BELS Letter

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We need an editor for the *BELS Letter*. Please write to Shirley at *petersonsm@earthlink.net.*

BELS Sound in 2003

The BELS Treasurer's Report for FY 1 Apr 2001 to 31 March 2002 was presented at the member meeting in San Diego (May 6, 2002) by our new treasurer, **Donna Curtis**.

Balance forward	$13,675.40
Income	23,957.02
TOTAL	$37,632.42
Expenses	
Examinations and Appeals	$6417.76
Administration	861.14
Website	1080.00
Member Relations	3082.79
Annual Meeting (including most of the 10th Anniv expenses from '01 and some from '02)	10,744.14
Bank Fees	388.90
TOTAL	$22,574.73
CLOSING BALANCE	$15,057.69

When treasurers are happy, everybody's happy. Former Treasurer Nancy Taylor, left, with President Shirley Peterson at the last BELS annual meeting in San Diego.

Nancy Taylor, whose term as Treasurer was over in May 2002, shepherded BELS through its first biennial audit, a major undertaking. Thank you, Nancy. The auditing firm is CRISP HUGHES EVANS LLP. The auditor suggested using Quickbooks to "capture all cash receipt and disbursement transactions."

Capsules

BELS Secretary, **Mary Ann Schmidt**, is the one who sees to it that we have a printed directory and an accurate directory and roster on the website. Any time your contact information changes, please let Mary Ann know, or use the form available in the Members Only section of the website. Mary Ann also provides mailing labels whenever BELS does a mailing.

The reason you haven't been receiving a quarterly issue of the *BELS Letter* has nothing to do with a lack of mailing labels. What has happened is that the editor, **Ann Morcos**, has had a major life-change—she passed the rigors of police academy training and is now working 12-hour shifts, has retained two of the journals she edits, *and* the children's book she wrote, *The Tale of Nada Nutria*, has been published. This issue of *BELS Letter* was pulled together by **Shirley Peterson**, BELS President, with help from **John Darling**.

Peggy Chen, who gave a proctor training session at the CSE meeting in San Diego, attended the annual meeting of the National Organization for Competency Assurance (NOCA) on behalf of BELS. NOCA is an association of certifying and licensing boards and has established the National Commission for Certifying Agencies. BELS has needed to take a good look at NOCA and this year we got lucky. Peggy, our only member with experience at the Educational Testing Service (Princeton), now lives and works in Tucson where the NOCA meeting was held. Parts of her report will appear in the next issue of this newsletter.

The three members who attained Diplomate status in 2002 are **Elizabeth L Hess**, **Laurel Derks Prokop**, and **Pamela Paradis Tice**. Congratulations!

Continued on page 2

2003 Certification Examination Schedule

March 22, Saturday, 2-5 pm,	San Francisco	Register by March 1, 2003
May 3, Saturday, 1-4 pm	Pittsburgh (CSE)	Register by April 12,2003
June 8, Sunday, 2-5 pm	Bath, UK (EASE)	Register by May 16, 2003
Sept 17, Wednesday, 10 am-1pm	Miami (AMWA)	Register by Aug 27, 2003

Leslie Neistadt, Certification Registrar

Examination sites for 2004 include Princeton, Chicago, Vancouver, and St Louis.

Under the guidance of Certification Registrar **Leslie Neistadt**, several certification exams have been given independent of other meetings. The 2001 Chicago exam was one. Princeton exams are always independent. The Australian exam in Sydney, and exams in Houston and Madison were requested by BELS members and made to happen by Leslie, **Kim Berman**, the **Notification Cadre**, and the scorer of exams who remains nearly anonymous. BELS is now large enough to accommodate requests for exams, but the request must be made at least 6 months in advance by someone willing to make local arrangements. The exam must be open to any accepted applicant and will be administered on neutral ground only (not an employer's).

Bylaws

The vote on bylaws changes to eliminate Part 2 of the diplomate exam was, when the polls closed on May 17, 141 in favor of the bylaws change, 4 against, 1 abstention.

More bylaws changes will be mailed to members for their consideration. The changes this time are mostly to allow the Diplomate Registrar, now that people are applying for diplomate status, to sit on the Executive Council. A few of the changes are simply housekeeping matters and updates.

Watch your snail mail for a BELS dues notice and bear in mind that two of the bylaws changes have to do with dues, timely payment thereof.

Capsules, continued from page 1

Susan Eastwood has provided names and mailing addresses for biotech companies in the San Francisco Bay Area, and **Kim Berman** has done the same for the Boston area. We plan to send a classy bifold pamphlet about BELS to each of those companies before holding a certification examination locally. Susan will arrange the Bay Area exam in conjunction with a regional AMWA meeting (March 22), and **Bethany Thivierge** hopes to do the same with a regional AMWA meeting in the Boston area. Thanks to all!

An article in *Science Editor* (25[6]:207–208) reveals that **Walter Pagel**, BELS President-Elect, is an orchid fancier of considerable skill. Walter will become President in May, 2003, for a 2-year term.

Mary Ann Schmidt is proud to announce the birth of volume 26 of the *Flora of North America*, which she's been co-editing for the past three years. This volume treats Liliales and Orchidales and is available from Oxford University Press for $95.00 plus shipping and handling. To place an order for this or any of the volumes, call OUP at (800) 451-7556 or visit *http://www.oup-usa.org/reference/sprintro.html*.

Diplomate Examination

The examination now proceeds in just two steps. First, apply for candidacy. Second, submit a portfolio. There is no longer a schedule for taking the diplomate examination because success hinges on the portfolio and the portfolio can be submitted any time after candidacy has been approved.

There is nothing to study for. The portfolio consists of examples from your own editorial work, and may consist of excerpts from more than one manuscript. The total number of edited pages exhibited in a portfolio should be no greater than 30 and must include one table. Supporting material, such as correspondence with the author, is encouraged and not counted in the 30-page limit.

Guides for preparing the portfolio are sent only to those BELS members who have applied for and been accepted into candidacy.

The edited portfolio material need not have been published. We're interested in the editorial work, not the author's success.

The identities of candidates are confidential. Only the names of those who pass the exam are announced.

The Diplomate Registrar is Bobbie Reitt, and, if you need more information, she's still at *redit@earthlink.net*.

There's great pride in accomplishment when you've submitted a passing portfolio. And you can use ELS(D) after your name.

Register to be a BELS Diplomate. Write to Diplomate Registrar, *redit@earthlink.net*.

BELS Serves

Summarized Q&A From the BELS Mailing List Server

Barbara Schwedel, ELS

I'm very impressed with our membership! You ask questions that are both thought provoking and practical, generously offer great answers, and provide high-quality summaries for the column. And it's a lot of fun working with you! This column includes four full-length Q&A discussions and one brief one from early 2002. Thanks to all of you who participated.

Substantive Editing

Kim Berman's husband, who is a scientist/writer/editor in government service, writes and edits books about his hobby—trains, railroading, etc—in his spare time. After editing a book by two lawyers who are rail fans, he asked Kim to pose these questions to readers of the BELS mailing list: "Have you ever done substantive editing on a book project, been paid for your work, and acknowledged in the book for your services, and then found out AFTER publication that the authors incorporated almost none of your edits? How did you deal with it? Has it ever come back to haunt you?"

Flo Witte said this has happened to her with scientific articles and recalled one paper in which the authors had acknowledged her editing help without her knowledge—not only did the published paper contain very few of her edits, the very first sentence of the abstract contained a subject-verb disagreement! **Jessica Ancker** mentioned that this scenario has also happened to her with scientific papers and that it bothers her when she is acknowledged, as it looks as if the paper is a sample of her work. She observed that nothing has ever come of these situations, "except for exasperation on my part."

Linda Watts Jackim told of a generous offer she had made to a grammatically challenged friend who was compiling a museum-related collections project. "It was a horrible mess and I didn't want to be involved in the entire project," so she made a few suggestions. To thank Linda, the friend listed Linda as the project editor. The friend seemed so pleased about the acknowledgment that a horrified Linda behaved "as graciously as possible" and later "placed my copy in the bottom of a file drawer." **Carol Kakalec Kohn** said that she requests up front not to be included in the acknowledgments, observing that "this has always been a point of concern for me ... because I don't feel I should be acknowledged in print for doing my job." **Ron Wolf** suggested that part of the problem may have been due to editing material written by lawyers, who take great pride in being able to obfuscate a succinct message! Ron observed that "the danger with having writers who, because of pride or combative nature, reject all editorial changes, is that the final product makes you look bad." **Rhana Pike** mentioned that some medical journals have noted that this is a problem, and are now asking people for signed permission to include their names in the acknowledgments.

Many respondents also commented that this should be accepted as a common occurrence in the editing world and that payment for a job well done may be all that you'll get out of the project. **Bobbie Reitt** observed, "As professionals we give advice; that doesn't mean that the clients have to take it." Kim recently provided the following update: "The editor in question (my husband) has taken this advice to heart, cashed the check, filed the book in the bottom drawer, and is anticipating cautious behavior when solicited for editing services in the future."

Advanced Degree

When **Tamia Karpeles** was considering the pros and cons of applying to a graduate program that offers a master's degree in the life sciences, she asked, "Setting aside all of the subjective elements, ... how much practical value is the MS likely to have in terms of my freelance career? Would I find that an advanced degree opens up additional opportunities? Better-paying opportunities? A more interesting variety of opportunities?"

The responses were unequivocal: Almost everyone saw the degree as useful. Cited advantages included increased respect from the science community, greater confidence when approaching highly technical assignments, and a competitive edge in the job market. **Mary Carr** advised that her MA in biology opened up "much more in the way of credibility and opportunity. ... I get a lot more respect for my editorial opinions from the scientists ... and I am offered more technical and challenging assignments." **Lynne Stockton** said, "it's not about the money or the recognition as much as it's about the enhanced knowledge and skills," and she also acknowledged that her MS "bumped me up the pay scale." **Barbara Schwedel** introduced an additional point for consideration—whether one's freelance work comes mostly from "cold calls" or word of mouth. "If I were familiar with a person's excellent work, I wouldn't care about degrees," I explained. "But if I were choosing among a bunch of people I didn't know, those with a science degree would get extra points."

"It was about this time that the discussion turned from the practical to the philosophical," Tamia observed later, "and that's when things heated up." **Michael Altus** expressed the

matter succinctly: "The debate rages on: Which is better, a background in language and literature, or one in biology and medicine?" Michael went on to paraphrase a speaker at a CBE freelancing workshop some years ago: "The important issue is whether one can do the job." The range and eloquence of the opinions that followed shows that this issue is near the hearts of many life science editors. The focus was not so much on whether a bias toward the science degree exists—this is acknowledged almost universally—but whether it can be justified. "I was still receiving responses 3 weeks later," Tamia said. "It's difficult to summarize them; they take up a 30-page file."

One of the most insightful observations came from **Claudette Upton**: "I think a point that is being missed here is transportability of editorial skills. I have a degree (BA) in English, and for 20 years I did almost exclusively science editing. ... Now I am editing history. The skills—what one might call 'core competencies'—that make a person a good editor are indeed transportable across disciplines. One of those skills is the ability to fairly quickly pick up the primary concepts required to work in a particular subject area, and another is the willingness to surround oneself with resource materials to facilitate learning those primary concepts." Claudette concluded, "That's why certification programs like BELS are so important. ... I would venture to guess that employers who pay more attention to the letters 'ELS' rather than 'PhD' after the names of people they are considering hiring as editors are happier with the ultimate results."

Tamia agreed, making the closing comment, "And that, of course, is the unifying concept that has brought so many of us here!"

Scientist as Writer

Now we'll go to another question touching on what might be useful for a scientific communicator to have in his or her background: **Elena Westbrook** asked for suggestions for a young medical researcher who wanted to move from the laboratory to writing and editing. Elena asked, "Other than AMWA and BELS, are there other resources to which I could refer him? Any words of wisdom from other editors who come from a science background? What's his best potential market?"

Susan London suggested the Web site, *www.nasw.org*, and discussion lists of the National Association of Science Writers (NASW), which turned out to be the single most helpful resource mentioned. From the NASW home page, one can access its "Freelance Site" (from there, one can access links to organizations of interest to freelances, science news sources, copyright information, and more) as well as "Advice for Beginning Science Writers," the transcript of an in-depth—and sometimes fairly heated—discussion from May 1997 prompted by an experienced microbiology researcher who wanted to become a science writer.

In addition to suggesting the NASW, Susan wrote, "I can offer some *general* advice on the transition, but again, much will depend on the researcher's individual situation." Susan suggests that he assemble a professional portfolio of any documents that he has written and edited during his science career. She continued, "If he wants to break into new areas of science writing and editing, he may need to intern for a while or do some writing and editing on a volunteer basis. I would also encourage him to consider formal training and certification in writing and editing, and I would advise him to restructure his résumé so that it best presents him as a writer and editor (ie, he may need a functional résumé instead of a chronological résumé). Finally, I would encourage him to talk to as many science writers and editors as possible to determine what his options are."

Other recommended resources were as follows:

- Both **Susan Eastwood** and **Stephanie Deming** suggested the Council of Science Editors *www.councilscienceeditors.org/* formerly the Council of Biology Editors.
- Stephanie also suggested *Health Writer's Handbook* (Iowa University Press) by Barbara Gastel, editor of *Science Editor*, the CSE journal.
- Several people suggested *A Field Guide for Science Writers* (Blum and Knudson, eds, Oxford University Press, 1997), which is sold over the NASW website.

Ultimately, Elena provided some background information and reference lists to the researcher, but suggested that he look for ways to do more writing in his current position, then use the portfolio he develops to qualify for writing jobs. Elena observed, "He does have grant-writing experience, which will open a lot of possibilities once he gathers samples and highlights that work in his resume. In addition, because he does have web design and HTML experience, he will ask whether he can help with the research hospital's website; that will provide valuable experience, connections, and clips when he's ready to move on."

In Vivo/In Vitro Frustration

Jennifer Macke wrote, "It is my understanding that 'in vitro' refers to any experiment 'in glass' (ie, not in a living organism). 'In vivo' refers only to experiments in living (whole) organisms..." Jennifer continued, "I have a grant application in which the author is overtly defining (in the list of abbreviations) that 'in vivo' will mean 'in cell culture.' She needs an easy way to draw a distinction between experiments on living cells versus cell parts, so she wants to use 'in vivo/in vitro' to make this distinction." Jennifer continued, "The question is this. Am I being too rigid sticking with the traditional use of 'in vivo' to refer only to whole organisms? Is this now so widely misused that it has become OK to use 'in vivo' to mean cell culture? Should I let this author define 'in vivo' this way to suit her needs?"

Thomas Gegeny agreed with Jennifer. "Cell culture is 'in vitro'—even if they are whole, living cells. A cell is not a free-living, independent organism, which is the only vehicle for testing something in vivo." Tom added, "You are not being too rigid. I have never seen cell culture or other in vitro experiments referred to as 'in vivo.'" **Elaine Firestone** and **Michael Altus** concurred. Elaine observed, "Although this isn't the type of science I normally edit, a simple romp through the dictionary (Webster's, not Stedman's, mind you) confirms your correct usage of these two phrases." Elaine concluded, "I'm with you on this." Michael commented, "I agree with your concern. I completely avoid the use of 'in vivo' and of 'in vitro' because of the ambiguities that you mentioned. Instead, I use '(intact) animal,' '(intact) cell,' and 'cell extract' or 'cell-free preparation' when appropriate. Sometimes it's clear enough to omit 'intact,' which is why I used parentheses." **Cathy Davison** commented, "As a former NIH- and American Heart Association-funded independent scientist who performed in vivo experiments in whole animals for 20 years, I can say with certainty that 'in vivo' refers to whole, living organisms, and nothing else. Cell culture is definitely not an in vivo preparation." Cathy continued, "as a former grant reviewer, I can say that most reviewers would balk at someone using 'in vivo' incorrectly. In this competitive funding environment, applicants can't afford to make these types of fundamental mistakes—mistakes that call into question the applicant's credibility and his/her ability to obtain meaningful results." Cathy concluded, "Bottom line: you are right! And no, you are not being too rigid."

After hearing from these respondents, Jennifer offered her thanks to them, "particularly those who suggested that misusing the term 'in vivo' could jeopardize the grant application. That is probably all I need to convince the author to let me change it!" In fact, Jennifer was ultimately successful: "I did convince the researcher in question to change the terms, omitting 'in vivo' completely from the proposal. Instead we used 'in living cells' and 'in a cell-free system' to make the distinction she needed."

Last Licks

Ann Tamariz needed information about common practice among journals concerning errors and omissions insurance, and asked for "any guidelines or suggestions to offer regarding amount of coverage (and deductible) to acquire and what it is based on (how to decide on the amount)."

Ann observed, "I received few replies, but did receive one from a member who had worked for five or six journals, none of which carried the insurance. This respondent reported that her journal's intellectual property rights lawyer felt that publishing a disclaimer was sufficient. Two journals I contacted directly also did not carry it. The editor of one of them felt that, since they were a research journal—not a clinical journal, in which inaccurate drug dosage and patient identification could be litigable issues—they had no need of the insurance. The other journal editor, however, felt their journal manager should probably look into the insurance in view of the prevalence of lawsuits in today's society. Two insurance agents suggested that a total amount of one million dollars in coverage would not be out of line."

Fine Print

(1) The opinions in this column belong to the people cited and not necessarily to BELS or any employer. (2) If a BELS member not already on our mailing list would like his or her e-mail address added, please contact the BELS Webmaster at *Webmaster@bels.org*. Please provide your name and the e-mail address at which you would like to receive BELS mail. You must be an active, that is, dues-paying member to participate in the mailing list, and you can always have your e-mail address removed if you decide not to participate in the future. (3) I will conclude by noting that this column is for all of us in BELS! If you have any comments or questions, please e-mail me at *BSchwedel@aol.com*.

From left to right, Karen Phillips, Ann Donaldson, and Donna Tilton enjoying a little something at the San Diego meeting.

AntiVirus

In the June 11, 2002, issue of *PC Magazine*, Larry Seltzer reviewed 10 antivirus programs in an article entitled "Personal Antivirus: the one utility you can't live without" (pp 97–108). "Norton AntiVirus 2002" was better than all others. If you have e-mail you should have an antivirus program. The Norton program updates itself often and runs a virus check on all incoming and outgoing e-mails. The program costs about $50 at a discount store. The various Klez viruses that have plagued BELS listserve members are intercepted by Norton AntiVirus, Microsoft (if one is using a Microsoft e-mail program), and also by Max at FASEB. I have no idea how Max gets into the act, but it is nice to be told by all monitors that an incoming virus has been apprehended and sequestered.

Computer Vision Syndrome

Kendall Wills Sterling, ELS

"Computer Vision Syndrome" is the second in the series of three articles on repetitive stress injuries Kendall has written for BELS publication. The first appeared in the Spring 2002 issue. The third will be published in the next BELS Letter.

Eye and vision problems are the most frequently reported health-related problem in computer workers, occurring in 70% to 75% of such workers;[1] these eye and vision problems related to computer use have been termed *computer vision syndrome*.[2] The most common symptoms are eye strain, headache, blurred vision, and neck or shoulder pain, which generally increase in severity with the amount of video display terminal (VDT) use.

Working at a computer is more visually demanding than reading printed documents. Such work requires frequent saccadic eye movements (ocular motility) and imposes continuous focusing (accommodation) and alignment (vergence) demands, all of which involve repetitious muscular activity. As with musculoskeletal disorders resulting from repetitive motion, computer users experience problems when the visual demands of the task exceed their ability to comfortably perform that task.[1]

Certain aspects of the computer video display, such as screen resolution and contrast, image refresh rate and flicker, and screen glare, along with working distances and angles that are different from those used for viewing a printed document, can also contribute to eye symptoms. Typically, vision difficulties are related to repetitive activity (eg, frequent eye movements from work documents to the computer screen, or from the screen to the keyboard and back again) or to disorders of muscles, tendons, bones, or nerves (eg, problems related to neuromuscular control mechanisms). Problems may also occur or be aggravated when some aspect of the eyes or visual system is repeatedly stressed, causing the vision system to break down, similar to the breakdown seen in muscles and tendons that are overused. These problems may be exacerbated or may occur more quickly in users who are more than 40 years old, as the flexibility of the cyrstalline lens within the eye decreases with age.[1]

Work that is both visually and physically fatiguing can result in lowered productivity, increased error rate, and reduced job satisfaction.[2] Although vision disorders may initially occur as localized fatigue and may subside after work has been discontinued, they often return when work is resumed. Unlike other sources of localized fatigue, in which the muscles are able to accommodate, the visual system is less able to adapt to the conditions that cause the fatigue.[2] As a result, some vision problems become more significant over time and may be further aggravated by poor VDT design or workplace ergonomics, improper workplace lighting, and uncorrected or undercorrected vision conditions (eg, farsightedness, astigmatism). Steps should be taken to correct these deficiencies and thereby reduce the potential for development of stress and related ocular discomfort in the workplace.

Reducing Ocular Discomfort in the Workplace

General Ergonomic Considerations

Monitors should be positioned 20 to 28 inches from the eyes, with the eyes in a downward gaze of about 15 degrees when viewing the screen. The top of the screen should be below the horizontal eye level of the operator and tilted backward slightly;[2] users who wear bifocals should lower the monitor by 6 inches.[3] Desktop reading material should be positioned at a 20-degree incline approximately 20 inches away from the eyes (the "20/20 rule").

Document holders should be positioned near the computer screen and in the same plane as the screen to avoid eye strain; they should also be frequently alternated between the left and right sides of the screen. Users should rest their eyes frequently by changing their focus from close to distance vision, and should keep both their eyeglasses and the VDT screen clean.

Lighting

Light reflected from the computer screen can reduce contrast and visibility of the display, leading to eye strain. Bright lights in the peripheral field of view, windows, overhead fluorescent lights, and desk lamps can all contribute to glare. A compromise must be struck between the amount of light needed to enhance computer screen visibility and reduce glare, and that needed for other office reading and work tasks. Generally speaking, older persons require more light than younger ones; for example, workers 50 years of age require twice the light levels of young adults for comfortable work.[2]

The brightness of the computer screen and that of the surrounding room should be balanced. Lower levels of light are needed for dim-background screens, and higher levels when viewing documents. Lighting levels of 200 to 700 lux (20 to 70 foot-candles), as measured at the workstation, are recommended.[2] Additional lighting for reading poor-quality documents may be obtained through the use of a task light.

The monitor should be positioned at a 90-degree angle to strong light sources such as windows or bright lights. Computer users should avoid facing an unshaded window, as the difference in brightness between the monitor screen and the area behind it may be very stressful to the eyes. Users should also not face away from the window, as they can then cast shadows on the computer screen. Shades, curtains, or blinds can be used to adjust light levels during the day. Screen brightness and contrast can also be adjusted to balance with

room lighting and provide maximum visibility; lowering screen brightness will enhance image stability and reduce character flicker.[2]

Anti-glare filters can be placed over the VDT screen to reduce glare and reflections, but these should be considered supplemental and are not a substitute for proper lighting and monitor placement. Furthermore, some filters are ineffective; only those with the seal of acceptance from the American Optometric Association (AOA) have been proven to reduce monitor glare.[2,4]

The ideal color combination for viewing documents is a white background with black letters. Users should avoid using more than four colors on the screen at a time. Strain-producing color combinations include blue and green and blue and red.

Correction of Existing Vision Deficits

Although VDTs emit radiation, the levels emitted have been found to be well within safe limits and are often unmeasurable.[2,5] The AOA considers it unlikely that the use of VDTs causes permanent changes or organic damage to the eyes or visual system.[2,5]

Despite these conclusions, a high percentage of computer users have been found to have uncorrected or undercorrected vision problems (eg, farsightedness, astigmatism).[5–7] Often these deficits were present prior to beginning VDT work, but the demands imposed on the visual system did not exceed the system's ability to accommodate. After the individual begins VDT work, however, these un- or undercorrected problems can become major contributing factors in the development of eye strain. For this reason, all VDT operators should undergo an eye examination prior to or soon after beginning VDT work and periodically thereafter.[2]

If you think you are experiencing eye strain and have done all you can to enhance your work environment, see your eye doctor for an examination and talk to him or her about prescription eyeglasses designed specifically for computer users. Standard eye examinations do not simulate computer screens; new technology can enable your eye doctor to prescribe glasses that are designed for the way you read text on a computer screen. Special lens coatings can also reduce glare and maximize visual comfort.[2] Be sure to take frequent breaks to get your eyes focused off the screen and into the distance to relax the eye muscles. VDT workers who experience problems with eye focusing or eye coordination that cannot be adequately corrected with eyeglasses or contact lenses may require a program of optometric vision therapy designed to treat specific binocular vision dysfunctions.

Summary

Eye and vision problems are the most frequently reported health-related problem in computer workers and can lead to lowered productivity, increased error rate, and reduced job satisfaction.[2] Steps should be taken to reduce the potential for development of stress and related ocular discomfort in the workplace. Such measures include frequent rest breaks, ergonomic alterations to the workstation, use of proper lighting, and correction of vision deficits.

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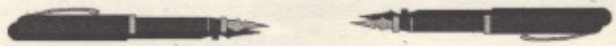

From left to right, Walter Pagel, incoming BELS president, his wife, Frances, and Stephanie Deming sharing in the general merriment of the BELS meeting in San Diego in May 2002.

Congratulations!

BELS is delighted to welcome 31 new members from three examinations. Contact information is available on the BELS website, *www.bels.org*.

May 4, 2002 San Diego, CA

Teresa Carson, ELS
Lawrence, KS

Beverly Ann Peters, MA, ELS
Garland, TX

Naomi L Ruff, PhD, ELS
San Francisco, CA

Charlotte S Seidman, MS, MPH, ELS
El Cajon, CA

Stacy Simpson, ELS
Grayslake, IL

October 30, 2002 San Diego, CA

Naina Chohan, ELS
Plymouth Meeting, PA

Jodi Lynn Woody Clifford, MA, ELS
Long Beach, CA

Roberta Connelly, MS, ELS
Seattle, WA

Toniann Derion, PhD, ELS
Pleasanton, CA

Randall J Fritz, DVM, ELS
Rochester, MN

Cindy W Hamilton, PharmD, ELS
Virginia Beach, VA

Tamara K Locke, ELS
Rochester, MN

K Alexandra MacDonald, MFA, ELS
Brooklyn, NY

Barbara McGowan, ELS
San Diego, CA

Marianne Mallia, ELS
Houston, TX

Mary Anne Mitchell, ELS
Fort Worth, TX

Aron Ross, PhD, ELS
Denver, CO

Gayle Nicholas Scott, PharmD, ELS
Chesapeake, VA

Maria B Uravich, ELS
Wesley Chapel, FL

Elizabeth Villeponteaux, ELS
Chapel Hill, NC

November 16, 2002 Madison, WI

Michele Arduengo, PhD, ELS
Madison, WI

Julia R Barrett, MS, ELS
Madison, WI

Krista E M Galley, MS, ELS
Tallahassee, FL

Sam Jackson, ELS
Baraboo, WI

Monte L Kendrick, MS, ELS
Madison, WI

Kari B Kenefick, MS, ELS
Madison, WI

Isobel Maciver, PhD, ELS
Madison, WI

Anna Marshall, MS, ELS
Seattle, WA

Julie M Johnson Miles, ELS
Fall River, WI

Brenda Moss, ELS
Palatine, IL

Terri Sundquist, MS, ELS
Oregon, WI

BELS Letter
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