

# The Society for In Vitro Biology

# 2003



## Annual Report

### PRESIDENT'S REPORT

It has been my honor to represent and serve as President of the Society for In Vitro Biology (SIVB) for these past two years. As President and chair of the SIVB Executive Board, accomplishments include building and strengthening partnership with others in the scientific biotechnology community. These accomplishments occurred despite the growing deficit in society membership and operational revenues. As of this annual report to the membership, the SIVB actively participates as an associate member of the American Association for the Advancement of Science (AAAS), American Institute of Biological Science (AIBS), BioOne Consortium and the Council for Agricultural Science and Technology (CAST). To further reduce costs, consolidate administrative operations and promote membership retention and growth, as of July 1, 2004, the SIVB member services will be managed by New Beginnings Management.

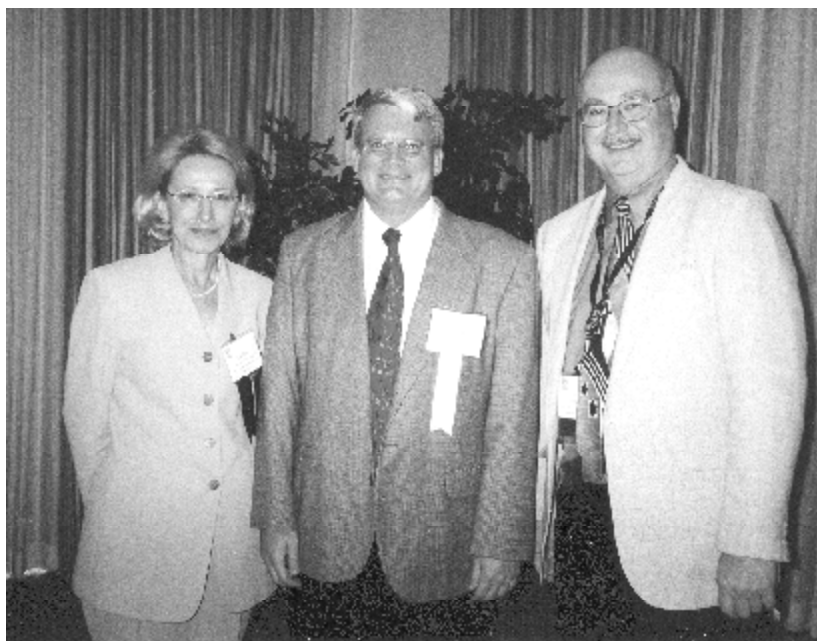
Historically, the Society, as the former Tissue Culture Association (TCA), was the worldwide communication and educational source for scientists who pioneered the profession and development of in vitro biology. These scientists developed the technology and set the standards for using cells, tissues and organs for the production of human viral vaccines, models for cellular aging, tissue substitutes and other tissue models for advancement of science and medicine. The current diversity of the society reflects advancements in the areas of mammalian cell and tissue culture, as well as the areas of plant cell culture and propagation, invertebrate, marine and fish cell culture and bio-products, and in vitro alternatives for toxicology research, genomics and tissue engineering.

The 2004 World Congress on In Vitro Biology and the 11th International Conference on Invertebrate Cell & Tissue Culture held May 22-26 in San Francisco, CA represent the international partnerships and relationship that are the foundation of the society. The World Congress "Emerging Global Technologies," co-sponsored by the Japanese Tissue Culture Society (JTCA), Japanese Association for Animal Cell Technology (JAAC), Japanese Society of Plant Cell & Molecular Biology (JSPCMB), Canadian Chapter of the International Association of Plant Tissue Culture and Biotechnology (IAPTCB), Swiss Tissue Culture Society (STCS), and the European Tissue Culture Society (ETCS) continues the historical society organizational forum where scientists gather to discuss, improve and continue to set national and international policy regarding regulation and use of cells, tissue and organs and their products. The presence of the Congress keynote speaker, Kary Banks Mullis, 1993 Nobel Laureate in Chemistry "For the Invention of Polymerase Chain Reaction (PCR)" and plenary symposiums to recognize the lifetime achievements of Walter Nelson-Rees, Thomas D. C. Grace and Trevor A. Thorpe clearly meet the vision, mission and goals of the SIVB to:

- Support programs of scientific education, training and public information;
- Publish scientific journals and convene educational meetings, workshops and symposia;
- Promote the contributions of scientists in the area and profession of in vitro biology and biotechnology;
- Recognize the achievements of the membership and other scientists contributing to the development of in vitro biology;
- Set the standards and professional behavior for the ethical use of cells, tissues and organs in the development of research and clinical products.

The Society for In Vitro Biology is about people and the recognition of their scientific achievements that serve as the backbone for in vitro biology in global medicine and health. This year's recognition of members in all Sections is but a small token to the people who dedicated years of their own time and funds and intellectual property to realize the TCA/SIVB. It has been my privilege to be a part of the Society history. The opportunity to meet, facilitate and recognize many scientists whose pioneering accomplishments and contributions will remain long past the changes that will occur under new leadership.

Sandra L. Schneider, DrPH, President  
drsandra@stic.net



Sandra L. Schneider, DrPH, SIVB President; Richard L. Stouffer, PhD, 2003 Congress Plenary Speaker; and William J. Smith, PhD, 2003 Program Committee Chair at the 2003 Congress on In Vitro Biology.

## Secretary's Report

Active participation by current members, the enthusiasm of new members, an outstanding meeting in Portland, and the participation of many more students, due to free meeting registration, made 2003 a great year. Members are the driving force of any organization and the SIVB is no exception. We are fortunate to have as members many outstanding scientists who are willing to share both their scientific and organizational talents with other SIVB members. This openness provides an excellent opportunity for scientists at the beginning of their careers to interact with established researchers.

Some of the great strengths of the SIVB, the interdisciplinary nature of our annual meetings and World Congresses, the inclusiveness of the organization, the moderate size of the meetings, all provide special opportunities for our members. The larger venue of the Society World Congress every four years encourages international interactions.

As with any organization we can only be as strong and vibrant as our members make us. We hope you will bring your colleagues to join you as members and add their talents and enthusiasm to our society. Volunteer for a committee or run for a Section office and help form the policies of the SIVB.

The board is working hard to keep the SIVB on the cutting edge of science in both annual meetings and publications. If you have ideas for improvements or concerns about any aspect of the society, I encourage you to speak to a board member so your contributions can be considered for the benefit of the whole society.

I have greatly enjoyed serving as SIVB Secretary for the past four years and I know that newly elected Secretary Nancy Reichert will serve you well.

Barbara M. Reed, Secretary  
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## Treasurer's Report

The fiscal results for the society for 2003 is once again not filled with good news. We started 2003 with a net deficit of \$9,384 and we ended the year with a deficit net asset of \$112,669. Approximately half of the 2003 deficit came from the annual meeting. If we can gain any positive out of this deficit it is that the deficit was not as large as what was anticipated by the budget. Through the efforts of the Board, the development committee, the program committee, the section chairs and our membership we were able to partially correct the situation. We are continuing to find ways to cut our costs and the finance committee and the Board is working diligently to identify areas of cost savings. The major issue continues to be that our revenues continue to decline. In this next year, it will be critical to increase our revenues through our membership, publications and annual meeting. In order to bring the Society back into a positive cash flow, it is imperative that we all continue to work together to find ways increase our revenue and contain our costs. This will obviously require some dedication from our membership. I would like to commend the efforts of the section chairs and their membership as well as the development committee for their efforts in finding ways to resolve our current financial situation. The new Board of Directors, under the leadership of President, David Altman, and Development Committee must continue to the efforts of the previous Board. David Songstad, Development Committee Chair, will be leading a capital campaign to build an endowment that hopefully will be instrumental in helping the Society survive and grow. The 2003 Annual Report includes a Treasurer's Summary Report consisting of a Statement of Financial Position and Statement of Activities for the year. The full auditor's report is available from the business office on request.

Richard Heller, Treasurer  
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## Business Office Report

The Business Office activities focused on the 2003 Congress on In Vitro Biology, publications and membership. The 2003 Congress on In Vitro Biology was held in Portland, Oregon from May 31 – June 4, 2003 at the Doubletree Hotels Complex. The 2003 Congress highlighted Dr. Richard L. Stouffer, PhD, from the Oregon Regional Primate Research Center. He spoke on ARTistic Use of Nonhuman Primates: IVF to Cloning and Beyond. Also, there was a presentation of the Plant Fellow Award to Barbara M. Reed and Mary Ann Lila. Additionally, in 2003, a new award, the Invertebrate Fellow Award, was presented to its first recipient, Marcia J. Loeb. Given the current discussion on bioterrorism and the scientists' responsibility in these situations, a symposium was presented entitled, "Countering Chemical and Biological Threats: Current Research." Arrangements were made for special events at The Scotts Company on May 31, 2003; the Pittock Mansion and Forestry Center for the Plenary Reception on June 1, 2003; a Fun Run/Walk on June 3, 2003; and a winery tour at the Greyhorse Winery on June 5, 2003. The Society for In Vitro Biology (SIVB) has always believed that the future of in vitro biology lies in today's students. To support the Society's vision of encouraging education and informational exchange, in 2003, SIVB offered all students free registration to the scientific sessions of the 2003 Congress. Also, as an added bonus, all students who registered and attended the 2003 Congress received free membership to the Society in 2004! SIVB is committed to the future endeavors of science and encourages the continued growth of upcoming researchers and scientists. As a result of this endeavor, student registration doubled over previous years.

Certain circumstances can be attributed to the 2003 Congresses attendance: 1) having convened the meeting in May at the end of the academic semester caused University professionals to be inconvenienced, 2) the SARS outbreak (whether one believes SARS has been overblown as a health threat or not, there is no disputing that one outcome of the disease is that it has fundamentally altered the way associations thing about and plant their conventions and the contracts behind those events), 3) the war on Iraq, and 4) the sluggish world economy, which was the factor that had the greatest potential effect on impacting meetings for 2003. At the 2003 Congress on In Vitro Biology, the attendance reached 383. There were 159 members, 13 non-members, 12 post docs, and 24 one-day registrants. Also, there were 49 student registrants, and 5 guests registered.

The 2004 World Congress on In Vitro Biology, an international congress held every four years, focuses on issues pertinent to Plant, Vertebrate, Invertebrate, and Cellular Toxicology research and will give participants a unique learning experience on plant and animal cell culture and biotechnology. The fifth World Congress in 2004, co-sponsored by the Japanese Tissue Culture Society (JTCA), Japanese Association for Animal Cell Technology (JAAC), Japanese Society of Plant Cell & Molecular Biology (JSPCMB), Swiss Tissue Culture Society (STCS), European Tissue Culture Society (ETCS), and the Canadian Chapter of the International Association of Plant Tissue Culture and Biotechnology (IAPTCB) will be held May 22-26, 2004 in San Francisco, California. The World Congress theme, "Emerging Global Technologies," will attract scientific participation from many countries. The Hyatt Regency San Francisco at Embarcadero Center will be the site of the 2004 World Congress on In Vitro Biology. This downtown luxury hotel on San Francisco Bay in the Financial District across from the Ferry Building, is part of the dynamic 8-block Embarcadero Center, convenient to Fisherman's Wharf, Chinatown, Moscone Convention Center, Ghirardelli Square, North Beach and Union Square. It is adjacent to all forms of transportation - BART (Bay Area Rapid Transit), Muni intra-city transit, and California Street Cable Car.

The 2004 World Congress will highlight Dr. Kary B. Mullis, Founder of Altermune and 1993 Nobel Laureate in Chemistry "For The Invention of Polymerase Chain Reaction (PCR)." He will be presenting, "Chemically Programmable Immunity: The Challenge and Approach of Today's Disease/Pathogen Drug Treatments." Also there will be a presentation of three Lifetime Achievement Awards during the Congress: Dr. Thomas D.C. Grace, Dr. Walter Nelson-Rees, and Dr. Trevor A. Thorpe. There will also be a number of fellow awards presented during the Congress.

Arrangements have been finalized for a San Francisco Bay Cruise event. Attendees will be invited to sit back, relax, and enjoy an evening dinner cruise along the San Francisco Bay on May 23, 2004. The Second Annual SIVB 5k Fun Run/2k Walk, is scheduled for 6:15 am on Tuesday, May 25, 2004. Please join SIVB to run along Fisherman's Wharf.

In 2003, the Board requested the Business Office find additional ways to reduce expenditures. In reviewing the finances of the Society, it was realized that the best solution for reduction of expenditures was to have a management company run the day-to-day operations of the Society. To facilitate this, as of July 1, 2004, the Board has agreed to have New Beginning's Management take over the running of the business office. New mailing addresses will be sent out to all members through broadcast email and by mail as soon as details have been finalized. Members will see no difference in operations, as SIVB's current Managing Director and Publications Manager comprise the major staff of New Beginning's Management.

2003 was an exciting year for the Business Office's Publications Department. The Business Office continued to partner with both CABI Publishing and Allen Press to publish the *In Vitro Cellular and Developmental Biology* journals and worked closely with the Publications Committee to assist in a number of decisions that were



finalized during the year. Both journals, realizing the importance of 4-color in the *In Vitro* publications, worked to reduce the 4-color charges in both the *Animal* and *Plant* journals.

In 2003, the *In Vitro Cellular and Developmental Biology – Plant* began taking steps to increase its marketplace visibility. SIVB signed a contract for *In Vitro – Plant* to join the BioOne consortium in February 2003. Issues began showing up on the BioOne site in December 2003. To move with the current marketplace needs, *In Vitro – Plant* began to push for an online manuscript system, which is hoped to be implemented by the end of 2004. Additionally, it was noted the Dr. Phillips did not have an editorial assistant to help him with the increased workload involved in producing the *Plant* journal. This has been remedied and the Editor-in-Chief position will now include editorial assistance from now on.

The *In Vitro – Animal* journal continues to see tremendous growth this year in online visibility. Allen Track, our online manuscript submissions system became active in November of 2002 and has already increased the journal's visibility. To assist in the *Animal* journal's drive for more papers, SIVB instituted an ASAP site, which went active on April 8, 2003. As part of the consortium with BioOne and its online journals, *In Vitro – Animal* has shown growth in additional online subscription income. *In Vitro – Animal* has continues to have articles listed in the top 25 most requested articles' list in BioOne. The Society is currently displaying abstracts from its published *Animal* journals on the PubMed website. Allen Press is now forwarding this information to PubMed on the same day the journal goes live online on our site, which increases visibility. The *Animal* site continued to be updated by the addition of information on ASAP Publishing.

To further increase the visibility of the *Animal* and journal, the Business Office continued advertising the recent updates in the publications. A postcard was designed and mailed to all members and authors in the journals touting the recent and upcoming advances for the journals. In addition, SIVB published a Call for Papers of the journal on Biotechniques.com and through BioSpace. Allen Press is continuing to forward abstracting information to PubMed immediately upon publication of each issue of the journal. The Business Office continued its heavy campaign to activate online access to all library subscribers who had eligibility for online access, but had not forwarded the appropriate information to activate the service. As a reminder, for eligible members wishing to access the online version of the *In Vitro – Animal* journal, you will need your ID number and password. Your ID number is your membership number to the Society. Your password is your first name as recorded in the SIVB Membership database (including capitals). If you do not have this information and wish to receive it, please contact the business office at [sivb@sivb.org](mailto:sivb@sivb.org).

The publications department was very active in other areas during 2003. The *In Vitro Report* completed its transition to be an online publication. The first online issue to go live was the January – March 2003 issue. This was originally designed as a pdf that would be printed as before. The first completely online publication was the October – December 2003 issue. This was designed completely in html. In the first half of 2003, the SIVB website added a Public Policy section to keep members informed of current issues. Additionally, an SIVB merchandise page was added that offers many of the SIVB items for sale all year round. The Business Office added more detailed information on copyright transfer information on the site with links to Ingenta and Infotrieve to allow nonmembers to purchase single articles from the journals.

In 2003, the 2003 Congress on In Vitro Biology's Abstract Issue was held for publication until the final possible moment to allow participants the most possible time to submit abstracts. Abstract issues were handed out at the Congress to all participants, while those not attending received their issues in the mail. This was the first time that issues had not been mailed prior to the meeting, but it did allow for the most complete information to be provided to all attendees and members. To allow a preview of the materials at the 2003 Congress on In Vitro Biology, the program and abstracts were uploaded as pdf's for member's review on the website a few weeks prior to the event.

The Business Office would like to thank all the members of the Society who have given of their time to support the Society for In Vitro Biology. A special thanks to the 2002-2004 Board of Directors, Committee, and Section Chairs for their support to the vision of the Society. As always, thank you to the volunteers at the 2003 Congress. We welcome your ideas and suggestions in promoting the Society for In Vitro Biology. Contact us at either [marietta@sivb.org](mailto:marietta@sivb.org) or [sivb@sivb.org](mailto:sivb@sivb.org).

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## Cellular Toxicology Section

The 2003 Annual Meeting of the Society of In Vitro Biology in Portland, Oregon had very active collaboration between Cellular Toxicology and the Vertebrate Section to bring about a timely and informative scientific meeting. An exciting array of Sessions-In Depth, Contributed Papers, Interactive Poster Sessions and Roundtable Discussions were presented. SID's included "Countering Chemical and Biological Threats: Current Research" convened by Elizabeth Roemer and "Epigenetic Toxicants, Altered Intra-Cellular Signaling and Modulated GAP Junctional Intercellular Communication" convened by Alda Vidrich. A Contributed Paper Session on Cell Models and Cellular Differentiation was moderated by Kim O'Connor. As always, the Interactive Poster Sessions drew a lively attendance as well as fruitful discussions among attendees. These sessions covered a variety of topics including In Vitro Tools/ Evaluation of Toxicity moderated by Bobbie Thompson and In Vitro Tool and Techniques moderated by John Harbell. This year's Roundtable Discussion sessions were introduced. The topics covered were Predictive Toxicology moderated by John Harbell and Biopharmaceutical Manufacturing: Addressing the Needs for Staffing, Facilities and Processes Development moderated by Dennis Laska and Bill Smith; The CTS thanks the many sponsors and exhibitors who supported the Society's program and events or that made contributions to the Society's general fund.

Two awards were given for work in the field of Toxicology. The CTS awarded the annual Cellular Toxicology Student Award to Salih S. Kocer from the State University of New York for the interesting and very timely study entitled "Metalloprotease Inhibitors, Non-microbial Chemically Modified Tetracyclines and Ilomastat, Block Anthrax Lethal Factor Activity In Vitro." The Joseph F. Morgan Award, which provides travel funds for Canadian students to attend the Annual Meeting of the SIVB, was given to Vivian Dayeh from the University of Waterloo for her work entitled "Enhancing the Sensitivity of Rainbow Trout Cells in Culture to the Toxicity of Metals." The CTS appreciates the efforts of all who submitted their work for consideration. All are winners!

The annual CTS business meeting again was held jointly with the Vertebrate Section. The 2004 World Congress program dominated the discussion and by meeting's end a program outline emerged. The World Congress program will include State-of-the-Art Symposia and workshops on such topics as stem cells, RNA interference, tissue engineering, cell culture systems for production of pharmaceuticals, proteomics and laser capture microdissection.

On behalf of the Cellular Toxicology Program Committee, we thank you for your attendance of the 2003 meeting and participation in its program and many activities. We appreciate your continued support of the mission and objectives of the CTS and of the SIVB. See you all again in 2004.

Alda Vidrich, Chair, Cellular Toxicology  
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Program Co-chair Mark Jordan and Convener Marceline Egnin at the Plant Biotechnology Social



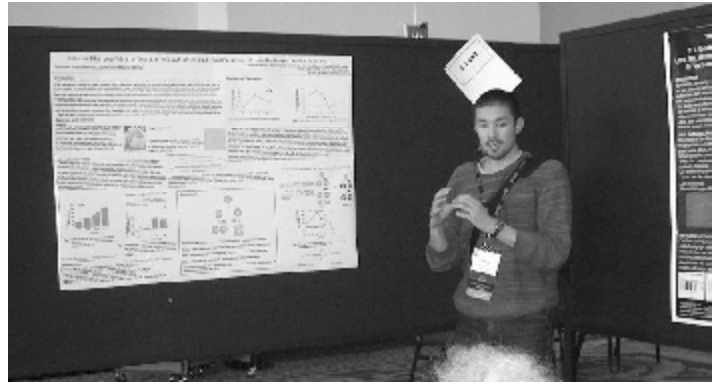
Sandra Schneider, Tohru Masui, and William Smith take a minute to chat during the Vertebrate/Cellular Toxicology Section Social

## Invertebrate Section

The Doubletree Hotel Portland-Jantzen Beach located on the beautiful Columbia River provided the ideal setting for the 2003 Congress on In Vitro Biology, held May 31–June 4. Portland, Oregon, affectionately known as City of Roses, was in full bloom and proudly welcomed all participants.

Much hard work, dedication and commitment to the field by many enabled the Invertebrate Section to put on a very successful and informative program throughout the conference. An Interactive Invertebrate Poster Session was moderated by Dr. Guy Smagghe, Ghent University. This poster session entitled Insect Midgut Stem Cell Lines and Insect Cell Lines for Biocontrol included the following posters presentations: Effect of Bt Proteins on the Viability of Selected Insect Cell Lines by Cynthia L. Goodman, USDA.ARS.BCIRL, H. Nabli, J. Baum, T. Malvar, B. Isaac, Y-J. Lee, A.H. McIntosh and S.J. Phipps; Insulin-like Peptides Stimulate Midgut Stem Cell Proliferation of Lepidopteran Larvae In Vitro by Shintaro Goto, Kobe University, Marcia J. Loeb, and Makio Takeda; Effects of Insect Hormone Actions, 20E and JH, on Midgut Stem Cells of Lepidoptera by Guy Smagghe, Ghent University, W. Vanhassel, C. Moeremans, K. Elsen, and M. Loeb, and Who Controls Midgut Stem Cell Differentiation - the Stem Cell or the Environment? by Raziel S. Hakim, Howard University, M. Loeb, and J. Young.

Marcia J. Loeb, USDA (recently retired) and Raziel S. Hakim, Howard University co-convoked an intensive symposium entitled Growth Factors in Growth, Regeneration and Differentiation of Invertebrate Cells. The following papers were presented: (1). Co-culture of Trypanosoma musculi with Spleen-derived Adherent Fibroblasts and Macrophages Ensures Survival In Vitro by Winston A. Anderson, Howard University; Lymnaea EGF, (2). Roles in Neurite Outgrowth In Vitro and In Vivo by Andrew G.M. Bulloch, University of Calgary, Canada, (3). Growth-blocking Peptide Family and Its Multiple Effects on Insect and Vertebrate Cells by Yoichi Hayakawa, Hokkaido University, (4). Regeneration of Walking Legs in the Fiddler Crab, Uca pugilator: The Role of Growth



*Dr. Shintaro Goto was presenting his poster at the Interactive Poster session.*



*At the closing Banquet on Wednesday evening, our current Section President Amy Wang (GlaxoSmithKline), and Dr. Cindy Goodman (USDA) received awards from the SIVB President. And as extra surprise and honour, Dr. Marcia Loeb (USDA) was given the "SIVB Presidential Award" by the SIVB President, Dr. Sandra Schneider, for her rich career in insect cell research. Several young scientists and PhD students in invertebrate section were honoured with SIVB Awards. Dr. Shintaro Goto was the winner of both Student Travel Award and The Honor B. Fell Award. Vivian Dayeh (not shown), a PhD candidate from the University of Waterloo, Waterloo, ON, Canada received both SIVB Student Travel Award and the Morgan Award. The invertebrate section highly encourages young scientists to actively participate at the SIVB meetings and activities.*



*Amy Wang, the Invertebrate Section President was presenting the first "Invertebrate Fellow Award" to Dr. Marcia Loeb*



*Invertebrate Section Business Meeting, Portland, Oregon*



*Following recent elections the following people make up the Invertebrate Section Executive for 2005-2006 term: Dr. Guy Smagghe (third left of the above picture) President, Dr. Raziel Hakim (second left) Vice President, and Guido F. Caputo, Secretary/Treasurer (not shown.)*

Factors by Penny M. Hopkins, University of Oklahoma, (5). Regulation of the Fate of Stem Cells from the Midgut of the Caterpillar, *Heliothis virescens* by Marcia Loeb, USDA, and (6). Modulation of Growth Factor Signaling During *C. Elegans* Vulva Development by Nadeem Moghal, California Institute of Technology.

A second symposium, a joint session with the Vertebrate Section convened by Guido F. Caputo, Natural Resources Canada was entitled Delivery of Genes to Mammalian Cells with Baculoviruses. The following papers were presented: Isolation and Characterization of Transgenic Insect Cell Lines with Humanized Glycoprotein Processing Pathways by Donald L. Jarvis, University of Wyoming; Recombinant Baculoviruses as Mammalian Cell Gene-delivery Vectors by Tom A. Kost, GlaxoSmithKline, and Enhancing the Sensitivity of Rainbow Trout Cells in Culture to the Toxicity of Metals by Vivian Rashida Dayeh, University of Waterloo, Canada.

Amy Wang, Invertebrate President  
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Guido F. Caputo, Invertebrate Secretary  
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## History Society

The History Society was established in 1979 at the Seattle Washington Tissue Culture Association (TCA) meeting as the Records and Historical Committee. The charge of the committee is to preserve historical information concerning the growth, maintenance and in vitro experimental use of cells, tissues and organs. The History Society, in conjunction with the Records and Historical Committee oversees contributions to the SIVB archives located in the main library of the University of Maryland, Baltimore, MD. This archived material is available to all that would like to acquaint themselves with the history of tissue culture and scientific application to in vitro biology.

Members of the History Society and Records and Historical Committee are Leonard J. Schiff (President and Vertebrate Member), Jon Ryan (Vice President), Martha Wright (Secretary/Treasurer), Karl Maramorosch (Invertebrate Member), June Bradlaw (Cellular Toxicology Member), and James H. M. Herderson (Plant Member). The Committee held an informal meeting at the 2003 Congress on In Vitro Biology, Portland, OR.

Leonard J. Schiff  
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## Plant Biotechnology Section

In 2003, the Plant Section expanded the definition of scientific areas we encompass. We have always been rich in the more classical aspects of in vitro biology, which enabled our Section to develop its strength and character. We have also spread into research areas not envisioned by many when our Section was formed. Since we actually encompass a broader area of scientific endeavor than represented in our bylaws, I appointed a committee [Drs. Ray Shillito (Chair), Ebrahim Firoozabady, Todd Jones, Heidi Kaeppler, and Barbara Reed] to update our Section's bylaws. The updated bylaws were sent to various Plant Section members for additional input, then voted on at the Plant Section Business Meeting in Portland. The majority of the members present voted to change the bylaws, so it was put to a vote on our most recent ballot. It again passed by a majority vote. Among those changes included the name of our Section. As of 2004, we will be called the Plant Biotechnology Section with the membership described as follows. "Plant biotechnology may be defined as the application of knowledge obtained from study of the life sciences to provide technological benefit to plant biology. Plant biotechnology includes all forms of plant tissue culture, biochemistry, and molecular biology, and genomic methodologies applied to the plant sciences, including the study of whole plants derived from plant tissue culture and/or molecular techniques."

The Plant Section's scientific program presented at the 2003 Congress on In Vitro Biology in Portland was outstanding. Dr. Harold Trick (2003 Plant Program Chair), along with the entire Plant Planning Committee, prepared a comprehensive, diverse and cutting-edge program. Dr. Mark Jordan (2003 Plant Program Co-Chair) worked extremely hard to raise funds to support this program and updated our list of contacts for fund raising. Thank you to all involved!

To keep the Plant Section and meeting registrants better informed about our Section's functions during the 2003 Congress, Ms. Marietta Ellis, Managing Director of the SIVB, asked the Section officers to draft an invitation that would be sent to all via email and be included in the registration package. That effort attracted nearly 50 people to attend the Plant Planning Meeting, and nearly 100 attended the Plant Section Business Meeting. We hope this level of involvement continues! Post-meeting, we (the officers) sent thank you letters to all Plant Section meeting attendees and letters to Section members that did not attend, reminding all of the 2004 World Congress on In Vitro Biology to be held in San Francisco.

Seeking greater input from Plant Section members, five new committees were proposed and there was enough volunteer interest to activate three. They are: Finance Oversight that helps the Section officers decide on and authorize expenditures and related budget issues; Rapid Response that works in conjunction with the SIVB Public Policy Committee to coordinate responses to emerging issues of professional importance; and New Horizons (Phase 2) that will evaluate comprehensive survey data collected a few years back and make recommendations on proposed plans of action.

With some of the efforts mentioned above we are trying to foster greater involvement within our Section. One goal was to reverse the downward trend of membership in the Plant Section and the SIVB in general. Our Section membership was 498 in 2001, 411 in 2002 and 422 in 2003. Overall, the SIVB lost 172 members in 2002 and 58 in 2003 (881 members). I am thrilled we gained a few members in 2003, but am saddened that some other Sections lost ground. For the Plant Section to remain viable, the SIVB as a whole must remain viable.

The 2004 World Congress on In Vitro Biology promises to be outstanding with Dr. Wayne Parrott as the 2004 Program Chair. Planned are four Society-wide sessions that should be of interest to a diverse audience. Plus, the Keynote Speaker will be Dr. Kary Mullis, Nobel Laureate, with this session co-funded by the Plant Biotechnology Section and Bayer CropScience. The collective, comprehensive efforts of Dr. Mark Jordan (2004 Plant Biotechnology Program Chair), Drs. Allan Wenck and Peggy Ozias-Akins (Plant Biotechnology Program Sr. and Jr. Co-Chairs, respectively), and the entire Plant Biotechnology Program Committee have ensured we will have a full slate of exciting sessions in San Francisco. Thank you!

In closing, I would like to acknowledge the great contributions made by Dr. Suzanne Rogers (Plant Section Vice Chair) and Dr. Lisa Lee (Plant Section Secretary). In all discussions and collective decisions, each offered their unique views and ideas while keeping the best interest of the Plant Section at the forefront. Thank you! I would also like to express my gratitude to those Section members I sought advice from this past year. As busy as each of you were, you always made time to help. A final thanks to those Section members who volunteered to serve on our new committees. I hope you remain involved. With your help, we can all look forward to a productive, scientifically-rich year ahead.

Nancy A. Reichert, Plant Biotechnology Section Chair  
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## Vertebrate Section

The Vertebrate Section continues its long standing in the Society for In Vitro Biology by providing its members with information on the latest research activities in vertebrate cell biology, a training forum and continuing education on research methods and applied sciences. The Section continued these activities at the 2003 Congress on In Vitro Biology by hosting or co-hosting 6 symposia and workshops, 1 contributed paper session, 3 round tables and 2 interactive poster sessions. Symposia and workshop included: Cryopreservation, Convened by Barbra Reed, USDA-ARS, Valerie Pence, Cincinnati Zoo and Botanical Garden, and Lia Campbell, Organ Recovery Systems, Inc.; Epigenetic Toxicants, Altered Intracellular Signaling and Modulated Gap Junctional Inter-cellular Communication, Convened by Alda Vidrich, University of Virginia Health Care System; Countering Chemical and Biological Threats: Current Research, Convened by Elizabeth Roemer, State University of New York - Stony Brook (ably attended by William Smith, U.S. Army Medical Research Institute of Chemical Defense (USAMRICD), in Ms. Roemer's absence; Advances in Cancer Modeling and Treatment, Convened by Richard Heller, University of South Florida, and Paul Price, GIBCO Invitrogen; Delivery of Genes to Mammal Cells with Baculoviruses, Convened by: Guido F. Caputo, Natural Resources Canada; and In Vitro Quantitation of Angiogenesis: BD Biosciences Workshop, Convened by Steve Isely, BD Biosciences Discovery Labware. Round table sessions included: The Future of Serum: A Roundtable Discussion; Moderated by William Smith, USAMRICD; Biopharmaceutical Manufacturing: Address the Needs of Staffing, Facilities, and Processes; Moderated by Dennis Laska, Eli Lilly and Company, and William Smith, USAMRICD; and Predictive Toxicology, Moderated by John Harbell, Institute for In Vitro Sciences, Inc. (IIVS). Contributed papers included Cell Models and Cellular Differentiation, Moderated by Kim O'Connor, Tulane University. Two interactive poster sessions, In Vitro Tools and Techniques; Moderated by John Harbell, IIVS; and In Vitro Tools/Evaluation of Toxicity, Moderated by Bobbie Thompson, HyClone Laboratories, gave authors a scheduled opportunity to summarize and discuss their work.

The business meeting of the Vertebrate Section was held jointly with the Cellular Toxicology Section. Alda Vidrich, Cellular Toxicology Chair, opened the meeting. Janis Demetrulias, Vertebrate Chair, welcomed the attendees. A special thank you was made to Congress Donors and Sponsors with special recognition to the Congress Laureate Sponsor, the US Army Medical Research and Materials Command. Congress contributors included Gibco-Invitrogen, BD Biosciences Discovery Labware, Caisson Laboratories, MatTek Corporation, Promega Corporation. Nominations were made for Vertebrate and Cellular Toxicology Section Co-Chair and Secretary elections for the 2004-2006 term. Current Co-Chairs, William Smith, Vertebrate, and Gordana Vunjac-Novakovic, Cellular Toxicology, will become Section Chairpersons. Sections worked together to identify nominees for the upcoming Society officers and committee member elections. Section and Society elected individuals will be announced and take office at the business meeting in San Francisco.

The Sections identified potential program areas for the 2004 World Congress which will be held in San Francisco, CA. 2004 World Congress Program Chair, Wayne Parrott, had challenged the sections to identify areas with broad scientific applications for which all of the Society would have an interest. Among the topics discussed were: Recent Technology and Microscopic Techniques; Cell Identification; Contamination and Standardization; Stem Cells; Updates on High Throughput Screen Technology: Approached and Applications; New Medium Development; Interfering RNAs and Gene Knockdown; Cell Based Biosensors; Frontiers of DNA Analysis; Gene and Gene Targeting Integration; Tissue Engineering; Solving Culture Problems; and Cells to Screen for Ecotoxins. The need for continued fund raising for the 2004 World Congress was emphasized and discussed.

Spring of 2003, Vertebrate section members had been asked to complete an online survey designed to provide a list of suggested topics for future meeting and to highlight individual expectations from membership in the Society. 35% of the members responded to the survey. Numerous topics were suggested for 2004 and several have been incorporated in the initial plan for the upcoming World Congress. Section members indicated that they expect and are provided with exposure to cutting edge science and the practical application of established and innovative scientific methods. The 2004 World Congress meets those expectations and promised to be a very exciting meeting. The Congress will start Saturday, May 22, and continue through Thursday. I look forward to seeing you in San Francisco.

Janis Demetrulias, Vertebrate Section Chair  
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## STANDING COMMITTEES

### Awards

The Fellow Award recognizes members of the SIVB who have been active members for at least 10 years. A Fellow has made outstanding contributions in their area of specialization or discipline to include research, teaching, and administration in public, government, academic, or private industry activities. This was the first Invertebrate Fellow Award to be presented by the SIVB. The Invertebrate Fellow Award was presented to Marcia J. Loeb for her many contributions to the field of invertebrate cell culture, during the last 40 years. She has been not only an excellent endocrinologist and reproductive biologist of insects, but also a pioneer in the application of in vitro technology to basic and applied biology in insect science field for more than 20 years. There were two Plant Fellow Awards presented in 2003 to Mary Ann Lila and Barbara M. Reed. Dr. Lila's research emphasizes integration of biological and engineering approaches to decipher complex problems. Working extensively with berry germplasm, her team is currently determining the mechanisms by which plant secondary products, particularly bioflavonoids, intervene in human health disorders. Dr. Reed developed an innovative method for cold storage of in vitro germplasm based on concepts of cold acclimatization and desiccation stress. She led research, which produced detailed information on the bacterial contaminants, antibiotic responses, and methods for bacterial elimination from tissue cultures of diverse genotypes of several genera.

A number of Distinguished Service Awards were presented at the 2003 Congress on In Vitro Biology. The Education Committee members, consisting of Carol M. Stiff, Margaret L. Smith, Sarwan K. Dhir, Michael E. Kane, Zuzana Zachar, Patricia E. Bossert, Judi Heitz, Burton C. Lidgerding, Valerie Pence, Kenneth Torres, and Elizabeth J. Roemer, were presented with Distinguished Service Awards for their outstanding contributions to the Education Committee. William J. Smith and Cynthia Goodman were presented with Distinguished Service Awards for outstanding contributions to the Society for In Vitro Biology.

Additionally, two President's Awards were presented. Indra K. Vasil received the President's Award for the development and promotion of Plant In Vitro Biology Scientific Programs 1999-2003, and Marcia J. Loeb received the President's Award for the development and promotion of Invertebrate Physiology 1987-2003.

The Student Affairs and Awards Committee consisted this past year of Gertrude Buehring (Chair), Pamela Weathers, Craig Meyers, and Suzanne Rogers. The following awards were presented at the banquet of the 2003 Portland meeting: Tristan F. Kraft Burns received the Hope E. Hopps Award and an SIVB Travel Award for his presentation "Vaccinium angustifolium cell cultures: An alternative method of studying the anti-cancer potential of wild blueberries." The John Song Awards was given to Li Chen for her presentation "Transformation and regeneration of wetland monocot Juncus acuminatus using different binary vectors." Giang Thi Thanh Dam was given an SIVB Travel Award for her presentation "A novel disposable film culture vessel for photoautotrophic micropropagation of Epidendrum orchidi." Vivian Dayeh was presented the Joseph F. Morgan Award and an SIVB Travel Award for her work "Enhancing the sensitivity of rainbow trout cells in culture to the toxicity of metals." Shintaro Goto received the Honor B. Fell Award and an SIVB Travel Award for his presentation "Insulin-like peptides stimulate midgut stem cell proliferation of lepidoptern larvae in vitro." An SIVB Travel Award was presented to Since Pauline Kopsombut for her work entitled "UV and visible radiation effects on flavinoid production in cell cultures of Vitis vinifera and glycine max." Serena McCoy received an SIVB Travel Award for her presentation "Expression of a synthetic avidin gene in maize for control of corn rootworm Diabrotica and other insect pests."

The Philip R. White Memorial Award was set up to support continuing training in plant tissue culture and is presented to applicants participating in hands-on workshops or in-lab training with an expert mentor. The 2003 award was presented to Esther Uchendu from Ibadan, Nigeria. Ms. Uchendu attended a workshop at the Kawanda Agricultural Research Institute Tissue Culture Laboratory for hands-on training on embryo rescue and culture of Musa spp. The Philip R. White Committee members for 2003 were Drs. Carol Stiff (Chair), Satyahari Dey, Michael Kane, John Lunghusen, and Raymond Shillito.

Eugene L. Elmore, PhD, Chair, Awards Committee  
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Gertrude C. Buehring, PhD, Chair, Student Affairs Committee  
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Carol M. Stiff, PhD, Chair, Phillip White Award Committee  
kck@turbonet.com



*Marcia Loeb is presented with the 2003 President's Award by Sandra Schneider*



*Cindy Goodman is presented with the 2003 Distinguished Service Award*



*2003 Student Award Winners: (L to R) Top row: Tristan F. Kraft Burns, Sandanand Dhenkeney, Shintaro Goto, (Sandra Schmieder, SIVB President), Serena B. McCoy, Salih S. Kocer; Bottom Row: Since Pauline Kopsombut, Vivian Dayeh, Li Chen, and Hyun-Kyung Kim.*



*Barbara Reed accepts her Plant Fellow Award presented by Trevor Thorpe*



## Constitution and Bylaws

A motion was passed by Board at the February 2003 meeting asking the Committee to review inconsistencies in board membership between the Constitution and the Bylaws. In addition to change the Constitution so the Board can alter the Bylaws as needed to keep the Society functioning smoothly. The Chair looked at Constitutions of other scientific societies and found that most allow in their constitution the ability for the board to make changes to the bylaws of the society in order to adapt as operating needs change. No action was taken in 2003.

Changes are necessary to the Bylaws Section 3B in order to insure the entire membership of the Society is equally represented on the Board. No action was taken in 2003.

Members of the Committee were: Past-Presidents Delia R. Bethel, Mary Ann Lila, current President Sandra L. Schneider and liaison Marietta Wheaton Ellis.

Melissa E. Hinga, Chair

## Development

The Development Committee is charged with the responsibility of fundraising to support the Society's programs, workshops and other educational venues. Members of the Development Committee include the chairs and co-chairs from each of the Sections (Cellular Toxicology, Invertebrate, Plant and Vertebrate), members and corporate advisors interested in the promoting and assisting with the financial stability of the SIVB. The 2004 Development Committee members includes: David D. Songstad (chair) Monsanto; Janis Demetruilis, Technikos Research Associates; Barbara Doonan, UST; John Harbell, Institute for In Vitro Science, Inc.; Hank Lane; Lisa Lee, The Scotts Company; Mark C. Jordan, Agriculture and Agri-Food Canada; Gordana V. Vunjak-Novakovic, MIT; Nancy C. Reichert, Mississippi State University; Elizabeth J. Roemer, SUNY Stony Brook; Sandra L. Schneider, Research and Clinical Laboratory Systems; Raymond Shillito, Bayer CropScience; Guy Smaghe, University of Ghent; William J. Smith, U.S. Army Medical Research Institute of Chemical Defense; Alda Vidrich, University of Virginia; and Amy Wang, GlaxoSmithKline.

In 2003, the total fund raising efforts resulted in \$77,400 given to offset expenses within specific sections as well as across the entire program. This amount was down from the last fund raising effort in 2001 when slightly over \$113,000 was raised. However, as of April 19, 2004, we have raised \$86,300 with additional contributions pending. One of the reasons for this upswing was an ad hoc SIVB program fund raising effort that sought new sources to contribute to the SIVB program expenses. A total of \$7,500 from new sources was obtained with academic institutions contributing this year. In the next two years, Development Committee efforts will focus on maintaining our existing contributors while encouraging the previous supporters to recommit their affiliation with the SIVB. Kim Rayford will continue as the Editor of the *In Vitro Report*.

David D. Songstad, PhD, Chair, Development Committee  
david.d.songstad@monsanto.com

## Education

### SIVB 2003 Meeting:

Carol Stiff convened a successful session on Sunday morning: "Creating Connections Between Scientists and Educators: Bringing Biotech to the Classroom." Support was provided by LIGASE, Monsanto, the SIVB Education Committee, PhytoTechnology Laboratories, Caisson Laboratories and Temple Inland Forests. Students, teachers and society members took advantage of the opportunity to interact at the Education Poster Session Saturday evening. Posters were diverse, including two presentations by high school students, a community college class project, and two presentations by educators. The high school topics were: "The Effect of Trace Metals on Bioluminescent Dinoflagellates" by P. D. Clark from St. Andrew's Episcopal School in Ridgeland, MS and "Identification of Drug Resistant Loci in Breast Cancer Cells by RAPD-PCR Fingerprinting" by Raymond Mailhot from the Altamont School in Birmingham, AL. K. C. Cawley's Portland Community College tissue culture students: R. Aleman, M. Blackledge, C. Campbell, J. Cohen, B. Lindsey, M. Kondapalli, J. Marsh-Haffner, N. Myint, and K. Taylor presented their class

project "Some Effects of Plant Growth Regulators on Mammalian Cells". Our two educators were Bernadette Plair, from the Cincinnati Zoo and Botanical Garden, presenting: "Plant Tissue Culture and Plant Conservation: In Vitro Methods for Introducing Concepts to the Classroom" and Carol A. Harrison, from Booker T. Washington High School and Tuskegee University, Tuskegee AL, presenting: "Investigating the Use of Oil Degradation Microbes in the Secondary Science Classroom."

### Education Committee Activities:

Carol Stiff is the Education Committee Liaison to SIVB reports. She collects and coordinates materials for the newsletter, and puts together the education committee column. Anyone who has items they would like to have included (workshops, announcements, etc) should send them to Carol at <carolstiff@kitchenculturekit.com>. Ask to be put on her e-mail list, and you will receive timely reminders when the columns are being prepared.

Plans are proceeding for a Virtual Poster Session. This will initially focus on the work of high school students, but eventually we hope to expand it to serve a broader range of interested parties. We are starting with students who currently participate in the science fairs affiliated with ISEF, as this will get us off the ground with good materials that have already been reviewed by outside experts. Student participation in the ISEF program begins with entry in a local fair where the abstracts are all reviewed by a scientific committee. In addition, to participate in these events students MUST provide documentation that satisfies all of the federal rules on research (animal use, human tissue, GMOs, recombinant DNA, radiochemicals, etc.) By accepting students that have already jumped that hurdle, we save ourselves a lot of bureaucratic headaches. After we get the high school component working, potential future virtual poster participants could include undergraduate and graduate students, and "Silent Abstract" presenters. We hope to have this up and running before the end of 2004.

### Ongoing and Future Programs:

We are continuing our liaisons with other organizations, including the Long Island Group Advancing Science Education (LIGASE) (<http://ws.cc.stonybrook.edu/ligase/>), Bio-Link (<http://www.bio-link.org/>), and the National Association of Biology Teachers (NABT) (<http://www.nabt.org/>). Through Pat Bossert we have an ongoing relationship with LIGASE, located at Stony Brook University in NY and founded and directed by David Bynum, the 2003 winner of a national Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring. Through our collaborations with both NABT and Bio-Link, we will help in the development of programs with teachers at the 2 and 4 year college level.

Over the years, SIVB has expanded to create an environment of scientific exchange and interdisciplinary synergy with the goal of advancing current and future systems for in vitro biology. The SIVB Education Committee was subsequently organized to further the education of our members, as well as to provide outreach programs to K-12 teachers and the public. The pressing need for well trained biotechnology employees is a common topic of discussion among the members of the SIVB. We are always glad to see constructive programs designed to educate the greatly needed life sciences workforce. These new entrants into the field of biotechnology are the very source of our new SIVB membership. The development of Bio-Link during its successful six years as an ATE Center of Excellence was a valuable addition to the field of biotechnology workforce education. Collaboration between our two groups will serve both organizations extremely well. In this spirit, we have contributed a letter in support of Bio-Link's new proposal for funding as an ATE National Resource Center.

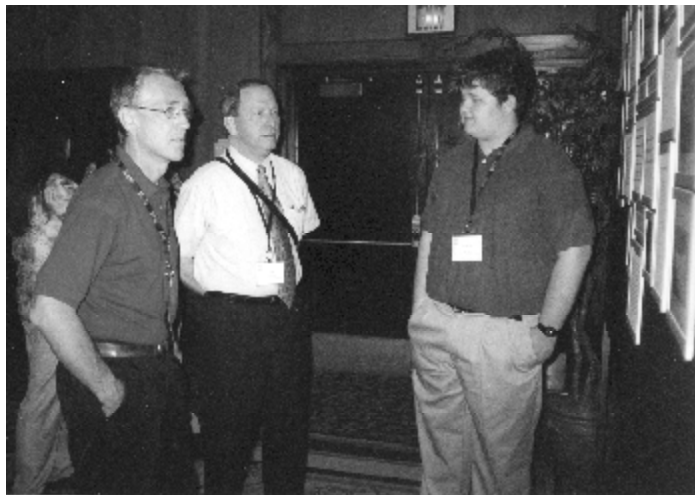
The Education Committee is always looking for members who are interested in participating. Anyone interested in working on education is welcome to join us. Our areas of focus, range from K-12 to college level education and professional development. We are always open to new ideas, and generally have more great ideas than we have manpower. If you are interested in working with us, or have ideas for future programs please contact Liz Roemer at <eroemer@notes.cc.sunysb.edu> or call (631) 444-7347.

Elizabeth Roemer, Chair, Education Committee  
eroemer@notes.cc.sunysb.edu

## Laboratory Materials and Biosafety

The Laboratory Materials and Biosafety Committee (LMBC) provides a mechanism within the Society for In Vitro Biology (SIVB) to promote laboratory standards, biotechnology practices, laboratory materials, safety equipment, and facilities that constitute biosafety levels 1-4 associated with in vitro and biotechnology methodology. The goals of the LMBC are: 1) to provide an educational process and format to distribute information regarding potential hazards and risk assessment associated with: the cell culture process, the use and handling of biological agents, quality control of biomaterials, and updates on federal regulation pertinent to research, industry and clinical biotechnology applications; 2) to recommend laboratory practice, operation, or materials based on risk assessment of the agent/or material and the laboratory activity involved; and 3) to promote the interaction of committee members with national and international scientists, professional groups, and manufacturers regarding the design, processing, and use of material for in vitro and biotechnology methodology.

The LMBC committee members represent government, university/academia, private industry and include: John Harbell (chair), Institute of In Vitro Sciences; Sandra L. Schneider (co-chair), Research and Clinical Laboratory Systems; June Bradlaw, International Foundation for Ethical Research; Walter Finkbeiner, University of California-San Francisco; Thomas Goodwin, Johnson Space Center, NASA; John Masters, University College London, Institute of Urology-UK; Colette Rudd, Rudd & Associates; Lynn Rutsky; The University of Texas Health Science Center Houston; William J. Smith, U.S. Army Medical Research Institute of Chemical Defense; Glyn N. Stacey, National Institute for Biological Standards and Control-UK; Valerie Williamson Weed, VivoRx; and Alda Vidrich, University of Virginia Health Sciences Center



High School Student Peter Clark presents his poster to Todd Jones and John Harbell during the Education Special Poster Session.

The LMBC met with the Vertebrate and Toxicology Sections during the 2003 Congress in Portland, Oregon and continues to actively promote topics related to tissue engineering, public health policy and risk analysis. Toward this goal, Committee members continue to work with and support the efforts of the: FDA Center for Devices and Radiological Health in the area of regulatory and standardization for biomaterials and tissue components; and the American Association Advancement Science and American Institute Biological Sciences for standardization of in vitro technologies. The LMBC in conjunction with the Cell Standardization Committee sponsored the 2004 World Congress on In Vitro Biology Plenary Symposium Mammalian Cell Culture Contaminants: Identification and Control and the recognition of Dr Walter Nelson-Reese for his pioneering and Lifetime Achievements in cell culture contamination identification. A World Congress movie night was held to view the BBC presentation Strange Attractions: The Life and Times of Life and Times. This film featured historical interviews with Leonard Hayflick, Walter Nelson-Rees, and numerous other scientists.

Sandra L. Schneider  
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*SIVB is grateful for the assistance of the 2003 Congress Volunteers.*



*Poster presentations were integral to the 2003 Congress.*



*The sharing of scientific knowledge is the focus of the SIVB Annual Meetings.*

## Membership

The future of the society rests on our ability to attract new members and encourage their participation in society activities. If you as a member enjoy the publications, meetings, and interdisciplinary atmosphere of the SIVB, we need your help in increasing membership this year. Let your associates know about the exciting programs presented at the SIVB meetings and the opportunity for members to participate in the planning process. Get them to attend, join, and take advantage of the benefits of SIVB membership.

Getting the membership to grow will take a group effort on the part of all our members. Please encourage your colleagues or students to join and attend the meetings. Students are the future of the SIVB. Free meeting registration and complementary 1-year memberships provide the incentive for students to "look us over" and see the benefits of our society.

SIVB meetings offer excellent science, and it is possible to have a number of smaller symposia, which allow a great diversity of topics so there is something for everyone. Also, in terms of "value for money" there is a lot in the SIVB meetings. Although the meetings are held in the US, they are indeed very international in terms of science and the participants. The SIVB offers so much extra in terms of support groups, networking potential, News Letters and Journals, and all in the context of multi and interdisciplinary science.

This year the committee assisted in revising the membership brochure and spearheaded initiating email alerts to the membership. We hope these alerts will better inform our members of the activities and benefits of the society. We also asked each member to contact associates who might enjoy the benefits and congeniality of SIVB. We thank you all for your great response to this request. We have enjoyed serving you for the past 2 years and look forward to seeing you at future SIVB meetings.

### 2002-2004 Membership Committee Members

|                              |                                |
|------------------------------|--------------------------------|
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Barbara M. Reed, PhD, Chair, Membership Committee  
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## Program

The 2003 Congress on In Vitro Biology was held at the DoubleTree -Jantzen Beach Hotel, Portland, Oregon from 31 May - 4 June. The Congress focused on a wide range of topics and issues of interest to all Sections (Cellular Toxicology, Invertebrate, Plant, and Vertebrate) of the Society. A total of 382 scientists from 23 countries attended the scientific meeting and interacted with exhibitor representatives. This was the first year SIVB offered free registration to Students and 48 took advantage of this opportunity. The start of the meeting was signaled by what, hopefully, will be a long-standing tradition - the Student Reception and Poster Session coordinated by the Education Committee. Posters by students from high schools and community colleges, as well as educators, led to discussions with scientists attending the Congress. The Opening Reception was held in the Exhibit Hall and was a positive forum for participants to meet with the exhibitors and posters session presenters.

While sessions started early Sunday morning, with excellent attendance, many Committee meetings had already concluded. I was impressed by the outstanding attendance at various Committee meetings even though they occurred as early as 7:00 AM. Sunday concluded with Plenary Speaker, Dr. Richard Stouffer of the Oregon National Primate Research Center, giving a stimulating, entertaining and highly informative talk on the current status of primate reproductive studies and their implications to humans. Following this talk, which received rave reviews from a highly eclectic audience, we boarded buses to a reception at the truly beautiful and historic Pittock Mansion. Next, over to the Forestry Center for a delightful dinner and walk-through of the exhibit areas.

The Congress Program consisted of 18 Symposia, 3 Roundtable Discussions, 1 Workshop, 6 Contributed Paper sessions, and 5 Interactive Poster sessions. In all, 212 abstracts were received, of which 82 were presented as posters. The breadth of excellent science at these sessions was as good, and in my opinion better than, previous SIVB meetings. While acknowledging the uniqueness of problems studied across the various Sections of the Society, many of the session themes crossed all disciplines. It is not surprising that Biotechnology was a theme in more than a third of the sessions, ranging from improvement of forests and grapevines and delivery of genes to insect, plant and mammalian cells, to creation of pest resistance and biocontrol systems. Stem cell utility in cancer treatment, reproduction, biocontrol, and toxicology highlighted the immense steps being made in this arena. Growth factors and in vitro techniques were the foci of several sessions in both plant and animal session with an extended Invertebrate Symposium consisting of 6 Invited Speakers. Three corporate sponsors got together to arrange and provide speakers for a Roundtable Discussion on the future of serum in animal cell propagation. Even the unfortunate impact of chemical and biological terrorism in our world today was addressed by two symposia; one in the Plant sessions and one in the Animal sessions, in which new models for studying mechanisms of action and therapeutic approaches to these threats were discussed.

The SIVB is deeply indebted to a large list of individuals who put this program together and carried it out flawlessly. These individuals include: conveners, fund-raisers and corporate sponsors, solicitors, presenters, moderators, exhibitors and schedulers. The Congress program planning began with Committee Chairs from each of the Sections, but was brought to fruition by many other hardworking, diligent members of SIVB. And something that cannot be overlooked, the



office staff of SIVB that pulled the Congress and programs, meeting facilities, banquet and tours all together into a positive experience for all that attended. My thanks to all for making this meeting a great success.

As Program Chair, I waited all year to enjoy the social events that have become a trademark of SIVB meetings. Thanks to the Board meeting, I missed the Scotts Company tour on Saturday, but am sure everyone had a very good trip. I already mentioned the Plenary Reception and Dinner, which I did attend and enjoyed tremendously. On Tuesday, I was called back to my Institute and missed both the closing banquet and the winery tour at Greyhorse Vineyards. I've heard from many that the banquet was outstanding. Some of our Invited Speakers called specifically to mention the superb time they had throughout the meeting and to let me know that SIVB knows how to celebrate.

If you need more specifics or want to comment on any aspect of the Congress please contact me at [william.smith@apg.amedd.army.mil](mailto:william.smith@apg.amedd.army.mil). I look forward to seeing you all in San Francisco for the World Congress in 2004.

William J. Smith, PhD, Chair  
2003 Congress Program Committee  
[william.smith@apg.amedd.army.mil](mailto:william.smith@apg.amedd.army.mil)

## Publications

The Editor-in-Chief's office for *In Vitro Cellular and Developmental Biology – Animal* reports that the journal experienced a 31% increase in total submissions of manuscripts over the comparable period last year (105 compared to 80 in 2002-2003). This puts the journal back up over 2001 levels and is a promising recovery from the previous year's losses in submissions. The published totals for the past year vs. the prior year are: 85 regular papers (65 in 2002-2003), 19 Reports [formerly scientific Letters-to-the-Editor] (14 in 2002-2003), 1 invited review, 1 book review, and 1 Special Lecture (Missouri Senator Christopher Bond's Opening Remarks at the SIVB Congress 2001). Overall, the average time from receipt to first decision in the review process was 5.6 weeks compared to 6.4 weeks last year. Online papers for which first decisions have been made within this report period indicated a reduction in time to an average of 4.7 weeks.

We are optimistic that this recovery is finally reflecting the effect of implementation of both online publication, begun several years ago, and more recently the online submission and review begun in November 2002. By the end of the current report period, 88% of the submissions received were online submissions. The remaining were hardcopy submissions, an option that currently is being continued. Competition posed by the proliferation of new online journals that overlap our niche and themes and the constantly changing electronic revolution in publishing and marketing remains a challenge. We have seen constant improvements in the implementation of "As Soon As Possible" (ASAP) publishing of papers. Marketing, maintenance of visibility of the journal, and troubleshooting with specific clients remain challenges due to the nature and modest resources of the society in this area. We remain optimistic that time, coupled with a concerted effort in marketing that emphasizes the benefits of electronic submission and publication, as well as the journal's solid history and impact rating, will aid in rebuilding our competitive position in the publication arena.

The Editor-in-Chief's office for *In Vitro Cellular and Developmental Biology – Plant* reports that the published totals for the past year vs. the prior year are: 127 manuscripts received (vs. 123 in 2002) that include 6 Invited Review Articles and 3 Special Interest Articles (e.g., Symposium Proceedings). Seventy-five manuscripts were accepted. The rejection rate for 2003 was 49% compared to 46% for 2002. The origin of submissions is as follows: North America - 37; Latin America - 17; Europe - 15; Middle East - 8; Africa - 0; India - 25; Asia - 20; Australia - 5. The average time from receipt of a manuscript to initial decision was 9.3 weeks (range 1-28 weeks), which was a little longer than the 2000-2002 average of 7.3-7.8 weeks.

We perceive the overall quality of our articles surpasses that of our two most direct competitors (*Plant Cell Reports*, *Plant Cell Tissue Organ Culture*); however, this is not reflected by journal impact factors. The most recent journal impact rating for *In Vitro – Plant* is based on year 2002 data, at 0.440 (vs. 0.559 in 2001 data, 0.750 in 2000 data, 0.372 in 1999 data, 0.514 in 1998 data). This compares to ratings of 1.340 in 2002 data, 1.375 in 2001 data, 1.127 in 2000 data and 1.076 in 1999 data for *Plant Cell Reports*; and ratings of 0.632 in 2002 data, 0.631 in 2001 data, 0.444 in 2000 data and 0.498 in 1999 data for *PCTOC*. Journal impact ratings are influenced by distribution and subscriptions (especially institutional). This is being addressed by continuing efforts in marketing and internet distribution by SIVB and CABL.

Access via article databases. We are attempting to get IVP indexed and abstracted in a greater array of article databases; Quality of articles. We have addressed this by gradually increasing the rejection rate, and by a recent (1999) refocusing of the Matrix Categories. However, the IAPTC&B issues and SIVB issues are used together in determining IVP journal impact factors. The IAPTC&B editorial board needs to consider these issues as well: 1) Number of articles published. We realized a marked increase in submissions during 2000-2003, which we hope to sustain with a consistently greater number of articles with higher quality; 2) Appearance of special interest articles. We now have at least one Invited Review Article or SIVB Congress Symposium Proceeding appearing per issue.

Associate Editors and Reviewing Editors are doing great work for the journal, especially in maintaining high quality. In order to improve the responsiveness of the review process and editorial tracking, and reduce the international mailing times and expense, we are converting to an online system for managing manuscript submissions and editorial assessments during the Summer of 2004. About 12% of the Associate Editors and 25% of the Reviewing Editors were rotated on/off this year, primarily based on topic area needs. The lists of Associate and Reviewing Editors were extended with additional international members. With the pattern of increased number of submissions in recent years, we continue to evaluate the feasibility of an increase from four to five SIVB issues per year (and an increase from two to three IAPTC&B issues annually).

The 2 IAPTC&B issues of the *In Vitro – Plant* journal received 58 manuscripts in 2003 and accepted 30, reflecting a rejection rate of 36.2%. The March/April issue contained 29 articles, the September/October issue contained 23 articles, and 7 papers were still under review. The time between receipt and acceptance of mss ranged from 1 month to 14 months. This wide spread was

due to both the variable length of time authors required for manuscript revision as well as the slow response of some Reviewing Editors (REs). Those REs who did not accomplish their reviews in a timely fashion will, in the future, either receive fewer mss to review or will be omitted from review altogether. Based on the current ms submission and reviewing process, there is no pressing need to increase the number of annual journal issues from 2 to 3 for IAPTC&B. Finally, efforts have been taken to scrutinize the submitted mss more stringently in order to increase the journal quality and thereby increase the impact factor.

The following are new members of the Editorial Board from 2003: Drs. Gynheung An (Korea), Freddi Hammerschlag (USA), Alejandro Mentaberry (Argentina), Hans-Henning Steinbiss (Germany), Edward C.T. Yeung (Canada). Belated thanks are due to Drs. Daniel C.W. Brown (Canada), Daniel J. Cantliffe (USA), Paul Christou (UK), Horst Lörz (Germany), and Maria Jose Sampaio (Brazil), who completed their terms on the Board.

The *In Vitro Report* has been fully converted to an electronic newsletter and is now accessible via the Internet. The new layout allows for more abstracts to be highlighted and results in a tremendous cost savings to the society. Kimberly Rayford has done an outstanding job as Editor-in-Chief and has continued to maintain the quality of the *In Vitro Report*. News and articles from all members of the society are welcome and encouraged. The *In Vitro Report* will continue to be an effective communication tool for all members.

Alda Vidrich, Chair, Publications Committee  
[Av4x@virginia.edu](mailto:Av4x@virginia.edu)

Wallace L. McKeehan, Editor-in-Chief, *In Vitro – Animal*  
[wmckeeha@ibt.tamu.edu](mailto:wmckeeha@ibt.tamu.edu)

Gregory C. Phillips, Editor-in-Chief, *In Vitro – Plant*  
[gphillips@astate.edu](mailto:gphillips@astate.edu)

Kimberly Rayford, Editor in Chief, *In Vitro Report*  
[krayford@slsc.org](mailto:krayford@slsc.org)

Michele G. Schultz, SIVB Publications Manager  
[michele@sivb.org](mailto:michele@sivb.org)

## Nominating

Nominations for the 2004-2006 election slate for The Society for In Vitro Biology, and for the leadership of individual sections (Plant, Invertebrate, Vertebrate, and Toxicology) were completed by mid fall 2003. Votes were cast by members either using electronic or mail-in ballots, and final results were tallied in mid-December.

### Officers for the Society and Sections are listed below:

|                                            |                  |
|--------------------------------------------|------------------|
| President Elect:                           | Paul Price       |
| Vice President:                            | David Songstad   |
| Secretary:                                 | Nancy Reichert   |
| Treasurer:                                 | Richard Heller   |
| Member at Large:                           | John Harbell     |
| Member at Large:                           | Dennis Laska     |
| Publications:                              | Michael Horn     |
| Public Policy:                             | Pam Weathers     |
| Awards Chair:                              | Amy Wang         |
| Education Chair:                           | Elizabeth Roemer |
| Laboratory Materials and Bio-safety Chair: | Linda Jacobsen   |
| Constitution & Bylaws:                     | Melissa Hinga    |

### Plant Officers:

|                      |                |
|----------------------|----------------|
| Chair:               | Nancy Reichert |
| Vice Chair:          | Mark Jordan    |
| Secretary/Treasurer: | Lisa Lee       |

### Vertebrate Officers:

|              |              |
|--------------|--------------|
| Chair Elect: | Paul Price   |
| Secretary:   | Kim O'Connor |

### Cell Toxicology Officers:

|             |              |
|-------------|--------------|
| Vice Chair: | David Jayme  |
| Secretary:  | Kim O'Connor |

### Invertebrate Officers:

|                      |              |
|----------------------|--------------|
| President:           | Guy Smagghe  |
| Vice President:      | Ray Hakim    |
| Secretary/Treasurer: | Guido Caputo |

The Nominations Committee appreciates the commitment and dedication of all the candidates who were willing to be nominated, and the excellent and insightful nomination platforms that were presented to the voting membership.

Mary Ann Lila, Chair, Nominating Committee  
[imagemal@uiuc.edu](mailto:imagemal@uiuc.edu)

## Public Policy

The Public Policy Committee is a standing committee of the Society for In Vitro Biology designed to assist its members and the general public to obtain a better understanding of in vitro biology and its research process and progress. The Committee is charged to aid the Board of the SIVB in their dealings with members of Congress and other governmental officials for the purpose of giving advice on funding priorities and other relevant matters. With the assistance of other associations, the Public Policy Committee's goal is to actively educate its members about current issues effecting the scientific community and society as a whole.

The Society is currently a member of the following associations that work with legislators to effect national and international scientific policy. American Institute of Biological Sciences (AIBS) provides a variety of public-policy services for their members and the biological community at large. They focus on research funding, research policy, and education policy. Council for Agricultural Science and Technology (CAST) assembles, interprets, and communicates science-based information regionally, nationally, and internationally on food, fiber, agricultural, natural resource, and related societal and environmental issues to our stakeholders—legislators, regulators, policy makers, the media, the private sector, and the public. American Association for the Advancement of Science (AAAS) examines questions of concern to world citizens and their governments from human rights and ecosystem protection to federal spending, ethics, equity and more. The International Foundation for Ethical Research or IFER is a non-profit organization dedicated to finding non-animal alternatives for scientific research.

This year we have continued to update the Public Policy link on the SIVB home page with hyperlinks to the current public policy reports of the AIBS, CAST and the AAAS. In addition we have added links to Grant applications for IFER and Invitrogen and copies of the most current position papers for the AIBS Stem Cell and for the Crop Genetic Engineering reports and added an "Action and Legislative Alert" sections.

Paul Price, PhD, Chair  
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June Bradlaw, PhD  
Science Advisor, International Foundation for Ethical Research  
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Todd J. Jones, PhD  
Weyerhaeuser Co  
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## REPRESENTATIVES OF THE SIVB

### American Type Culture Collection

The ATCC Cell Biology Program distributed 65,660 items during 2003. It has replenished stocks on about 600 cell lines representing the CCL, CRL, TIB, HB, and HTB categories. These cell lines were expanded, recharacterized, and released for distribution.

Personnel in the R&D Cell Biology Program has acquired, authenticated, expanded, and cryopreserved an additional 140 new items. Included, for example, are three murine adenocarcinomas cell lines (TRAMP-C1, TRAMP-C2, TRAMP-C3) of prostate origin that represent various stages of cellular transformation and progression to androgen-independent metastatic disease; four human cervical carcinoma cell lines (GH329, GH354, Ect1/E6E7, End1/E6E7); one vaginal mucosa cell line (VK2/E6E7); one human liver epithelial cell line (THLE-2), immortalized with SV-40 large T antigen; twenty-five DNA and twenty-nine RNA preparations, and seventeen snap-frozen pellets from various cancer cell lines. Additional details on these and other cell lines may be obtained via the Internet page (<http://www.atcc.org>).

In keeping with the mission of the ATCC, the Cell Biology R&D Program is actively involved in the procurement of grants and contracts and development of reagents and tools for research in cell biology. A five-year contract from the National Cancer Institute on The Procurement of DNA, RNA, Transformed Lymphocytes, and Lymphoblastoid Cell Lines for Genetic Studies, was awarded to ATCC on May 1, 2003 with Dr. Yvonne A. Reid as the Principal Investigator.

After 28 years of outstanding service to the ATCC's Cell Biology Program, Dr. Robert Hay has retired. His contributions to the ATCC and the scientific community are a testament and a tribute to his excellent leadership. He will be greatly missed by the entire staff at the ATCC.

The Cell Biology Staff would like to thank the members of the Cell Biology Advisory Committee for their advice and input over the years. The group reviewed staffing, accessioning plans, research, and contract activities, and made recommendations for future efforts. Members included Dr. Barbara Knowles, Jackson Laboratories (Chairperson); Dr. Michael C. Chang, NIH-NCRR (Project Officer, NCRR); Dr. Gerard J. McGarrity (SIVB); Dr. David S. Kaplan (FDA), Dr. Olivia Smith (UTSA), Dr. Neil Talbot (USDA), and Dr. William R. Tolbert (San Diego).

Robert Hay

Yvonne A. Reid  
yreid@atcc.org

## International Association for Plant Tissue Culture & Biotechnology

The International Association for Plant Tissue Culture & Biotechnology (IAPTC&B) was founded in 1963. The primary activities of the IAPTC&B have been to organize international congresses of plant tissue culture and biotechnology every four years, and to publish a newsletter/journal for its membership. The IAPTC&B is the oldest and the largest international professional organization to represent plant biotechnology. It has more than 2,500 members in over 80 countries. Each year, members receive two issues of the journal *In Vitro - Plant*.

The next IAPTC&B Congress, "Biotechnology and Sustainable Agriculture 2006 and Beyond", will be held in Beijing, China from August 13–18, 2006. Scientific programs of the IAPTC&B Congress will cover various aspects of plant tissue culture and biotechnology. It includes current advances in plant tissue culture, plant molecular biology and biotechnology, impact of plant biotechnology on agriculture, industry and environment, intellectual property in biotechnology, biosafety and public acceptance of genetically modified plants, biotechnology related bioinformatics and other related fields.

Dues for the IAPTC&B are \$40 per year. They can be paid directly to the IAPTC&B or they can be paid along with membership dues for the Society for In Vitro Biology (SIVB).

The IAPTC&B and the International Plant Propagators' Society (IPPS) are sponsoring a Plant Micropropagation meeting themed: "Micropropagation – Technology and Production" on May 4–5, 2004 in Orlando, Florida. The speakers for the conference are a combination of commercial and academic authorities in Plant Tissue Culture. The speakers on May 4 include Dr. Paul Read of the University of Nebraska, Dr. John Preece of Southern Illinois University, Mr. Ray Gillis of Agristarts, Dr. Ken Torres of Phytotechnology Labs, Mr. Kent Kratz of Casa Flora, Dr. Mark Bridgen of Cornell University, Mr. Gary Hennen of Oglesby, Dr. Jerzy Nowak from VPI, and Dr. Randy Niedz of the US Horticultural Research Lab. On May 5, after a tour of Leu Gardens, participants will board a bus and spend the day touring several of the local commercial tissue culture laboratories including AgriStarts, the University of Florida tissue culture lab in Apopka, and Casa Flora. The website for the meeting is [www.hort.cornell.edu/IAPTCB](http://www.hort.cornell.edu/IAPTCB).

The IAPTC&B thanks Dr. Randy Niedz of the US Horticultural Research Laboratory in Ft. Pierce, FL for serving as the local site committee chair for the 2004 meeting.

Mark Bridgen, IAPTC&B US Correspondent  
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**TREASURER'S SUMMARY REPORT**

**SOCIETY FOR IN VITRO BIOLOGY**

**STATEMENTS OF FINANCIAL POSITION**

**DECEMBER 31, 2003 AND 2002**

|                                         | <u>2003</u>          | <u>2002</u>          |
|-----------------------------------------|----------------------|----------------------|
| <b>ASSETS</b>                           |                      |                      |
| <u>Current assets:</u>                  |                      |                      |
| Cash                                    | \$ 114,057.00        | \$ 177,690.00        |
| Accounts receivable                     | \$ 47,383.00         | \$ 14,998.00         |
| Prepaid expenses                        | \$ 27,073.00         | \$ 15,517.00         |
| <b>Total current assets</b>             | <b>\$ 188,513.00</b> | <b>\$ 208,205.00</b> |
| <u>Noncurrent assets:</u>               |                      |                      |
| Furniture and equipment, net            | \$ 7,252.00          | \$ 15,713.00         |
| Investments                             | \$ 137,672.00        | \$ 165,691.00        |
| Inventories                             | \$ 1,240.00          | \$ 1,643.00          |
| <b>Total noncurrent assets</b>          | <b>\$ 146,164.00</b> | <b>\$ 183,047.00</b> |
| <u>Other assets:</u>                    |                      |                      |
| Deposit                                 | \$ 1,303.00          | \$ 1,303.00          |
| <b>Total Assets</b>                     | <b>\$ 335,980.00</b> | <b>\$ 392,555.00</b> |
| <b>LIABILITIES AND NET ASSETS</b>       |                      |                      |
| <u>Current liabilities:</u>             |                      |                      |
| Accounts payable                        | \$ 61,078.00         | \$ 65,464.00         |
| Deferred dues and subscriptions         | \$ 185,069.00        | \$ 135,962.00        |
| <b>Total Current Liabilities</b>        | <b>\$ 246,147.00</b> | <b>\$ 201,426.00</b> |
| <u>Long-term liabilities:</u>           |                      |                      |
| IAPTC&B liability                       | \$ -                 | \$ 10,871.00         |
| Deferred dues and subscriptions         | \$ 4,314.00          | \$ 4,937.00          |
| <b>Total Long-term Liabilities</b>      | <b>\$ 4,314.00</b>   | <b>\$ 15,808.00</b>  |
| <b>Total Liabilities</b>                | <b>\$ 250,461.00</b> | <b>\$ 217,234.00</b> |
| Net assets                              | \$ 85,519.00         | \$ 175,321.00        |
| <b>Total Liabilities and Net Assets</b> | <b>\$ 335,980.00</b> | <b>\$ 392,555.00</b> |

# TREASURER'S SUMMARY REPORT

## SOCIETY FOR IN VITRO BIOLOGY

### STATEMENT OF ACTIVITIES FOR THE YEARS ENDED DECEMBER 31, 2003 AND 2002

|                                                               | <u>2003</u>                 | <u>2002</u>                 |
|---------------------------------------------------------------|-----------------------------|-----------------------------|
| <b><u>Revenue:</u></b>                                        |                             |                             |
| Subscription and other publication income                     | \$ 200,198.00               | \$ 216,547.00               |
| Annual meeting income                                         | \$ 130,394.00               | \$ 74,856.00                |
| Dues                                                          | \$ 103,596.00               | \$ 87,774.00                |
| Interest income                                               | \$ 4,029.00                 | \$ 9,373.00                 |
| Contributions-plant                                           | \$ 35,500.00                | \$ 45,500.00                |
| Contributions-toxicology                                      | \$ 1,100.00                 | \$ 3,000.00                 |
| Contributions-other                                           | \$ 27,515.00                | \$ 19,246.00                |
| Management Fee (IAPTC&B)                                      | \$ 623.00                   | \$ 43,652.00                |
| Miscellaneous income                                          | \$ 20,743.00                | \$ 32,509.00                |
|                                                               | <u>                    </u> | <u>                    </u> |
| <b>Total revenue</b>                                          | <b>\$ 523,698.00</b>        | <b>\$ 532,457.00</b>        |
|                                                               | <u>                    </u> | <u>                    </u> |
| <b><u>Expenses:</u></b>                                       |                             |                             |
| Program services                                              |                             |                             |
| Publications                                                  | \$ 225,455.00               | \$ 200,825.00               |
| Annual meeting expenses                                       | \$ 221,530.00               | \$ 168,924.00               |
|                                                               | <u>                    </u> | <u>                    </u> |
| <b>Total program services</b>                                 | <b>\$ 446,985.00</b>        | <b>\$ 369,749.00</b>        |
|                                                               | <u>                    </u> | <u>                    </u> |
| Supporting services                                           |                             |                             |
| Administration                                                | \$ 167,368.00               | \$ 175,656.00               |
|                                                               | <u>                    </u> | <u>                    </u> |
| <b>Total expenses</b>                                         | <b>\$ 614,353.00</b>        | <b>\$ 545,405.00</b>        |
|                                                               | <u>                    </u> | <u>                    </u> |
| Change in net assets before unrealized<br>gain on investments | \$ (90,655.00)              | \$ (12,948.00)              |
|                                                               | <u>                    </u> | <u>                    </u> |
| Unrealized gain in fair value of<br>investments               | \$ 853.00                   | \$ 1,499.00                 |
|                                                               | <u>                    </u> | <u>                    </u> |
| Change in Net Assets                                          | \$ (89,802.00)              | \$ (11,449.00)              |
|                                                               | <u>                    </u> | <u>                    </u> |
| Net Assets, beginning of year                                 | \$ 175,321.00               | \$ 186,770.00               |
|                                                               | <u>                    </u> | <u>                    </u> |
| <b>Net Assets, end of year</b>                                | <b>\$ 85,519.00</b>         | <b>\$ 175,321.00</b>        |
|                                                               | <u>                    </u> | <u>                    </u> |