

LGBT Role Models for the Next Generation of Chemists

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Date: Fri, 31 Mar 1995

From: #####@uci.edu

To: jsnowick@uci.edu

I sent a message to you about a week ago to tell you how much I enjoyed your class. I didn't have enough nerve to tell you that I admire you for who you are and for your success in life. I hope someday I can do the same. But for now, I'm still closeted in this world which seems to be filled with hate and fear. I hear it everywhere I go, even in lecture. It saddens me to hear such things, for I know they are directed at me as well. A part of me dies each time.

But finally with a role model such as you, I can start to come out of my shell. To be true to myself and be true to others. Before that time can occur, I must gather enough courage to speak out. You are a big influence to me. You have given me hope, courage, and some optimism that I can be someone in the future. I would like to thank you for that.

I always thought my life would be apocalyptic if anyone knew of my "dark secret". Now, with some faith in myself and humanity, I will attempt to reach out and ask for some help, comfort, and support from my closest friends. It will be a huge step for me, and I hope I make it through. Again I would like to thank you. You have done so much for me, even if you haven't done a thing for me. Your presence is all it takes to affect someone's life positively.

A former Student,

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ChemistryBlog

Out and about

by boyie on Nov 24 2009 (5523 Views)

Back in undergrad, there was someone who was in the closet as a chemist. There was no one else he could really look up to as there weren't many out and about chemists, even though he went to a very liberal school. He tried to remain in the closet, but eventually came out to his friends and was accepted right away....

Now this person's undergraduate research advisor was well, not that accepting and there was lots of drama.... Eventually fired from his position ... and after almost losing a summer fellowship ... he went back into the closet even though word had spread and had become a bit ostracized in the department.

Years later this undergrad would go to grad school. Again, he came out to a few folks when starting. But it didn't last long as the department which was said to be quite friendly to the LGBT community seemed as such in the beginning. However, there would be more drama later on and [he] decided to pursue other avenues instead of chemistry.

Alas, that is my story....

Steve @ Nov 24, 2009 - 10:11:48:

I'm going through the same exact thing now... gay and in chemistry (but as an undergrad). I'm not out to anyone in my lab, and honestly I don't think I ever will be. I'm completely out to all my friends, but I just separate my two lives like that. I feel dirty hiding who I am, but what am I to do? There's too much riding on my position, getting recommendation letters, etc.

Excimer @ Nov 24, 2009 - 11:11:37:

The supposed conservatism ... of chemistry faculty is not the reason why. Science is Asperger's central, full of people who are indifferent to emotion and unable to deal with irrational changes. Science draws these people. Coming out is a rather emotionally taxing process, and the people who make up the scientific establishment generally lack the empathy needed to help you through the process....

Honestly, this is the first time I have ever heard of someone GLBT being discriminated against in a chemistry lab by their advisor.

Psi*Psi @ Nov 25, 2009 - 12:11:21:

@Steve: Make GLBT-friendly friends within chemistry. There are departments and research groups where you can be accepted for who you are-I'm in one.

The Class of 2005

These days, the path to scientific independence is long and steep. But every year, a new cohort of scientists makes it to the top, thanks to lots of hard work, determination, talent, and at least a little good luck. This week, we celebrate the success of the new faculty class by profiling eight early-career researchers from the United States and Europe who this year came of age, beginning their first permanent jobs as independent scientists

United States: Two Scientists and a Baby

The conventional wisdom for job seekers is “keep it simple.” It’s hard enough to get a tenure-track job without any complications; forget about finding two jobs in the same place, for instance, or adding children to the mix. By that standard, earth scientist Alexis Templeton and biophysical chemist Amy Palmer did a lot wrong in their search for tenure-track jobs. They were determined to stay together, seeking faculty positions in the same city, even the same institution, and they started a family just as they began searching for jobs. Yet Palmer and Templeton have ended up together at the University of Colorado, in jobs that they each wanted.

If they did so many things wrong, how did things end up so right? The conventional wisdom, it seems, is no longer always so wise. It’s been eroded by cultural changes at leading institutions. And, as Templeton and Palmer’s experience indicates, talent, hard work, audacity, and—especially—being ready can overcome some high barriers. “We felt ready,” says Templeton. “We just felt that we had to go for it.”

Convergence and scientific divergence

Palmer and Templeton have been aligning their plans and ambitions since they met as undergraduates at Dartmouth College. Templeton graduated first and began working on a master’s degree at Dartmouth. When Palmer finished her bachelor’s degree, she took a technician job in a Dartmouth laboratory while Templeton finished her master’s degree. Then they headed west together, where Palmer enrolled at Stanford University in bioinorganic chemistry and Templeton did a technician stint of her own, in a stable-isotope lab at the nearby Lawrence Berkeley lab.

Later, Templeton joined Palmer in gradu-



ate school at Stanford, and soon they were deep into their first dual job search. “We actually co-interviewed for postdocs at some places,” says Templeton. “That was our first run-through.” They decided to stay in California but headed south, to the University of California, San Diego: Palmer in



Together in Colorado. Alexis Templeton (left) and Amy Palmer.

the department of pharmacology and Templeton at the UCSD-affiliated Scripps Institution of Oceanography.

Both scientists changed direction with their postdocs. Templeton took up the study of the ecology and chemistry of microbial communities that live on the flanks of submarine volcanoes. “We’re looking at the ways life can exist in these systems. We’re at the early stages of trying to figure out who’s present, and then we want to look mechanistically at how they do it.” Palmer studies the movement of signaling molecules within and between “living cells, and in real time.”

Two scientists and a baby

As their scientific paths diverged, Templeton and Palmer’s personal lives became more tightly intertwined: Just as they began looking for faculty positions together, Ethan was born to Palmer on 29 November 2004—the middle of the interviewing season.

Just a few years ago, any one of these complicating factors—the unconventional nature of their relationship; requiring two jobs in the same place; having a baby in the midst of the job search—could have caused problems. But “what we found is that many institutions have worked very hard in the last few years to be very open” to assisting new parents and dual-career couples, as well as about lifestyle choice, says Templeton: “I think the landscape has changed a lot.”

“Institutions were very good about helping us, if one had an offer, trying to accommodate the other,” adds Palmer. “We had no idea going into this that that would even be an option.”

Universities also went out of their way to accommodate the demands of the baby. Several rescheduled interviews, and even when her hosts didn’t know what to do, “they were always willing to ask,” says Palmer.

And what about the fact that they were two women in a relationship? “There wasn’t a blink, which was really astounding,” says Templeton.

Arrival

Although things were going very well for the couple—top institutions were expressing interest in both of them—the experience was exhausting. When Templeton wasn’t interviewing, she was off in the South Pacific collecting data. “It was great and hard all at the same time,” says Palmer. “I’ve never been as deeply tired as I was from November until about April when we finally decided where we would end up.”

Templeton remembers when the call came and their collective future began to gel. Palmer already had an offer from the University of Colorado, Boulder, and they were waiting to hear from the earth science department, which had interviewed Templeton independently. “I was totally out of touch, in Samoa, which is where we were working,”

CREDIT: SARA SHRIVER

The UC Freshman Seminar Program

Freshman seminars...

- ...are conducted in a small group setting, limited to 15 students.
- ...typically meet for one hour a week as one-unit courses.
- ...focus on academic topics of interest to the faculty member.
- ...center on class discussions of selected readings.
- ...expose students to new and unfamiliar fields of study.
- ...attract students to schools and majors.

Faculty participants...

- ...share their research and scholarly work with undergraduates in a group setting.
- ...explore new lines of inquiry with students as active participants.
- ...help students understand the culture of the research university.
- ...receive a freshman seminar award for individual academic use.
- ...participate over and above their regular teaching assignments.

Student participants...

- ...broaden their academic horizons.
- ...explore possible majors.
- ...are introduced to the culture of the research university.
- ...learn in a supportive and congenial atmosphere.
- ...have close contact with professors and future mentors.
- ...develop communication skills through class give-and-take.
- ...can, in most cases, receive a letter grade or elect the pass/not pass option.

Syllabus

Freshman Seminar: Queer Scientists, Queer Science

Textbook

There is no assigned textbook for this class. Optional readings are listed on the Class Materials web page <http://eee.uci.edu/07w/87568/materials.html>.

Course Objective

This class will explore factors influencing the scientific interests and the career paths of gay and lesbian scientists.

Classes

Classes will consist of weekly talks and discussions lead by some of UCI's gay and lesbian science faculty and by other gay and lesbian scientists. Attendance of all classes is mandatory and participation in the discussion through questions and comments is expected.

Assignment (Due Friday, March 23 at 5 pm)

Write a brief essay (e.g., 2-5 pages) addressing the question: "Is there a unique gay and lesbian perspective on science?" Draw upon the class presentations and discussion, the optional readings, and any additional sources that you wish to better define and answer this question. If you feel that your essay could better address a related topic that draws upon the course content (e.g., the semantics or validity of this question), you may do so.

Class Schedule and Topics Covered

Tuesday, January 9

Organizational Meeting

Tuesday, January 16

Speaker: Dr. James S. Nowick,

Professor, Department of Chemistry, UCI

Topics: Organic Chemistry Research on Protein Structure and Interactions; A Brief Autobiography

Tuesday, January 23

Speaker: Dr. Debra J. Richardson

Professor, Department of Informatics, UCI

Dean of Donald Bren School of Information and Computer Sciences, UCI

Topics: Biography of Alan Turing; Autobiography; Research on Software Testing

Tuesday, January 30

Speaker: Dr. Sheryl Tsai

Assistant Professor, Department of Molecular Biology and Biochemistry, UCI

Topic: The Chemical Biology of Diversity in Sexuality and Natural Products

Tuesday, February 6

Speaker: Dr. Amy A. Ross

Vice President of Research and Development, Diamics, Inc.

Mentoring Project Coordinator, National Organization of Gay and Lesbian Scientists and Technical Professionals, Inc.

Topic: An Autobiographical Perspective on Pathology and the AIDS Epidemic

<http://eee.uci.edu/07w/87568>

Class Schedule and Topics Covered (continued)

Tuesday, February 13

Graduate Student Panel

Speaker: Stuart Souki

Ph.D. Candidate, Department of Microbiology and Molecular Genetics, UCI

Speaker: Shelly Peyton

Ph.D. Candidate, Department of Chemical Engineering and Materials Science, UCI

Speaker: Raffy Dakessian

Ph.D. Candidate, Department of Molecular Biology and Biochemistry, UCI

Topics: Career and Research of Ph.D. Candidates in the Sciences

Class Schedule and Topics Covered (continued)

Tuesday, February 20

Speaker: Dr. John H. Weiss (M.D., Ph.D.)

Professor, Departments of Neurology; Anatomy & Neurobiology, UCI

Topics: Autobiography and Research in Neurology

Tuesday, February 27

Speaker: Dr. Michael Green

Professor, Department of Electrical Engineering and Computer Science, UCI

Topics: History of the Gay Rights Movement; Autobiography; Introduction to Electrical Engineering; Biography of Lynn Conway

Tuesday, March 6

Speaker: Dr. Hung Y. Fan

Professor, Department of Molecular Biology and Biochemistry, UCI

Director, Cancer Research Institute, UCI

Topics: Retroviruses that Cause Cancer; A Few Words About Myself

Tuesday, March 13

Speaker: Dr. Kate Hutton

Staff Seismologist, Seismological Laboratory, Caltech

Speaker: Rochelle A. Diamond

Lab Manager, Flow Cytometry/Cell Sorting Facility, Caltech

Topics: Autobiography; National Organization of Gay and Lesbian Scientists and Technical Professionals Inc. (NOGLSTP)

Class Materials and Links

Articles of Interest

Jeffrey Escoffier; Alan Malyon; Stephen Morin; Sharon Raphael "[Homophobia: Effects on Scientists](#)" *Science* **1980**, 209, 340 (July 18, 1980 Issue).

Shirley M. Malcolm "[Who are the Gay Scientists?](#)" *Science* **1981**, 213, 1100-1101 (September 4, 1981 Issue).

Gary Libman "[Scientists Confront Homophobia in Their Ranks](#)" *Los Angeles Times*, Feb 2, 1990. pg. 1.

Barbara Spector "[Gay and Lesbian Scientists Seek Workplace Equality](#)" in *The Scientist* March 2, 1992 issue.

Rochelle A. Diamond "[Gay Scientists Improve Workplace Conditions Through Visibility And More Communication](#)" in *The Scientist* February 6, 1995 issue.

"[Bertozzi: Infectious in Her Enthusiasm](#)" *Chemical and Engineering News* **2000**, 78(5): 26-35. See also: "[Five Years Later: At the end of their MacArthur fellowships, three women chemists are more daring, more visible](#)" *Chemical and Engineering News* **2004**, 82(35): 22-26.

Class Materials and Links (continued)

Richard Tate "[That Earthquake Lady - Seismologist Kate Hutton](#)" *The Advocate* March 13, 2001.

Prachi Patel-Predd "[The Gay Engineer](#)" in *IEEE Spectrum* February 2005 issue.

Jim Austin "[THE CLASS OF 2005: United States: Two Scientists and a Baby](#)" *Science* **2005**, 310, 518-519 (October 21, 2005 Issue).

Wikipedia: [Alan Turing](#).

Lynn Conway's Website: <http://www.lynnconway.com>.

National Organization of Gay and Lesbian Scientists and Technical Professionals Inc.

website: <http://www.noglstp.org/>

UCI Queer Studies Minor

website: http://www.humanities.uci.edu/WomensStudies/undergrad/queer_studies.php

Articles from Science Careers, online (not included in original bibliography)

Closeted Discoverers: Lesbian, Gay, Bisexual, and Transgender Scientists (October 01, 2010)

Jeff Hammonds Photo courtesy Battelle Jeff Hammonds "LGBT scientists should be recognized as excellent employees not as having sexual cultural issues." —Jeff Hammonds Think "Don't Ask, Don't Tell" applies only to the military? This too happens in the sciences, at all levels, from academia and industry to professional societies. Below are some of the ways that lesbian, bisexual, gay, and transgend...

Shattering the Glass Closet (December 05, 2008)

"No person should be harassed or driven from a job because of their sexual orientation or gender identity." Karl Kingsley "When you are not in the mainstream and when you are researching something that might not be in the mainstream, it is so important to have a mentor to show you the ropes." —Karl Kingsley Acceptance in the workplace for "out" gay scientists is not that unusual in today's scient...

It's great if you're straight? (August 6, 2004)

In an ideal world, gender and sexual orientation would be as relevant to academic success as hair colour and shoe size. A general shift in attitudes, as well as legal obligations, has certainly brought equality closer to women in science. But what about lesbian, gay, bisexual, and transgender (LGBT) scientists? It seems that although gay men broadly feel accepted in the academic...

LGBT Scientists Must Chart Their Own Course (July 26, 2002)

Gay, lesbian, bisexual, and transgendered (LGBT) scientists--a sometimes invisible minority within the scientific community--face unique career challenges. A recent panel discussion explored these issues and offered participants excellent advice. A panel of six, representing both junior- and senior-level faculty members and researchers from several Bay Area academic institutions and industry, was...

The Students

- 10 students enrolled
- 3 freshmen, 1 sophomore, 2 juniors, 4 seniors
- 5 male, 5 female
- 5 Asian, 3 white (non-Latino), 1 Latino, 1 African American
- 3 social sciences, 1 chemistry, 1 chemical engineering, 1 biological sciences, 1 anthropology, 1 psychology, 1 international studies, 1 undeclared

The Final Essays

“Is there a unique gay and lesbian perspective on science?” Draw upon the class presentations and discussion, the optional readings, and any additional sources that you wish to better define and answer this question. If you feel that your essay could better address a related topic that draws upon the course content (e.g., the semantics or validity of this question), you may do so.

“...In this hetero-normative society, being a homosexual can come with many burdens, especially in the highly conservative scientific community. The scientists that spoke about their struggles essentially came to similar conclusions; they felt that in the work place they had to work harder and provide more results because they did not want their sexuality to affect the working environments. For the fortunate ones, sexuality may not even be an issue, however most had to conceal their sexuality and indulge in their work. Many of them had to worry about where they were going to study because of the stigmas placed on people of their orientation. The most notable stories were that of the graduate panel, who still experience segregation today and are forced to hide their sexual orientation. Another important speaker was Rochelle Diamond, who pointed out the struggles she faced and how they drove her to work harder to be successful. Their stories accurately proved that queer scientists have the potential to create have a different perspective on science.”

The Final Essays (continued)

“Is there a gay and lesbian perspective on science? In terms of selecting which area of science to specialize, I do not think sexual orientation plays much of a role.... After listening to all of the presenters speak, quite enthusiastically, about their respective fields of study, I got the sense that their sexual orientation did not have much of an impact on their research. When the class began, I thought maybe one specific field of study would be dominated, but after completing the readings and listening to the presenters, that assumption is clearly false.”

“However, the question is relevant when framed in a different context. I do believe there is a unique perspective concerning visibility within the scientific community.... When I envisioned a scientist before taking this class, I imagined an old man, in a white lab coat messing with chemicals through the night. Well, I was wrong again on so many levels.... I learned that science is a group endeavor. It is absolutely impossible to make significant discoveries in science without a strong and competent team. The panel of graduate students made this really clear to me. Listening to them describe their crazy hours and how the majority of that time is spent with their lab associates, a comfortable environment is a very important key to success. Unfortunately, what I gathered from their stories is that their sexual orientation was not blindingly accepted and that their colleagues believed it would have some type of negative effect on their competence.”

“In a field where diversity in our physical environment is understood and accepted, it is disturbing that the diversity of sexual orientation within the field is not objectively accepted.... In a field where collaboration and cooperation is vital, having a key member of a team feel obligated to hide a big part of their identity is ridiculous and counter-productive.”

The Final Essays (continued)

"First day of class, I barely found the hidden room in time. I gladly sank into the plastic chairs, out of breath and trying to gather my scattered thoughts. "Queer Science" was such an interesting class name, I wondered what we would be discussing. The professor stood up and presented to the class the course objective: is there any correlation between being gay and being in the science department? First thought that bolted into my brain was 'Is this guy crazy? Of course there isn't! He's living proof!'"

"...Weeks came and scientists went ahead talking about the hardship of coming out and the genius in their research. More and more I would think, 'Maybe I'm wrong. Maybe science is too cold to even accept gays and lesbians. Maybe it's not even science that's too cold, it's the people and their perceptions.'..."

"...The one lecture that really spun my brain with this correlation business was the one led by Dr. Amy A. Ross. All of the speakers were very interesting and seemed very dedicated to their work and their personal lives, but she had flair and spunk. She mentioned how when she came out, the social perspective on gays and lesbians was very narrow minded and bigoted. Gays and lesbians were looked down on and the hurdles that gays had to jump over were so much greater than now. For gays to enter into a field that is so monotone at that time was a great feat. No wonder I didn't think it was a big deal to be gay in the science department. I grew up being used to the gay and lesbian community."

"...After listening to the gay and lesbian speakers that came out, I went ahead and asked my gay and lesbian friends here at UCI if they ever felt discouraged to be a biological science major and to go ahead and work out their medical dreams.... Surprisingly, one of my gay friends said 'Actually, I was thinking of changing my major because I'm gay.'..."

Conclusions

Although there is now positive and matter-of-fact media coverage of LGBT scientists, young chemists and other scientists continue to face issues about being “out” professionally. These issues appear to be greatest for undergraduates, whose fears seem to exceed typical realities and may even be self-defeating. Visible LGBT role models continue to be needed, particularly in academia, to help guide and mentor LGBT undergraduate and graduate students.