Lessons Learned in Student Recruiting

J MICHELE STUART, JOANN P FENN

Nationally, clinical laboratory science programs are struggling for student applicants. Major challenges facing the laboratory profession include: 1) low salaries, 2) lack of public awareness, and 3) the myriad of career choices for new graduates. Increasing public awareness and actively recruiting students can overcome one of these challenges. This paper focuses on the successful student recruiting lessons learned at the University of Utah Medical Laboratory Science Program. Specific indicators show increased interest and activity for this program of study.

ABBREVIATIONS: CLS = clinical laboratory science; CLT = clinical laboratory technician; CLS/MT = medical technology/clinical laboratory science.

INDEX TERMS: academic advisor; clinical laboratory scientists; Internet; medical technology; NAACLS; recruiting.

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J Michele Stuart MSPH/HSA CLS(NCA) is Instructor, Academic Advisor, and Program Recruiter at the University of Utah, School of Medicine, Department of Pathology and ARUP Laboratories, Salt Lake City UT

JoAnn P Fenn MS is Associate Professor and Director of Education Medical Laboratory Sciences at the University of Utah, School of Medicine, Department of Pathology and ARUP Laboratories, Salt Lake City UT

Address for correspondence: J Michele Stuart MSPH/HSA CLS(NCA), University of Utah, School of Medicine, Department of Pathology and ARUP Laboratories, 50 North Medical Drive, 5R477, Salt Lake City UT 84132. (801) 585-5452, (801) 585-2463 (fax). michele.stuart@path.utah.edu

Nationwide, educators in medical technology/clinical laboratory science (CLS/MT) programs report decreases in applicants for 1997, 1998, and 1999, with many programs unable to fill avail-

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able 'slots'. Three factors contributing to the difficulty of recruiting potential students into the laboratory science profession are: 1) salaries, 2) lack of public awareness of the profession; and 3) the myriad of choices for careers that students now have. ^{2,3,4}

In Laboratory Industry Report, medical technologist/clinical laboratory scientist (CLS/MT) salaries were published based on salary survey data from Salary.com.⁵ The report compares salaries for professionals with two to four years experience: medical technologists – \$29,877; biotechnology chemist – \$41,894; pharmacy clinical research assistant – \$38,070; computer scientist – \$45,000 to \$55,000. Salaries represent a major challenge when attracting science-oriented students into CLS/MT instead of other areas of study.

Low student enrollment, fewer accredited programs, an aging workforce, and skills mobility add to the dilemma of the current national personnel shortage for CLS/MTs. The National Accrediting Agency for Clinical Laboratory Science (NAACLS) reports a significant decrease in graduates of CLS/MT programs - from 5318 graduates in 1983 to 2491 in 1999. 1,6 Skills mobility makes it difficult to retain graduates in the profession. Biotechnology companies, computer firms, pharmaceutical companies, and research centers 'lure away' our well-trained and knowledgeable laboratory employees. 4,7 NAACLS also reports a decrease in accredited CLS/ MT programs—638 in 1983 to 271 in 1999—a closure of 367 programs. During the two-year period of 1997 to 1999, 40 CLS/ MT programs closed. Recent information from NAACLS shows a decrease in 11 programs from 1999 to 2000.8 Considering that the average age of practicing CLS/MTs is 45 years, the current personnel shortage will worsen during the next 10 to 15 years. The U.S. Bureau of Labor Statistics projects that 5,300 new positions for CLS/MTs and clinical laboratory technicians (CLTs) will be created each year through 2008. In addition, another 4,000 positions will be vacated annually because of retiring CLS/MTs. These projections equate to a need for 9300 new CLS/MTs and CLTs each year, while in 1999 a total of approximately 5000 laboratorians graduated into the work force, including CLS/MTs, CLTs, cytotechnologists, histotechnologists, and histotechnicians.

Two years ago, the Medical Laboratory Science Program (MLS), Department of Pathology, University of Utah School of Medicine, created a 0.5 FTE position to oversee student recruitment and academic advising. With low numbers of applicants and difficulty by area laboratory facilities in hiring qualified CLS/MTs, it became clear that this program had to be more successful with recruitment. This article outlines the lessons learned and the successes of the recruitment process.

DESIGNATING A RECRUITER/ACADEMIC ADVISOR

Selecting the appropriate recruiter/academic advisor is critical. He or she will be the liaison between prospective clinical laboratory science (CLS) students and the program. The selected individual should possess strong multitasking abilities and people skills.

Adding a personal touch is imperative when assisting students during their pre-clinical laboratory educational experience. Students find added value in having a specific person to contact for support, advice, and general program information.

IDENTIFYING THE CURRENT PERCEPTIONS OF THE CLS PROGRAM

Defining, developing, and enhancing a recruitment program is an ongoing process. Success begins by developing a solid foundation. To assess how the program is promoted by the academic community, these focus questions should be asked: 1) How does the office of student recruitment and high school services, the critical liaison between prospective undergraduate students and the institution, present the CLS program information to students? 2) Is the program listed in the University's majors and degrees listing? 3) How accurately does the promotional material represent the program? 4) Is the material relevant? 5) Is the Web site address listed correctly? 6) Does the University General Catalog give up-to-date program information; 7) Are current recruiting documents accurate? The authors found several omissions and mistakes as they answered these questions about their program.

UPDATING AND REVISING EXISTING RECRUITMENT DOCUMENTS

One must update the available University information to accurately reflect current program status, and activities. For example, the updated CLS/MT program information should be shared with the office of student recruitment and high school services. Most universities and colleges have similar services that distribute valuable recruitment information not only to students but to parents and school administrators, as well.

If a program does not have a mission statement, it is time to develop one. A mission statement is critical to an organization or program and justifies its existence. When was the last time the mission statement was revised? Is it outdated? Does it reflect the organization's values, beliefs, and philosophy? Does the mission statement reflect the program's purpose? Since developing a mission statement for the University of Utah Medical Laboratory Science program, it has been used in a number of important documents and has been shared with other departments, faculty, laboratory managers, clinical site teaching specialists, and students. It is also displayed in the program's conference room.

RECRUITMENT STRATEGIES

Once the basic information materials have been refined, it is time to begin the recruitment strategies. A variety of approaches should be utilized to promote the educational program, rather than relying on only one marketing/recruiting technique. The following are recruitment strategies to consider:

Internet

A well designed Web site is a valuable recruitment tool. The Internet site conveys messages to large numbers of prospective students quickly and very inexpensively. The Internet puts information in the students' hands instantaneously. Think of the Internet as the program's business card. One can pass out thousands of business cards inexpensively 24 hours a day.

The Internet presence should be open, honest, and direct. The Web page must convey a clear introduction of the program and essential information the searcher can access. Some 'tips' and approaches the authors find useful are:

- Make the site user-friendly and attractive.
- Provide for mobility between Web pages.
- Link to the home page at the bottom of each page.
- Update the site frequently, maintain it for accuracy, and make it easy to access information.
- Register with powerful search engines, .e.g., AltaVista, Yahoo, and SearchEd.
- Create a short Web address making the site easily accessible. Allow simple navigation of the site.
- Use hyperlinks to connect to additional academic departments, e.g., biology, pre-medicine, chemistry, other colleges, clinical laboratory sites, and professional organizations, e.g., American Society for Clinical Laboratory Science, American Society of Clinical Pathologists, and American Society of Microbiology.
- Provide an e-mail address on each page, making it effortless for the searcher to request information or ask questions.

After the Web site has established a history, one can gather statistics to determine the number of user sessions, length of user sessions, and dates of high usage (Table 1). This information can be correlated with recruiting plans. For example, an open house or information meeting can be planned around high user dates when students are thinking about the program. At the University of Utah we combine 'high tech with high touch' by holding open house events during mid-March and mid-November which relates to our high student user dates.

Personal student contact

Building personal relationships with prospective students and projecting a welcoming and friendly atmosphere are critical for recruitment. As a recruiter/advisor one should be available for students' questions. We recommend at least one hour per student as adequate advising time. Immediate follow up (within one week) with letters, phone calls, and e-mail should be provided. Staying in touch with students, and selling the program on a 'one on one level' is vital. Students value attention and promptness, and they want to know that the advisor cares about them and their academic progress.

Table 1. University of Utah MLS Web site statistics

Timeframe	10/11/99 to 12/30/99	12/30/99 to 03/25/00	03/25/99 to 06/30/00	07/01/00 to 09/30/00	10/01/00 to 12/31/00	01/01/01 to 03/31/01
Average hits/week	2058	2667	1666	1400	1932	2149
Average user sessions/week	448	616	546	462	504	518
Average user session length	4:15	4:37	5:37	5:22	7:23	5:35

To allow for ease of student follow-up we developed a Recruitment Contact Form (Figure 1). By using the Recruitment Contact Form prospective student databases can be created. With a good database more students receive general information and invitations to attend program activities.

Our experience indicates that prospective students seek and appreciate advice on career-related issues. Individual comments reaffirm the importance of personal student contact. Four examples follow:

"Thank you so much for meeting with Andy and your very nice follow-up letter. Andy was feeling a little lost and overwhelmed with college, but your gracious response and interest in him have really given him new focus and enthusiasm to go on and become a success in CLS!" (Parent of prospective CLS student)

"Thank you for the follow-up letter. Your efforts continue to inspire me to pursue this degree." (Prospective CLS student)

"Thank you so much for the nice and encouraging letter and thanks so much for your help and care." (Prospective CLS student)

"Thank you so much. You got back to me so quickly. I appreciate the information." (Prospective CLS student)

Personal professional contact

While the Internet and published materials may initiate interest, personal contact with prospective students and organizations is still one of most productive ways to enhance program awareness. There are a number of ways to make and develop personal contacts.

Developing and maintaining relationships with high school counselors can be as simple as giving lectures or demonstrations at biology or career search courses, attending career fairs, becoming involved in science organizations, e.g., Health Occupations Students of America, arranging for student clinical laboratory visits, and sponsoring weekend workshops for junior and senior high school teachers.

Several recruitment opportunities are usually available on the college/university campus. We have had success by sponsoring open house information sessions in the biology department. This de-

Figure 1. University of Utah - MLS Recruitment Contact Form

School of Medicine Department of Pathology University of Utah

MLS Recruitment Contact Form

Name:		
Address:		Apt. No
City:	State:	Zip:
Telephone Number:	:	
E-mail:		
Grade: Present S	chool/Colleg	ge:
MTCytology	/ Mas	ter's Degree
How Did You Hear		· ·
Date and Follow-up		

partment is a 'gold mine' for potential students. Faculty can speak at undergraduate clubs, e.g., a science club, or pre-medicine society, attend freshmen orientation activities, and serve on college/university committees. The focus is to identify and recruit science

minded students who are not passionately pursuing another major and to let other academic departments know the program exists. The recruiter should regularly meet with college counselors and advisors, and keep them updated on program curriculum and informed about employment opportunities.

Program accessibility

In this age of instant information and communication it is even more important to be accessible. The easier it is for someone to find out about a program the more contacts one will have. To accomplish this important goal of being accessible, it is crucial to use a variety of recruitment approaches. Pre-professional courses can be expanded to overlap other science majors' requirements, e.g., pre-medical, pharmacy. The program should allow for ease of the application and admission process, offer a flexible admission date, and correlate admission dates with other disciplines. There should be a smooth transition from community or junior colleges through course articulation. Also, when meeting with potential transfer students a prepared articulation course guide for that college is useful.

Public awareness

More exposure brings more contacts. Most programs utilize one or more of the following strategies:

- Advertise in the local city newspapers' career section.
- Submit articles to local newspapers focusing on careers and the current CLS/MT shortage.
- Advertise your program in high school newspapers.
- Participate in school health fairs at all academic levels.
- · Speak at local civic organizations.
- Celebrate National Medical Laboratory Week activities.
- Provide information about your CLS/MT program using posters, flyers, brochures, videotapes, and computer presentations.
- Invite former students to promote the program at recruiting activities.
- Consider reminder items such as pens, bookmarks, calendars, brochures, or key chains.
- Include Web address on program envelopes and letterheads.

Employers

There are many benefits when program faculty maintain working relationships with potential employers, and participate in joint recruiting events. By staying current on employment opportunities to present to prospective and current students, the program becomes a valuable resource. More directly, students are informed about employer tuition reimbursement benefits and employment opportunities during and following CLS/MT education.

Students from other disciplines

Students often do not know their exact career track, which is why the successful recruiter will maintain a presence through other programs. To help students make that important career choice, the recruiter can talk with other closely related college programs, e.g., pharmacy, nursing, and biology, to obtain student application lists. Then every student on the list is invited to explore the world of CLS that may seem more attractive to them.

Word-of-mouth

Word-of-mouth is the least expensive way to advertise. Clinical laboratory professionals, students, and other college program advisors can successfully 'spread the word' about the CLS/MT program. Our experience indicates that personal student contacts are the most successful form of recruiting and 'sparking an interest' in prospective students.

MEASURABLE EFFECTS

Our creative recruiting methods resulted in a diverse group of 2001 applicants. The entering 2001 CLS class welcomed two students from pharmacy, one transfer student from a local four-year college, and four transfer students from three Utah community/junior colleges. Student applications increased from 15 in the year 2000 to 26 in 2001. We have not had more than 20 applicants since 1996.

Current Web statistics have increased to over 500 user sessions/ week, with an average user session time of 5 minutes 35 seconds (Table 1). The number of students seeking personal advising increased from 15 in 1999 to 79 students in the year 2000 (Figure 2).

Figure 2. Summary of student contact and declared Pre-MLS majors

60

40

40

20

10

Timeframe

Declared Pre-MLS Students

Individual Student Sessions

("One-on-One" Advising of Students)

Over a five-month period the number of students who were declared 'Pre-MLS Majors' increased from 15 in April 1999 to 40 students in September 1999 (Figure 2). The number of students requesting program applications for the 2001-2002 school year was 44, an increase of 29 over the 2000–2001 year applications.

CONCLUSIONS

For a program to succeed, students need to know it exists. CLS programs have to work harder at marketing than most health profession programs. A recruiting program should formulate strategies to wisely combine a variety of recruiting tools and marketing approaches. Each recruiting tool contributes to the success of the others. It is important to maintain accurate, up-to-date lists of interested students and to advertise current program activities. Professional contacts, word-ofmouth, and Internet recruiting activities may not work on their own, but together they will make a difference.9

It is our experience that personal student contact has the greatest impact on successful recruiting. As program stakeholders, all faculty members are encouraged to develop and improve recruiting strategies. These strategies are working and generating renewed interest in our CLS program.

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NIAID Unveils Bioterrorism Research Agenda

The National Institute of Allergy and Infectious Diseases (NIAID) recently released the NIAID Counter-Bioterrorism Research Agenda for CDC Category A Agents, a document describing the Institute's accelerated research plan for the most threatening agents of bioterrorism. The agenda outlines the research NIAID will undertake to help protect civilian populations from diseases such as smallpox, anthrax, and plague should they be unleashed intentionally by those who wish to do harm. The comprehensive plan includes short-, intermediate- and long-term research goals and describes specifically how bioterrorism countermeasures will be developed for each microbe. The document also contains a copy of the Strategic Plan for Counter-Bioterrorism Research of the NIAID, which provides a general overview of the Institute's broad plans for attacking the full range of potential bioterrorism pathogens.

The NIAID Counter-Bioterrorism Research Agenda for CDC Category A Agents is available online at http:// www.niaid.nih.gov/dmid/pdf/biotresearchagenda.pdf. Researchers can find information on bioterrorism-related research funding opportunities at http://www.niaid.nih.gov/dmid/bioterrorism.

NIAID is a component of the National Institutes of Health (NIH). NIAID supports basic and applied research to prevent, diagnose, and treat infectious and immune-mediated illnesses, including HIV/AIDS and other sexually transmitted diseases, illness from potential agents of bioterrorism, tuberculosis, malaria, autoimmune disorders, asthma, and allergies.

Press releases, fact sheets, and other NIAID-related materials are available on the NIAID Web site at http://www.niaid.nih.gov.