBS sifted flour
1 cup chilled, Crisco shortening (the original calls for home-rendered sweet lard)
1 scant tsp salt
1/2 cup cold water

If you would like to be featured in a future "Classmates Who Cook", contact the writer at Rafael.Rosengarten@yale.edu.

Filling

2 cups mashed sweet potatoes, sieved
1 cup granulated sugar
1/2 tsp cinnamon
1/2 tsp fresh-grated nutmeg
1/2 tsp salt
3 small or medium eggs, separated
2 tsps vanilla
2/3 cup butter, melted
1 2/3 cups milk, at room temperature

In a mixing bowl blend well together with a pastry blender the 3 cups flour, lard, and salt. Take care not to overwork the dough—it should look like coarse meal with pea-sized chunks. Add cold water and mix together by hand until the dough just comes together. Shape the dough into a ball, sprinkle the dough with two tablespoons flour to make it easier to handle, and divide the ball into pieces for the number of pies to be made. Cover with plastic and refrigerate 20 minutes to rest. Roll the dough out, place it in the pie pans, trim, cover, and set in the refrigerator or freezer until needed.

In another mixing bowl, combine the sieved sweet potatoes, sugar, spices, salt, beaten yolks, vanilla, and melted butter. Mix thoroughly. Add the milk and stir well. Beat the whites of eggs to medium peaks and fold them into the batter. Pour the batter into the pastry-lined pie pans. Bake in a 350 degree oven for 40 to 45 minutes.

Here are a few observations:

The dough for the crust is short and dry, and thus tricky to work with. You can try substituting a stick of unsalted butter for half of the Crisco. Also, you can add a little more water if needed.

Roast the potatoes, individually wrapped in aluminum foil, at 350 degrees for about two hours. They should be very soft and oozing caramelized juices. This can be done a day ahead of time. Let the potatoes cool completely before making the pie filling.

I think this recipe makes a wonderful pie, but it is a bit sweet for my taste. Next time I make it I plan to use 3/4 cup sugar (1/2 cup white, 1/4 cup brown).

I first tasted "chocolate chicken" in Barcelona and have found recipes in several Spanish and Mexican cookbooks. They remind me that the first people to make chocolate from the seeds of the cacao tree were native to Mesoamerica. The seeds were carried back to Spain by the conquistadors who decimated the indigenous people in the 16th century. In this way, the native American horticulturalists colonized the cuisine of their conquerors through the gift of this irresistible food.

Pollo a la Catalan

1 whole chicken, cut into pieces
salt and pepper
2 TBS olive oil
1 one-and-a-quarter inch piece of cinnamon stick
2 cloves garlic, chopped
1 onion, chopped
6 TBS brandy or rum
1/2 cup white wine
herb bouquet of bay leaf, sprig of thyme, parsley, strip of lemon zest
1/4 tsp saffron, crushed
1 oz almonds or hazelnuts, blanched, skinned, and toasted
1 oz dark chocolate, grated or 1/2 oz unsweetened cocoa powder (Choose a good chocolate with 70% cocoa.)

Rub chicken pieces with salt and pepper. Heat oil in a heavy bottomed frying pan or dutch oven and brown chicken slowly, adding the cinnamon stick and garlic, turning frequently. Add the onion and fry a few minutes more. Then add the brandy or rum, the wine, and the herb bouquet. Cover and bring to a simmer. In a food processor grind together the saffron, nuts, and chocolate. Thin with a little water and add to the chicken. Season with salt and pepper and cook until chicken is very tender, about 40 minutes. Remove the cinnamon stick and herb bouquet before serving.

Serve this dish with yellow Spanish rice and a big red wine like Jumilla, or even better, a Mexican beer like Negra Modelo. *B*

The BUZZ

Sources say that **Gillian Hooker** and **Dylan Burnette**, both of MCDB, were engaged on August 3.



Congratulations to *B*'s **Jen Warner**, INP, and **Eric Schmidt**, also INP, on their October 1 wedding.



Late breaking news: **Chloe Diamond** and **Andrew Mara**, both of MCDB, were married on November 5th.



Best wishes to **Mike Akins**, *B* alumnus and INP '05, and his wife, Amy, on the birth of John Michael, 7lbs 10 oz, on November 1.



Michael Turner, MCGD Track, and his wife welcomed Abigail Mae Turner, 8 lbs 8 oz and 21", into the world on November 8.



Congratulations to **Mark Laubach**, assistant professor of Neurobiology, and his wife, Bernadette, on the birth of Sara Elizabeth on October 9.



Say hello to Aidan Walsh Nolde, 8 lbs 13 oz and 21", who was born to **Mona Nolde**, MCDB, and her husband, Adam, on November 4.



Shawn Chavez, MCDB, and her husband Lonny are proud to announce the birth of Adison Rae, 5 lbs 3.5 oz and 19", on November 2.

The *B* magazine

"New Year's Resolutions"

Contest

Ok, we get the message - Our contest is far less popular when there aren't any cool prizes. We'll see what we can do about that in the future. Until then, thank you to the purists below who submitted entries for the sheer joy of getting their names in print. We love you guys.

1st Place

I resolve to present my data like the Beastie Boys would--- in rhyme form with just a little bit of illin'.

Dylan Burnette, MCDB

2nd Place

In 2006 I will finally make it to a departmental seminar.

Nadya Morales, Microbiology

3rd Place

In 2006 I will not cram my unrelated results into a "Story."

Nadya Morales, Microbiology

Other notable entries (ok, these are almost ALL of the other entries)...

> This year I resolve to talk to someone who can get my signature off that damn GESO poster...

Sara Nichols, Computational Biology and Bioinformatics

> I wish to make this my last Ph.D.

Aravind Basavapathruni, Pharmacology

> I resolve to end my quest for a "mechanism" by just making something up.

Dylan Burnette, MCDB

> In 2006 I will no longer use "quantitate" when "quantify" will work just as well and is recognized by my spell checker.

Dylan Burnette, MCDB

> 2006 sounds like a good year to figure out what I want to be when I grow up.

Dylan Burnette, MCDB

> I will stop taking 3-hour lunch breaks, at least when my boss is around.

Nadya Morales, Microbiology

> In 2006 I will only check my email 600 times a day (instead of 10,000).

Nadya Morales, Microbiology

> I will stop spitting into my lab-mate's cells. Really, I will!

Nadya Morales, Microbiology