

Report of October 1996 Survey of Biopharmaceutical Section Members

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Abstract

A 41-item survey of the 1770 members of the Biopharmaceutical Section was conducted to collect information on demography, education, employment, continuing education activities, and services provided by the Biopharmaceutical Section. The survey was returned by 1139 members (64%).

The results showed that most members are male (69%); White (75%) or Asian (22%); are employed by a pharmaceutical company (52%), by academia (18%), or by a CRO (13%); and have a doctorate (49%) or a masters (40%) in statistics. Most (57%) earn \$46-90 thousand/year, but 29% earn over \$90 thousand/year. Most are satisfied with their job, but pressure to produce is a common problem.

Introduction

Other than their names and addresses, very little was known about members of the Biopharmaceutical Section before this survey was taken. Location of members, membership in other ASA sections and ASA subscriptions were obtained when the mailing list was received for this survey and, therefore, were not included as questions. In order to better serve the membership, this survey was conducted to collect information about demographics, continuing education activities, and employment activities.

The survey took a year to plan, and there were numerous revisions to the questionnaire. Some questions that didn't make the final survey were about tobacco-use and alcohol-use. We often collect tobacco- and alcohol-use information in clinical trials but often don't do much with the data. However, these questions were quickly nixed by those who reviewed the survey, so we didn't have to worry about that. I also proposed some silly questions to make the survey a little more fun (e.g., Are you politically correct all the time, some of the time, none of the time, or what do you mean by politically correct?), but again these were nixed. I was urged to concentrate on the information that we wanted. Salary was an important item, and I originally proposed to collect it to the nearest thousand dollars; but to ensure a better response, a categorization of salary ranges was suggested. Arriving at a categorization for salary was difficult because there was little knowledge about the salary distribution, especially at the upper incomes. The question about primary writing hand was prompted by my observation that many statisticians in my work groups were left-handed. Since I was the author of the survey, I included the question.

When the survey was being planned, I naively estimated that we would get 1200 responses. Some people experienced in conducting surveys thought that we would do well if we got a 20% response. I had faith that our membership wanted to know the information gathered by this survey and am grateful for all the members who took the time to complete the survey questionnaire and return it. The T-shirt probably helped increase the response rate, but 260 members who sent back the questionnaire didn't send back the postcard for the free T-shirt. Our members are smart enough to know that they could have sent back the postcard without completing the questionnaire and no one would be the wiser. Including postage for US members helped increase the response rate, but we still got a good response rate from our foreign members who had to supply the postage to return the survey and the postcard. We would have included postage for foreign members but didn't know how this could be done. Near the due date, reminder postcards were sent to US members who hadn't returned a postcard to encourage a response, but this didn't appear to be effective. The cost for the preparation and mailing of the survey was \$4,620 and the cost of the T-shirts and mailing them was \$8,146 for a total cost of \$12,766. The free T-shirts may not have been necessary, but we were trying to reduce the surplus in the Section's treasury. We were also looking for something to give to members that would provide identification with the Section and believe that the T-shirt met that goal. The distribution of T-shirt sizes (876) was fairly symmetric (S -2%, M-10%, L-39%, XL-40%, XXL-9%).

A commercially-prepared machine-readable questionnaire was considered but that would have been about twice as expensive and would have taken more preparation time. The survey was printed on one-sided paper because there was the possibility of scanning in the forms and 2-sided paper would have made that process more difficult. However, the data were entered into a database and were stored as a SAS dataset. It was good that this survey was not considered as a pivotal confirmatory survey according to the new ICH guidelines because the analyses were not preplanned. Descriptive statistics were used to summarize the results; however, formal statistical analysis can be performed if desired. Since our members are experienced in evaluating data and because of the volume of the data, no graphics were used to summarize the results.

Method

A 41-item questionnaire was sent to 1770 Biopharmaceutical Section members (as of 26 Aug 1996) between 7-9 Oct 1996 (20 surveys were returned as undeliverable). The questionnaire was returned anonymously. To encourage response, a return postcard to get a free Biopharmaceutical Section T-shirt was included and was returned to a different address to maintain confidentiality. Questionnaires were to be returned by 31 Oct 1996. Reminder postcards were sent

to U.S. members who hadn't returned a postcard in mid Nov 1996 extending the due date to end of Nov 1996. Final cutoff was mid Jan 1997.

Results

The survey was a success in that 64% of the Biopharmaceutical Section members returned the survey. Most respondents completed all the items. One item that had a lot of non responses was sex/gender, with 111 missing responses. The results for each question are provided in the Appendix.

Demographic Characteristics

The Biopharmaceutical Section membership is primarily located in the US (91%). Most members are male (69%). The vast majority of members are between 26 and 54 years old (87%). Most members are white (75%) or Asian (22%). Only a small percentage were Black, Hispanic or Other ethnic group. The percentage of Asians is highest in members between 26-34 years old (32%) and decreases steadily in the older age groups (10% in 65+ age group) (Table 1). Similarly, the percentage of females was highest in the 26-34 year old group (41%) and decreased steadily until there were no females in the 65+ age group (Table 2). These results are similar to those presented in a National Science Foundation presentation entitled "NSF Study - Technical Careers" by Linda Parker and Lawrence Burton (2 July 1997 at Abbott Laboratories). The speaker also mentioned that few Blacks and Hispanics are employed in technical fields, so our section is not unusual in that respect. The data do not necessarily imply that more women are becoming Biopharmaceutical Section members because this was not a longitudinal study. Only 9% of members were left handed which is not much different from the national average. The percentage of left-handers was 12% in Whites and only 0.9% in Asians. The large number of Asians in our membership brought down the overall percentage of left-handers as few Asians are left-handed. Most members considered clinical (79%) to be their primary pharmaceutical interest with pre-clinical a very distant second (6%). Most members have either a doctorate (49%) or masters (40%) in statistics. Not many members have a higher degree in a non-statistical field than their statistics degree (Table 3).

ASA and Section Membership

About one-third (36%) of our members have belonged to the ASA for 5 years or less. Almost one-half (43%) of the members have belonged to the ASA for 11 or more years. Most (65%) of our members have belonged to our section for 5 years or less, so it appears many members joined the ASA a few years before joining the Biopharmaceutical Section.

Forty-five percent (45%) pay the ASA dues with their own money. An identical percentage of members pay Section membership dues with their own money. With almost one-half of our members paying ASA and section dues with their own money, we should consider what impact changes in dues and fees will have on our membership. Interestingly, most members in academia (73%) and virtually all members in government (98%) and the self-employed (94%) paid the dues with their own money, while in the pharmaceutical industry only 20% of members paid the dues with their own money (Table 4). Within the pharmaceutical industry, the percentage of members who had to pay ASA dues with their own money was smaller in the larger pharmaceutical companies than in the smaller companies (Table 5).

A high percentage of members employed by a pharmaceutical company or a contract research organization (CRO) considered the Biopharmaceutical Section as their primary ASA section (Table 6). However, less than 50% of members employed by academia, government, HMO (health maintenance organization)/formulary/insurance company or Other employer considered the Biopharmaceutical Section as their primary ASA section. Seventy-two percent (72%) of our members also belong to a local ASA chapter which suggests that our members are involved with professional activities. Our members frequently belong to other professional associations, e.g., the Biometrics Society (43%), DIA (30%), and the Society for Controlled Clinical Trials (20%). Membership in the ASQC was highest in Other (25%) and Self-employed (13%) (Table 8). Membership in the Biometrics Society was highest in Government (65%) and Academia (61%). Membership in the Society for Controlled Clinical Trials was similar across the employer types. As might be expected, membership in the DIA was highest in CRO (42%) and Pharmaceutical Industry (41%) members. Membership in the IMS was highest in Academia (29%) and Government (20%) members. Very few members belong to the ISCB, but that is not surprising since it is primarily an European organization.

Our members were generally well satisfied with our section. Blacks seemed more satisfied and Other ethnic group members seemed less satisfied than most members (Table 9), but the numbers are small. Satisfaction with the Biopharmaceutical Section appeared to increase with increasing age (Table 10) and with increasing years in the section (Table 11). The high number of members who had been in the section less than one year and were neither satisfied nor dissatisfied with the section may indicate that these members hadn't received a Biopharmaceutical Report or any other communication from our section and therefore didn't have enough information on which to make an opinion. Satisfaction with the Biopharmaceutical Section was also a little higher in members who considered the section as their primary section (Table 12).

Employment Characteristics

Six percent (6%) of our members indicated that they were unemployed; however, 69% of the unemployed were students. Over one-half of our members are employed in the pharmaceutical industry, 18% are employed in academia, and 13% are employed by a CRO. It was interesting to have information about the number of statisticians employed by a CRO because of the growth of CROs in the last few years. Thirty percent (30%) of the members had been employed in the pharmaceutical field between 1 and 5 years. Many of the members are employed in work groups with either no other statisticians (14%) or 1 to 5 other statisticians in their work unit (33%). This information is important because information from large pharmaceutical companies may not be representative of our membership. Somewhat surprisingly, 39% of our members considered themselves as formal supervisors. This percentage was lower in HMO/Formulary/Insurance Co. (18%) and Self-employed (27%) members (Table 13). The percentage of supervisors was higher in males (43%) than in females (29%) (Table 14). The percentage of supervisors was lower in non-Whites than in Whites (Table 15). Regardless of employer, over 20% of members reported that they worked over 50 hours/week (Table 16). Supervisors tended to work more than non-supervisors (Table 17).

Our membership appears to be satisfied with their jobs. The percentage of members who were very satisfied with their jobs tended to increase with longer total work hours (Table 18). The percentage of members who were dissatisfied with their job also increased with longer total work hours. Members in academia and the self-employed were the most satisfied (Table 19). Job satisfaction was reasonably consistent regardless of pharmaceutical interest (Table 20). Males were more satisfied with their jobs than were females (Table 21). Supervisors were more satisfied with their jobs than non-supervisors (Table 22).

Rating of problems by type of employer are presented in Tables 23-36. Generally, Pressure to Produce, Overwork, Poor Data Quality, and Non-statistical Tasks were common problems (>20%) while Lack of Respect, Job Security, Unethical Conduct, Racial/Ethnic Bias, and Sex/Gender Bias were infrequent problems (<10%). The other problem areas were rated as Common 10-20% of the time. The percentage of members who rated Lack of Respect as a Common problem was the lowest for the Self-employed. Low Pay was more of a problem in Academia and in HMO/Formulary/Insurance Co. Job Security was more of a problem in the Academia and Self-employed. Overwork and Pressure to Produce was somewhat less of a problem in Government, Self-employed and Other. Educational Advancement was less of a problem in Government, HMO/Formulary/Insurance Co., and the Self-employed. Advancement Opportunities was more of a problem in Government and less of a problem in the Self-employed. The problem of Advancement Opportunities and Educational Advancement was more common for those with a masters degree (Tables 37 and 38, respectively) than for other degrees.

Overall, perception of bias that members personally experienced was relatively low. However, when problems with racial bias were summarized by ethnic group (Table 39), 13% of Blacks and 9% of Asians and Hispanics rated racial bias as a common problem. Only 5% of females rated sex/gender bias as a common problem (Table 40).

The salaries (including usual bonuses) of members with a Master or Doctorate degree were highest in the Self-employed and Pharmaceutical Industry (Tables 42.1 and 42.2). Salaries for members with <1 year in the Biopharmaceutical field were commonly \$30-45 thousand/year for those with a Master degree and \$61-75 thousand/year for those with a Doctorate. Salaries increased with experience in the Biopharmaceutical field (Tables 43.1 and 43.2). For those with a Doctorate, 20% of those with 11-25 years of experience and 35% of those with >25 years of experience earned over \$135 thousand/year. Salaries were higher for males than for females (Tables 44.1 and 44.2). Salaries were higher for Whites than for Asians (Tables 45.1 and 45.2). The differences in salaries for sex/gender and ethnic groups are probably reflected by the differences in the years of experience between the sex/gender and ethnic groups.

Continuing Education Activities

Members rated their Peers as the most important way that they learn/update their statistical skills, with over one-half of the members rating Peers as Very Important (Table 49). Reading books was rated as Very or Somewhat Important by over 80% of members (Table 50). Statistical meetings, short courses, journals, and software were somewhat less important in how members update their statistical skills (Tables 46, 47, 51, and 52). Statistics meetings and journals were more important to those with a doctorate in learning/updating their statistical skills, while short courses were more important to those with a masters in learning/updating their statistical skills. University courses for credit were Very Important to those with a bachelor degree but much less so for those with a master or doctorate degree (Table 48). Statistical meetings and reading journals were more important for those in academia in learning/updating their statistical skills (Tables 53 and 58). Short courses were less important for those in government and the self-employed in learning/updating their statistical skills (Table 54). University courses were rated as less important for those in government and the self-employed (Table 55). Peers were rated less important for those in government, HMO/formulary/insurance co., and the self-employed in learning/updating their statistical skills (Table 56). Reading statistics books was important to those in academia and the self-employed in learning/updating their statistical skills (Table 57). Software was less important for those in government than for others (Table 59).

The number of statistical books bought by members in the last 5 years for their personal use increased with higher educational degree (Table 60). The number of statistical books bought was highest by those in academia and lowest in CROs and pharmaceutical industry (Table 61).

About one-third of members haven't attended an ASA annual meeting in the last five years. Attendance at the ASA annual meetings was higher with a more advanced degree (Table 62.1) About two-thirds of those who attended the ASA annual meetings rated them as good to excellent (Table 62.2). Those in government tended to attend more ASA annual meetings than those employed by other types of employers (Table 63.1) and also tended to rate the meetings more favorably (Table 63.2).

Computer Use

Most members use a networked PC or workstation at work and most use a computer at home. Over 80% of members use E-mail and over 60% use web browsers. Only 16% indicated that they did not use the Internet. Internet use was highest in government and academia and lowest in CROs and the self-employed (Table 64). Internet use did not differ with respect to supervisor status (Table 65).

Conclusions

With a 64% response rate, the survey was successful in obtaining information about the membership of the Biopharmaceutical Section. Members are generally satisfied with their jobs but work hard. Most members have been members for <5 years. Workshops and sessions are important services provided by the section. Members update statistical skills by consulting with peers and taking short courses.

Additional Results

This survey presented a wealth of information about our membership. If there are additional summaries that you would like to see, please contact me (847-937-3708, philip.pichotta@abbott.com) and I will try to provide additional results. These may be presented in the Section's electronic newsgroup. It would be nice to have the entire database available to our members, but this would raise some confidentiality issues even though the survey was anonymous.

Acknowledgment

The Biopharmaceutical Section wishes to thank MedFocus, DesPlaines, IL for data entry. Thanks to members who completed and returned the survey.

Table 1: Percentage of Ethnic Groups by Age Group (Entries are % of Row Total)

Age Group (N)	White	Black	Asian	Hispanic	Other
≤25yr (40)	85	0	5	2	8
26-34yrs (317)	65	1	32	2	1
35-44yrs (394)	71	3	24	1	<1
45-54yrs (277)	85	1	13	1	<1
55-64yrs (80)	83	0	14	1	2
65+yrs (20)	90	0	10	0	0

Table 2: Percentage of Sex by Age Group (Entries are % of Row Total)

Age Group (N)	Female	Male
≤25yr (37)	32	68
26-34yrs (298)	41	59
35-44yrs (366)	33	67
45-54yrs (241)	24	76
55-64yrs (69)	13	87
65+yrs (17)	0	100

Table 3: Highest Statistics Degree Vs Highest Non-Statistics Degree

Highest Statistical Degree	None	Bachelor	Masters	Doctorate/ MD/JD	Other
None	1	15	23	52	0
Bachelor	18	13	1	3	1
Masters	98	239	78	30	4
Doctorate	105	257	157	20	2

Table 4: Percentage of Members Who Pay ASA Dues with Own Money by Type of Employer

Employer (N)	Percent
Academia (191)	73%
CRO (134)	40%
Government (40)	98%
HMO/Formulary/Insurance Co. (12)	83%
Pharmaceutical Industry (542)	20%
Self-employed (53)	94%
Other (81)	46%

Table 5: Percentage of Members Who Pay ASA Dues with Own Money for Members Employed in Pharmaceutical Industry by Number of Statisticians Employed in Work Group

Number of Statisticians (N)	Percent
≤11 Statisticians (277)	25%
>11 Statisticians (264)	14%

Table 6: Primary Biopharmaceutical Section Membership by Pharmaceutical Interest

Pharmaceutical Interest (N)	% Primary
Animal Health (22)	77
Clinical (876)	78
Devices (32)	66
Diagnostics (19)	47
Information Management (40)	73
Manufacturing/Stability (11)	45
Pre-Clinical (72)	67
Other (34)	38

Table 7: Primary Biopharmaceutical Section Membership by Type of Employer

Employer (N)	% Primary
Academia (190)	46
CRO (135)	88
Government (38)	45
HMO/Formulary/Insurance Co. (12)	42
Pharmaceutical Industry (540)	90
Self-employed (53)	74
Other (80)	46

Table 8: Membership in Other Professional Societies by Type of Employer (Entries are % of Employer Total)

Employer (N)	ASQC	Biometrics Society	Controlled Clinical Society	DIA	IMS	ISCB
Academia (193)	5	61	21	10	29	6
CRO (137)	3	37	23	42	5	4
Government (40)	8	65	25	13	20	3
HMO/Formulary/Insurance Co. (12)	0	33	25	8	0	0
Pharmaceutical Industry (549)	5	42	19	41	6	5
Self-employed (53)	13	40	19	38	17	2
Other (81)	25	27	26	9	11	1

Table 9: Satisfaction with Biopharmaceutical Section by Ethnic Group
(Entries are % of Row Total)

Ethnic Group (N)	Very Satisfied	Satisfied	Neither Satisfied Nor Dissatisfied	Dissatisfied	Very Much Dissatisfied
White (823)	14	52	33	1	0
Black (17)	35	59	6	0	0
Asian (233)	10	52	34	1	2
Hispanic (13)	15	46	38	0	0
Other (10)	0	30	70	0	0

Table 10: Satisfaction with Biopharmaceutical Section by Age Group
(Entries are % of Row Total)

Age Group (N)	Very Satisfied	Satisfied	Neither Satisfied Nor Dissatisfied	Dissatisfied	Very Much Dissatisfied
≤25 years (38)	8	53	39	0	0
26-34 years (310)	9	50	40	1	0
35-44 years (388)	14	50	34	1	1
45-54 years (271)	17	54	28	<1	0
55-64 years (78)	13	56	29	1	0
65+ years (20)	20	65	15	0	0

Table 11: Satisfaction with Biopharmaceutical Section by Years in Biopharmaceutical Section (Entries are % of Row Total)

Years in Biopharmaceutical Section (N)	Very Satisfied	Satisfied	Neither Satisfied Nor Dissatisfied	Dissatisfied	Very Much Dissatisfied
<1 year (157)	7	45	48	0	0
1-5 years (539)	14	49	35	1	1
6-10 years (190)	13	58	27	2	1
>10 years (200)	17	58	25	0	0

Table 12: Satisfaction with Biopharmaceutical Section by Primary Biopharmaceutical Section Membership (Entries are % of Row Total)

Primary Biopharmaceutical Section Membership (N)	Very Satisfied	Satisfied	Neither Satisfied Nor Dissatisfied	Dissatisfied	Very Much Dissatisfied
Yes (809)	14	55	30	1	<1
No (280)	10	44	44	1	1

Table 13: Supervisor Status by Type of Employer

Employer (N)	% Supervisor
Academia (172)	44
CRO (135)	40
Government (36)	44
HMO/Formulary/Insurance Co. (11)	18
Pharmaceutical Industry (516)	38
Self-employed (49)	27
Other (75)	39

Table 14: Supervisor Status by Sex/Gender

Sex/Gender (N)	% Supervisor
Female (284)	29
Male ((622)	43

Table 15: Supervisor Status by Ethnic Group

Sex/Gender (N)	% Supervisor
White (750)	43
Black (13)	23
Asian (205)	27
Hispanic (12)	33
Other (7)	14

Table 16: Total Hours Worked (hours/week) by Type of Employer (Entries are % of Row Total)

Employer (N)	≤35	36-40	41-45	46-50	51-60	>60
Academia (187)	13	9	10	24	30	16
CRO (136)	9	13	26	21	14	17
Government (40)	0	18	20	25	27	10
HMO/Formulary/Insurance Co. (11)	18	27	0	27	18	9
Pharmaceutical Industry (544)	1	18	30	25	15	10
Self-employed (48)	31	13	15	19	15	8
Other (78)	10	14	24	29	14	8

Table 17: Total Hours Worked (hours/week) by Supervisor Status (Entries are % of Row Total)

Supervisor Status (N)	≤35	36-40	41-45	46-50	51-60	>60
Yes (383)	2	8	17	28	27	18
No (601)	10	21	29	21	11	8

Table 18: Job Satisfaction by Total Hours Worked (hours/week)
(Entries are % of Row Total)

Total Hours Worked (N)	Very Satisfied	Satisfied	Neither Satisfied Nor Dissatisfied	Dissatisfied	Very Much Dissatisfied
≤35 hours/week (69)	26	51		20	3
36-40 hours/week (161)	24	53		16	7
41-45 hours/week (248)	20	56		15	6
46-50 hours/week (255)	26	51		17	5
51-60 hours/week (188)	37	42		14	6
>60 hours/week (120)	35	40		15	8

Table 19: Job Satisfaction by Type of Employer (Entries are % of Row Total)

Employer (N)	Very Satisfied	Satisfied	Neither	Dissatisfied	Very Much Dissatisfied
Academia (193)	38	42	12	7	1
CRO (135)	21	50	19	9	2
Government (39)	28	59	10	0	3
HMO/Formulary/Insurance Co. (11)	18	27	18	36	0
Pharmaceutical Industry (544)	24	53	18	5	1
Self-employed (52)	46	42	10	2	0
Other (80)	31	49	10	9	1

Table 20: Job Satisfaction by Pharmaceutical Interest (Entries are % of Row Total)

Pharmaceutical Interest (N)	Very Satisfied	Satisfied	Neither	Dissatisfied	Very Much Dissatisfied
Animal Health (20)	25	50	15	10	0
Clinical (834)	28	49	16	6	1
Devices (32)	19	53	22	6	0
Diagnostics (16)	12	75	12	0	0
Information Management (37)	16	57	16	11	0
Manufacturing/ Stability (10)	50	50	0	0	0
Pre-Clinical (65)	31	51	12	5	2
Other (25)	36	32	16	16	0

Table 21: Job Satisfaction by Sex/Gender (Entries are % of Row Total)

Sex/Gender (N)	Very Satisfied	Satisfied	Neither	Dissatisfied	Very Much Dissatisfied
Female (297)	23	49	19	8	1
Male (655)	30	49	15	6	1

Table 22: Job Satisfaction by Supervisor Status (Entries are % of Row Total)

Supervisor (N)	Very Satisfied	Satisfied	Neither	Dissatisfied	Very Much Dissatisfied
Yes (386)	39	47	10	4	1
No (606)	21	51	20	8	1

Table 23: Problem of Lack of Power by Type of Employer (Entries are % of Row Total)

Employer (N)	No Problem	Rarely	Sometimes	Common
Academia (187)	21	26	41	12
CRO (133)	17	30	39	14
Government (39)	5	28	51	15
HMO/Formulary/Insurance Co. (12)	25	25	42	8
Pharmaceutical Industry (537)	9	32	46	13
Self-employed (46)	24	22	43	11
Other (75)	17	31	39	13

Table 24: Problem of Lack of Respect by Type of Employer (Entries are % of Row Total)

Employer (N)	No Problem	Rarely	Sometimes	Common
Academia (187)	36	30	27	6
CRO (134)	31	41	22	7
Government (39)	21	46	31	3
HMO/Formulary/Insurance Co. (12)	25	25	50	0
Pharmaceutical Industry (544)	23	35	34	8
Self-employed (48)	46	38	12	4
Other (75)	33	32	23	12

Table 25: Problem of Computer Support by Type of Employer (Entries are % of Row Total)

Employer (N)	No Problem	Rarely	Sometimes	Common
Academia (187)	36	21	28	14
CRO (135)	33	31	31	4
Government (39)	18	31	36	15
HMO/Formulary/Insurance Co. (12)	58	17	25	0
Pharmaceutical Industry (544)	24	32	33	10
Self-employed (47)	34	32	23	11
Other (75)	39	35	19	8

Table 26: Problem of Low Pay by Type of Employer (Entries are % of Row Total)

Employer (N)	No Problem	Rarely	Sometimes	Common
Academia (188)	24	21	26	28
CRO (135)	31	32	31	6
Government (39)	26	38	31	5
HMO/Formulary/Insurance Co. (12)	25	17	42	17
Pharmaceutical Industry (540)	35	30	26	9
Self-employed (47)	49	23	26	2
Other (76)	46	26	17	11

Table 27: Problem of Job Security by Type of Employer (Entries are % of Row Total)

Employer (N)	No Problem	Rarely	Sometimes	Common
Academia (187)	49	21	19	11
CRO (135)	35	32	26	7
Government (39)	44	41	15	0
HMO/Formulary/Insurance Co. (11)	36	27	36	0
Pharmaceutical Industry (541)	35	38	22	5
Self-employed (47)	47	17	21	15
Other (76)	42	28	24	7

Table 28: Problem of Overwork by Type of Employer (Entries are % of Row Total)

Employer (N)	No Problem	Rarely	Sometimes	Common
Academia (187)	11	12	37	40
CRO (135)	9	12	37	42
Government (39)	5	21	49	26
HMO/Formulary/Insurance Co. (12)	25	8	25	42
Pharmaceutical Industry (542)	5	17	38	40
Self-employed (48)	12	12	46	29
Other (76)	14	22	36	28

Table 29: Problem of Pressure to Produce by Type of Employer (Entries are % of Row Total)

Employer (N)	No Problem	Rarely	Sometimes	Common
Academia (186)	12	14	37	37
CRO (135)	8	13	33	46
Government (39)	8	23	54	15
HMO/Formulary/Insurance Co. (12)	25	0	33	42
Pharmaceutical Industry (543)	4	17	39	40
Self-employed (47)	9	17	45	30
Other (76)	11	26	36	28

Table 30: Problem of Poor Data Quality by Type of Employer (Entries are % of Row Total)

Employer (N)	No Problem	Rarely	Sometimes	Common
Academia (185)	12	21	39	27
CRO (136)	4	18	50	27
Government (39)	3	18	56	23
HMO/Formulary/Insurance Co. (12)	8	25	33	33
Pharmaceutical Industry (542)	6	30	43	21
Self-employed (48)	4	13	52	31
Other (75)	4	16	48	32

Table 31: Problem of Unethical Conduct by Type of Employer (Entries are % of Row Total)

Employer (N)	No Problem	Rarely	Sometimes	Common
Academia (185)	49	34	13	4
CRO (134)	49	35	13	4
Government (38)	39	50	11	0
HMO/Formulary/Insurance Co. (12)	58	33	8	0
Pharmaceutical Industry (539)	52	36	11	2
Self-employed (47)	40	43	15	2
Other (74)	50	27	19	4

Table 32: Problem of Racial/Ethnic Bias by Type of Employer (Entries are % of Row Total)

Employer (N)	No Problem	Rarely	Sometimes	Common
Academia (185)	71	16	8	5
CRO (135)	70	21	4	4
Government (39)	62	26	13	0
HMO/Formulary/Insurance Co. (12)	83	17	0	0
Pharmaceutical Industry (542)	67	21	10	2
Self-employed (47)	89	6	4	0
Other (74)	77	14	8	1

Table 33: Problem of Sex/Gender Bias by Type of Employer (Entries are % of Row Total)

Employer (N)	No Problem	Rarely	Sometimes	Common
Academia (186)	65	18	9	8
CRO (135)	67	22	10	1
Government (39)	59	26	13	3
HMO/Formulary/Insurance Co. (12)	67	33	0	0
Pharmaceutical Industry (543)	65	23	11	2
Self-employed (48)	81	8	6	4
Other (73)	77	12	10	1

Table 34: Problem of Educational Advancement by Type of Employer (Entries are % of Row Total)

Employer (N)	No Problem	Rarely	Sometimes	Common
Academia (178)	80	8	6	6
CRO (135)	61	14	12	13
Government (36)	78	8	8	6
HMO/Formulary/Insurance Co. (11)	64	27	0	9
Pharmaceutical Industry (528)	56	16	17	11
Self-employed (46)	80	11	2	7
Other (73)	59	8	16	16

Table 35: Problem of Advancement Opportunities by Type of Employer (Entries are % of Row Total)

Employer (N)	No Problem	Rarely	Sometimes	Common
Academia (184)	45	21	20	14
CRO (135)	30	21	32	18
Government (38)	21	21	29	29
HMO/Formulary/Insurance Co. (12)	25	33	25	17
Pharmaceutical Industry (544)	16	26	39	19
Self-employed (46)	63	17	13	7
Other (75)	33	16	27	24

Table 36: Problem of Non-Statistical Tasks by Type of Employer (Entries are % of Row Total)

Employer (N)	No Problem	Rarely	Sometimes	Common
Academia (186)	16	16	36	32
CRO (134)	8	19	37	37
Government (39)	0	18	41	41
HMO/Formulary/Insurance Co. (12)	17	8	33	42
Pharmaceutical Industry (543)	5	15	47	33
Self-employed (48)	15	17	37	31
Other (76)	11	18	43	28

Table 37: Problem of Advancement Opportunities by Highest Degree (Entries are % of Row Total)

Highest Degree (N)	No Problem	Rarely	Sometimes	Common
Bachelor (30)	27	30	30	13
Masters (396)	16	24	35	25
Doctorate/MD/JD (601)	33	22	30	14

Table 38: Problem of Educational Advancement by Highest Degree (Entries are % of Row Total)

Highest Degree (N)	No Problem	Rarely	Sometimes	Common
Bachelor (30)	63	13	13	10
Masters (391)	37	20	23	20
Doctorate/MD/JD (580)	81	9	6	4

Table 39: Problem of Ethnic Bias by Ethnic Group (Entries are % of Row Total)

Ethnic Group (N)	No Problem	Rarely	Sometimes	Common
White (776)	83	15	2	<1
Black (15)	27	20	40	13
Asian (217)	29	35	27	9
Hispanic (11)	45	18	27	9
Other (9)	67	22	11	0

Table 40: Problem of Sex/Gender Bias by Sex/Gender (Entries are % of Row Total)

Sex/Gender (N)	No Problem	Rarely	Sometimes	Common
Female (295)	45	30	20	5
Male (643)	76	18	4	2

Table 41: Publication Credit Given for Statistical Work by Type of Employer (Entries are % of Row Total)

Employer (N)	Always	Usually	Sometimes	Rarely	Never	Not Applicable
Academia (193)	18	44	18	5	0	17
CRO (134)	7	23	26	13	5	27
Government (37)	11	51	16	5	0	16
HMO/Formulary/Insurance Co. (11)	0	18	9	18	0	55
Pharmaceutical Industry (543)	6	32	26	17	4	15
Self-employed (52)	6	31	21	15	2	25
Other (80)	4	34	19	10	2	31

Table 42.1: Salary by Type of Employer where Highest Degree - Masters (Salary in Thousands of US Dollars/year) (Entries are % of Row Total)

Employer (N)	<30	30-45	46-60	61-75	76-90	91-105	106-120	121-135	>135
Academia (34)	56	26	12	6	0	0	0	0	0
CRO (60)	3	33	42	7	7	8	0	0	0
Pharmaceutical (229)	1	7	28	30	22	6	3	2	<1
Self-employed (17)	0	0	24	29	24	6	6	0	12
Other (40)	8	27	25	20	12	3	5	0	0

Table 42.2: Salary by Type of Employer where Highest Degree - Doctorate (Salary in Thousands of US Dollars/year) (Entries are % of Row Total)

Employer (N)	<30	30-45	46-60	61-75	76-90	91-105	106-120	121-135	>135
Academia (147)	3	13	24	19	13	10	6	3	10
CRO (63)	2	5	14	17	16	8	14	6	17
Government (31)	0	0	19	23	32	10	13	0	3
Pharmaceutical (285)	0	<1	5	22	21	13	15	7	16
Self-employed (29)	10	3	10	3	10	21	17	0	24
Other(32)	3	3	16	22	22	22	3	0	9

Table 43.1: Annual Salary by Years in Biopharmaceutical Field where Highest Degree = Masters
(Salary in Thousands of US Dollars/year) (Entries are % of Row Total)

Years (N)	<30	30-45	46-60	61-75	76-90	91-105	106-120	121-135	>135
<1yr (45)	29	44	24	0	2	0	0	0	0
1-5yr (135)	7	27	41	19	4	1	1	0	0
6-10yr (111)	3	3	30	41	14	4	3	2	1
11-25yr (75)	1	4	11	19	45	13	3	1	3
>25yr (20)	0	0	5	5	30	25	25	10	0

Table 43.2: Annual Salary by Years in Biopharmaceutical Field where Highest Degree = Doctorate/MD/JD
(Salary in Thousands of US Dollars/year) (Entries are % of Row Total)

Years (N)	<30	30-45	46-60	61-75	76-90	91-105	106-120	121-135	>135
<1yr (34)	6	18	21	32	9	9	0	0	6
1-5yr (150)	2	6	25	37	18	6	5	0	1
6-10yr (127)	2	4	11	16	27	15	12	6	8
11-25yr (170)	1	1	5	12	20	16	19	6	20
>25yr (88)	0	0	1	9	10	16	18	10	35

Table 44.1: Salary by Sex/Gender where Highest Degree - Masters
(Salary in Thousands of US Dollars/year) (Entries are % of Row Total)

Sex/Gender (N)	<30	30-45	46-60	61-75	76-90	91-105	106-120	121-135	>135
Female (162)	6	16	33	25	14	3	1	1	0
Male (198)	7	16	24	22	16	7	5	2	2

Table 44.2: Salary by Sex/Gender where Highest Degree - Doctorate
(Salary in Thousands of US Dollars/year) (Entries are % of Row Total)

Sex/Gender (N)	<30	30-45	46-60	61-75	76-90	91-105	106-120	121-135	>135
Female (112)	3	5	16	26	21	9	11	4	5
Male (413)	1	4	12	19	17	14	12	6	15

Table 45.1: Salary by Ethnic Group where Highest Degree - Masters
(Salary in Thousands of US Dollars/year) (Entries are % of Row Total)

Ethnic Group (N)	<30	30-45	46-60	61-75	76-90	91-105	106-120	121-135	>135
White (302)	5	14	28	22	18	7	3	2	3
Asian (72)	11	19	33	24	11	0	1	0	0

Table 45.2: Salary by Ethnic Group where Highest Degree - Doctorate
(Salary in Thousands of US Dollars/year) (Entries are % of Row Total)

Ethnic Group (N)	<30	30-45	46-60	61-75	76-90	91-105	106-120	121-135	>135
White (428)	2	4	11	17	19	14	13	4	17
Asian (140)	1	6	18	31	16	6	9	6	6

Table 46: Importance of Statistical Meetings in Learning/Updating
Statistical Skills by Highest Degree (Entries are % of Row Total)

Highest Degree (N)	Very Important	Somewhat Important	Not Very Important	Not Important
Bachelor (43)	19	44	19	19
Masters (426)	21	47	22	10
Doctorate/MD/JD (615)	29	46	15	9

Table 47: Importance of Short Courses in Learning/Updating Statistical Skills by Highest Degree (Entries are % of Row Total)

Highest Degree (N)	Very Important	Somewhat Important	Not Very Important	Not Important
Bachelor (43)	21	44	26	9
Masters (424)	42	38	12	8
Doctorate/MD/JD (604)	31	36	19	14

Table 48: Importance of University Courses in Learning/Updating Statistical Skills by Highest Degree (Entries are % of Row Total)

Highest Degree (N)	Very Important	Somewhat Important	Not Very Important	Not Important
Bachelor (46)	80	9	2	9
Masters (423)	31	23	22	24
Doctorate/MD/JD (556)	12	12	20	56

Table 49: Importance of Peers in Learning/Updating Statistical Skills by Highest Degree (Entries are % of Row Total)

Highest Degree (N)	Very Important	Somewhat Important	Not Very Important	Not Important
Bachelor (45)	71	22	4	2
Masters (430)	58	33	7	2
Doctorate/MD/JD (611)	51	38	7	4

Table 50: Importance of Reading Books in Learning/Updating Statistical Skills by Highest Degree (Entries are % of Row Total)

Highest Degree (N)	Very Important	Somewhat Important	Not Very Important	Not Important
Bachelor (46)	43	37	20	0
Masters (433)	40	45	13	2
Doctorate/MD/JD (615)	42	46	10	3

Table 51: Importance of Reading Journals in Learning/Updating Statistical Skills by Highest Degree (Entries are % of Row Total)

Highest Degree (N)	Very Important	Somewhat Important	Not Very Important	Not Important
Bachelor (46)	30	39	22	9
Masters (432)	28	49	20	3
Doctorate/MD/JD (621)	44	41	11	4

Table 52: Importance of Software in Learning/Updating Statistical Skills by Highest Degree (Entries are % of Row Total)

Highest Degree (N)	Very Important	Somewhat Important	Not Very Important	Not Important
Bachelor (46)	35	39	24	2
Masters (431)	32	43	19	6
Doctorate/MD/JD (611)	24	46	24	7

Table 53: Importance of Statistical Meetings in Learning/Updating Statistical Skills by Type of Employer (Entries are % of Row Total)

Employer (N)	Very Important	Somewhat Important	Not Very Important	Not Important
Academia (185)	35	41	13	11
CRO (132)	22	49	20	9
Government (39)	38	44	13	5
HMO/Formulary/Insurance Co. (10)	20	50	20	10
Pharmaceutical Industry (529)	24	49	18	8
Self-employed (50)	16	40	26	18
Other (78)	27	36	24	13

Table 54: Importance of Short Courses in Learning/Updating Statistical Skills by Type of Employer (Entries are % of Row Total)

Employer (N)	Very Important	Somewhat Important	Not Very Important	Not Important
Academia (182)	24	27	25	24
CRO (129)	34	42	13	11
Government (38)	16	58	13	13
HMO/Formulary/Insurance Co. (10)	40	40	0	20
Pharmaceutical Industry (530)	43	38	13	5
Self-employed (50)	16	38	24	22
Other (76)	38	34	14	13

Table 55: Importance of University Courses in Learning/Updating Statistical Skills by Type of Employer (Entries are % of Row Total)

Employer (N)	Very Important	Somewhat Important	Not Very Important	Not Important
Academia (179)	24	15	13	49
CRO (126)	22	15	23	40
Government (34)	6	12	24	59
HMO/Formulary/Insurance Co. (11)	27	9	27	36
Pharmaceutical Industry (493)	18	18	23	40
Self-employed (47)	11	11	13	66
Other (74)	25	16	27	31

Table 56: Importance of Peers in Learning/Updating Statistical Skills by Type of Employer (Entries are % of Row Total)

Employer (N)	Very Important	Somewhat Important	Not Very Important	Not Important
Academia (186)	59	33	4	5
CRO (129)	57	35	5	4
Government (38)	42	50	8	0
HMO/Formulary/Insurance Co. (10)	40	40	10	10
Pharmaceutical Industry (531)	55	36	7	2
Self-employed (50)	44	42	8	6
Other (79)	58	34	5	3

Table 57: Importance of Reading Books in Learning/Updating Statistical Skills by Type of Employer (Entries are % of Row Total)

Employer (N)	Very Important	Somewhat Important	Not Very Important	Not Important
Academia (188)	54	38	6	2
CRO (132)	38	43	15	4
Government (39)	44	44	13	0
HMO/Formulary/Insurance Co. (11)	36	55	9	0
Pharmaceutical Industry (532)	35	50	12	3
Self-employed (50)	54	30	10	6
Other (79)	42	48	9	1

Table 58: Importance of Reading Journals in Learning/Updating Statistical Skills by Type of Employer (Entries are % of Row Total)

Employer (N)	Very Important	Somewhat Important	Not Very Important	Not Important
Academia (191)	54	31	13	2
CRO (132)	30	46	17	6
Government (39)	38	54	8	0
HMO/Formulary/Insurance Co. (11)	27	55	18	0
Pharmaceutical Industry (533)	34	47	16	3
Self-employed (50)	28	50	8	14
Other (80)	34	42	21	3

Table 59: Importance of Software in Learning/Updating Statistical Skills by Type of Employer (Entries are % of Row Total)

Employer (N)	Very Important	Somewhat Important	Not Very Important	Not Important
Academia (186)	28	46	19	6
CRO (132)	30	41	21	8
Government (38)	16	53	21	11
HMO/Formulary/Insurance Co. (11)	27	64	9	0
Pharmaceutical Industry (528)	26	44	24	6
Self-employed (50)	30	52	14	4
Other (79)	32	43	18	8

Table 60: Number of Statistical Books Bought in Last 5 Years by Highest Degree (Entries are % of Row Total)

Highest Degree (N)	0	1-2	3-5	6-10	11-20	>20
Bachelor (46)	17	28	20	20	7	9
Masters (431)	13	23	25	23	9	8
Doctorate/MD/JD (617)	9	11	25	25	15	15

Table 61: Number of Statistical Books Bought in Last 5 Years Meetings by Type of Employer (Entries are % of Row Total)

Employer (N)	0	1-2	3-5	6-10	11-20	>20
Academia (190)	3	8	16	27	24	23
CRO (127)	10	20	32	21	9	8
Government (37)	14	22	16	24	14	11
HMO/Formulary/Insurance Co. (11)	0	18	18	36	9	18
Pharmaceutical Industry (536)	14	18	27	25	8	8
Self-employed (49)	14	8	31	8	18	20
Other (80)	8	19	25	20	12	16

Table 62.1: Number of ASA Annual Meetings Attended in Last 5 Years by Highest Degree (Entries are % of Row Total)

Highest Degree (N)	0	1	2	3	4	5
Bachelor (36)	75	14	6	3	0	3
Masters (391)	41	29	16	8	4	2
Doctorate/MD/JD (557)	21	22	22	17	8	10

Table 62.2: Quality of ASA Annual Meetings Attended in Last 5 Years by Highest Degree (Entries are % of Row Total)

Highest Degree (N)	Excellent	Good	Fair	Poor
Bachelor (11)	18	73	0	9
Masters (222)	11	47	37	5
Doctorate/MD/JD (447)	11	53	33	3

Table 63.1: Number of ASA Annual Meetings Attended by Type of Employer (Entries are % of Row Total)

Employer (N)	0	1	2	3	4	5
Academia (162)	27	23	19	10	9	11
CRO (113)	40	20	18	12	9	2
Government (36)	8	25	17	28	6	17
HMO/Formulary/Insurance Co. (11)	45	27	9	0	9	9
Pharmaceutical Industry (489)	26	26	21	14	6	6
Self-employed (44)	41	18	16	16	2	7
Other (73)	38	19	19	11	5	7

Table 63.2: Quality of ASA Annual Meetings by Employer (Entries are % of Row Total)

Employer (N)	Excellent	Good	Fair	Poor
Academia (126)	15	62	20	3
CRO (68)	9	53	35	3
Government (33)	21	52	27	0
HMO/Formulary/Insurance Co. (6)	0	33	50	17
Pharmaceutical Industry (354)	8	49	40	3
Self-employed (27)	15	44	33	7
Other (46)	9	48	35	9

Table 64: Internet Use by Type of Employer (Entries are % of Employer Total)

Employer (N)	Use E-mail	Use WWW	Use FTP	Do Not Use Internet
Academia (193)	92	82	66	8
CRO (137)	73	42	26	23
Government (40)	88	83	45	10
HMO/Formulary/Insurance Co. (12)	83	50	33	17
Pharmaceutical Industry (549)	78	56	28	18
Self-employed (53)	72	53	38	21
Other (81)	84	73	43	14

Table 65: Internet Use by Supervisor Status (Entries are % of Status Total)

Supervisor Status (N)	Use E-mail	Use WWW	Use FTP	Do Not Use Internet
Yes (388)	79	61	31	16
No (608)	80	60	39	18

Appendix

Complete results for each survey question are presented below:

1. Where do you live?

U.S.	1039	91%
Canada	26	2%
Europe	48	4%
Japan	9	1%
Mexico/Central/ S. America	4	<1%
Other	12	1%

2. What is your sex/gender?

Female	320	31%
Male	708	69%

3. What is your age?

≤25yr	40	4%
26-34yr	320	28%
35-44yr	399	35%
45-54yr	278	24%
55-64yr	80	7%
≥65yr	20	2%

4. What is your ethnic group?

White	842	75%
Black	18	2%
Asian	245	22%
Hispanic	13	1%
Other	10	1%

5. What is your primary writing hand?

Right	979	91%
Left	102	9%

6. How many years have you been a member of the ASA?

<1yr	83	7%
1-5yr	335	29%
6-10yr	235	21%
11-20yr	291	26%
>20yr	195	17%

7. How many years have you been a member of the Biopharmaceutical Section of the ASA?

<1yr	165	15%
1-5yr	555	50%
6-10yr	193	17%
>10yr	204	18%

8. Do you pay the ASA dues with your own money?

Yes	504	45%
No	623	55%

9. Do you pay the Biopharmaceutical Section dues with your own money?

Yes	510	45%
No	616	55%

10. Do you consider the Biopharmaceutical Section to be your primary ASA section?

Yes	833	74%
No	288	26%

11. Do you belong to a local ASA chapter?

Yes	792	72%
No	316	28%

12. What other professional societies do you belong to?

ASQC	78	7%
DIA	339	30%
IMS	129	11%
Biometrics Society	484	43%
ISCB	49	4%
Society for Controlled Clinical Trials	224	20%

13. What is your primary pharmaceutical interest?

Animal Health	22	2%
Clinical	882	79%
Devices	33	3%
Diagnostics	19	2%
Information Management	41	4%
Manufacturing/Stability	11	1%
Pre-Clinical	72	6%
Other	34	3%

14. Not employed? (If Yes, skip to Question 25)

Yes 72 (6%)

15. What is your current employment?

Academia	193	18%
CRO	137	13%
Government	40	4%
HMO/Formulary/Insurance Co.	12	1%
Pharmaceutical Industry	549	51%
Self-employed	53	5%
Other	81	8%

16. How many years have you been employed in the biopharmaceutical field?

<1yr	85	8%
1-5yr	308	30%
6-10yr	254	25%
11-25yr	262	25%
>25yr	122	12%

17. How many other statisticians are employed in your work unit?

None	152	14%
1-5	355	33%
6-10	173	16%
11-25	201	19%
>25	182	17%

18. Rate whether the following are problems you face as a statistician?
(Entries are % of Row Total)

Problem Area (N)	No Problem	Rarely	Sometimes	Common
Lack Power (1030)	14	30	43	13
Lack Respect (1040)	28	35	29	7
Computer Support (1040)	29	30	31	10
Low Pay (1038)	34	28	26	12
Job Security (1037)	39	33	22	7
Overwork (1040)	8	15	39	38
Pressure to Produce (1039)	7	17	38	38
Poor Data Quality (1038)	7	24	45	24
Unethical Conduct (1030)	50	36	12	2
Racial/Ethnic Bias (1035)	70	19	8	3
Sex/Gender Bias (1037)	66	21	10	3
Educational Advancement (1008)	63	14	13	10
Advancement Opportunities (1035)	26	23	32	18
Non-statistical tasks (1039)	8	16	42	33

19. Are you given adequate credit in medical publications for your statistical work?

Always	87	8%
Usually	355	34%
Sometimes	244	23%
Rarely	138	13%
Never	30	3%
Not applicable	201	19%

20. How satisfied are you with your job?

Very Satisfied	292	28%
Satisfied	524	50%
Neither Satisfied nor Dissatisfied	164	15%
Dissatisfied	66	6%
Very Dissatisfied	11	1%

21. Are you a formal supervisor?

Yes	388	39%
No	608	61%

22. What is your annual salary, including usual bonuses?
(US dollars in thousands)

Salary	N	%
<30	44	4%
30-45	100	10%
>45-60	190	19%
>60-75	214	21%
>75-90	178	17%
>90-105	97	10%
>105-120	83	8%
>120-135	34	3%
>135	86	8%

23. How many hours/week should you normally work (excluding overtime)? (categorized)

Hr/wk	N	%
<20	42	4%
21-30	18	2%
31-35	42	4%
36-40	759	73%
41-45	60	6%
46-50	76	7%
51-60	40	4%
>60	8	1%

24. How many hours/week of overtime do you work? (average over the last 3 months, categorized)

Hr/wk	N	%
0	206	21%
1-5	269	28%
6-10	254	26%
11-15	83	8%
16-20	64	7%
>20	99	10%

25. What is your highest degree earned in a statistics field?

None	91	8%
Bachelor	36	3%
Masters	452	40%
Doctorate	545	49%

26. What is your highest degree earned in a non-statistics field?

None	222	20%
Bachelor	524	47%
Masters	261	23%
Doctorate/MD/JD	109	10%
Other	7	1%

27. Are you a student (full or part-time) working for an advanced statistical degree?

Yes	171	15%
No	953	85%

28. Which statistics meetings have you attended in the last 5 years?

Number of Statistical Meetings Attended (Entries are % of Row Total)

Meeting (N)	0	1	2	3	4	≥5
ASA Annual Meetings (985)	31	24	19	13	6	7
ENAR (851)	63	19	10	4	3	2
WNAR (756)	95	3	1	1	<1	0
MBSW (776)	82	9	5	2	1	1
Applied Statistical Conf. (772)	84	11	4	1	<1	0
DIA Meetings (839)	59	18	11	6	2	4
Controlled Clinical Trials (794)	75	14	6	3	1	1
Internal Company (802)	59	7	9	8	5	12
Other Statistical Mtgs (883)	43	16	16	9	5	11

Average Quality of Statistical Meetings (Entries are % of Row Total)

Meeting (N)	Excellent	Good	Fair	Poor
ASA Annual Meetings (680)	11	51	34	4
ENAR (324)	26	54	18	2
WNAR (39)	18	46	28	8
MBSW (136)	33	51	12	4
Applied Statistical Conf. (124)	19	58	20	2
DIA Meetings (334)	13	58	26	3
Controlled Clinical Trials (195)	19	56	21	4
Internal Company (328)	14	61	22	3
Other Statistical Mtgs (488)	16	61	21	2

29. How many statistical short courses have you attended in the last 5 years?

Number of Statistical Short Courses Attended (Entries are % of Row Total)

Course (N)	0	1	2	3	4	≥5
ASA (881)	59	19	13	5	2	2
Local ASA Chapter (792)	74	11	9	3	1	1
Academia (784)	72	14	8	3	1	2
Commercial (787)	70	13	10	4	1	2
Internal Company (816)	61	10	11	8	5	5
Pharmaceutical Industry (757)	80	14	4	2	<1	<1

Average Quality of Statistical Short Courses Attended (Entries are % of Row Total)

Course (N)	Excellent	Good	Fair	Poor
ASA (354)	20	57	18	5
Local ASA Chapter (197)	20	59	18	3
Academia (211)	33	52	12	3
Commercial (219)	24	54	19	3
Internal Company (304)	22	59	17	2
Pharmaceutical Industry (146)	29	55	12	4

30. Do you regularly read any of the following statistical journals?

AmStat News	1027	90%
JASA	692	61%
American Statistician	711	62%
Biometrics	541	48%
Technometrics	172	15%
Statistics in Medicine	445	39%
Controlled Clinical Trials	335	29%
Other	191	17%

31. How do you rate the *Biopharmaceutical Report*?

Excellent	150	14%
Very Good	438	39%
Good	390	35%
Poor	22	2%
Never Read it	115	10%

32. What type of computer do you primarily use for statistical work?

Stand alone PC/Workstation	199	18%
Networked PC/Workstation	824	73%
Dumb Terminal	97	9%
None	8	1%

33. Do you use a computer at home?

Yes	921	82%
No	204	18%

34. Do you use the Internet in your work?

Email	919	81%
WWW	706	62%
FTP	437	38%
Do not use Internet	183	16%

35. How many statistical books have you bought in the last 5 years for your own personal use? (excluding those for college credit courses, categorized)

None	121	11%
1-2	178	16%
3-5	276	25%
6-10	263	24%
11-20	136	12%
20-425	127	12%

36. How Important are the below in learning/updating your statistical skills? (Entries are % of Row Total)

Method (N)	Very Important	Somewhat Important	Not Very Important	Not Important
Statistical Meetings (1090)	25	47	18	10
Short Courses (1078)	35	37	16	12
University Courses (1030)	23	16	20	41
Peers (1093)	55	36	7	3
Read Books (1100)	41	45	11	3
Read Journals (1106)	37	44	15	4
Software (1094)	27	44	22	7
Other Journals (1032)	14	37	30	18
Other (178)	27	17	5	51

37. How satisfied are you with the biopharmaceutical section? (Entries are % of Row Total)

Very Satisfied	148	13%
Satisfied	574	52%
Neither	373	34%
Dissatisfied	8	1%
Very Much Dissatisfied	4	<1%

38. How important are the services that the biopharmaceutical section provides? (Entries are % of Row Total)

Service (N)	Very Important	Somewhat Important	Not Very Important	Not Important
Sponsor Sessions (1057)	48	36	10	7
Publish Newsletter (1084)	42	43	11	4
Provide Refreshments at JSM (1062)	6	16	33	45
Provide Fellowship (1064)	30	41	18	11
Provide Web Pages (1066)	25	43	19	13
Sponsor Workshops (1073)	49	36	9	6
Provide Awards for Best Papers (1050)	12	33	31	24
Other Services (235)	11	14	17	58

39. Please suggest ways to improve Biopharmaceutical Section - 11 pages of responses

40. Please suggest ways to provide recognition of members of Biopharmaceutical Section - 5 pages of responses

41. Please suggest topics for future sessions or workshops - 9 pages of responses