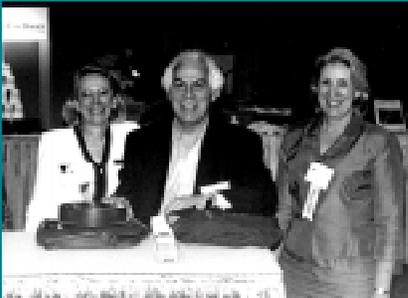


2000 ANNUAL REPORT OF The Society for In Vitro Biology

Events at the 2000 Congress On In Vitro Biology



PRESIDENT'S REPORT

Our Society is entering a new era of visibility in the public eye. We are challenged to be accountable for the emerging developments of *in vitro* biology, and we can embrace the opportunity to showcase the strong scientific grounding behind our work. A robust and exciting program has been developed for the 2001 Congress in St. Louis, MO, thanks to the Program Committee under the leadership of Todd Jones. The Opening Plenary Symposium will feature Dr. Roger Beachy, President of the Danforth Plant Sciences Center, and pioneer in biotechnology research towards alleviation of world hunger, environmental degradation, and disease. A full congress schedule of symposia, workshops, contributed paper sessions, educational programs, and exhibits is planned, and (for the first time this year), the poster sessions have been designed specifically to provide an enhanced opportunity for scientific interaction and exchange. The Program Committee plans to feature 'clustered' poster sessions around key topics (for example, plant transformation techniques, or stem cell technology), which will maximize the opportunity for both the presenters and other attendees to engage in lively discussions and to compare strategies to approach common problems. Because of the St. Louis venue, participants can take advantage of the opportunity to tour Monsanto Company's Chesterfield Village Research Center, visit the Missouri Botanical Gardens, and witness the classic rivalry of the St. Louis Cardinals and Chicago Cubs at Busch Stadium, adjacent to the conference site. Information about these and other events during the congress can be accessed at www.sivb.org. Hard-working and dedicated committee members, financial supporters, and business office staff have all come together to bring this outstanding meeting to the Midwest this year.

The inaugural issues of the *In Vitro Plant Journal* and the *In Vitro Animal Journal* under the auspices of new publishers (CABI International, and Allen Press, respectively) were available to our members in 2000. David Altman has led the Publications Committee to orchestrate these changes in publication and promotion for the journals. The Society has taken advantage of our new membership in AIBS (American Institute of Biological Sciences) to interface with other organizations on scientific issues of mutual interest, and has also moved to join CAST (Council for Agricultural Science and Technology). The stated mission of CAST (to identify food and fiber, environmental, and other agricultural issues and to interpret related scientific research information for legislators, regulators, and the media for use in the public policy decision making) is right on target with our goals for SIVB in the years ahead. Meanwhile, our Constitution and Bylaws are undergoing a rigorous revision to reflect the changing face of the Society in the new decade.

In mid 2000, a new Board of Directors was named for the Society, including Sandra Schneider (President-Elect), Ray Shillito (Vice President), Barbara Reed (Secretary), Elizabeth Roemer (Treasurer), and Lehman Ellis, John Harbell, Maud Hinchee, and Todd Jones (Members at Large). I am endlessly grateful for the determined effort, energy and breadth of perspectives each of these members brings into the leadership of the SIVB. All of our Society's members can rest assured that the SIVB's Board is acting as excellent stewards of their interests. Finally, I encourage each of you, our members, to jump right in and add your voice to our expanding interests in the SIVB. Help to guide the direction and vision of the SIVB in the months and years ahead. Seek out the committees and activities that most pique your interest, and join in the decision-making that makes this Society vibrant and exciting. Please don't hesitate to call on me if you have any questions on how to participate; we're waiting to hear from you!

Mary Ann Lila Smith, President
imagemal@uiuc.edu

POSTERS AND EXHIBITS



SECRETARY'S REPORT

The year 2000 was busy and successful for the SIVB. Active participation by current members, the enthusiasm of new members, an outstanding World Congress, and exciting changes in our publications all made 2000 a banner 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 in the cellular toxicology, invertebrate, plant, and vertebrate divisions.

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. As the Society becomes more international in scope, I hope we can establish branches on other continents. SIVB branches provide a more local opportunity for members to present their research, introduce their students to the culture of scientific meetings, and allow for networking. The larger venue of the Society meetings allows for international interactions. European colleagues note that SIVB meetings are full of interesting sessions and posters, and are provided at a reasonable cost.

I hope all our members will consider which features of the SIVB they most enjoy or find useful. We can all participate in making the SIVB even better by volunteering for a committee, running for an office, nominating someone for an award, or encouraging colleagues and students to join and participate in the annual meetings.

Barbara M. Reed, Secretary
reedbm@bcc.orst.edu

TREASURER'S REPORT

The 2000 fiscal year has brought some marginal improvement in the Society's bottom line. Our unaudited total revenue for 2000 was \$546,709. We began the year with a general fund deficit of \$53,229 (1999, audited). This, combined with our 2000 expenses, has left us with a year end general fund deficit of \$20,822. This deficit reduction has been due in large part to a number of cost cutting measures initiated by our previous administration and brought to fruition during the second half of the year.

The business office has been relocated to smaller, less expensive quarters. An enormous vote of thanks must go to Marietta Ellis, Managing Director, and Michele Schultz, Administrative Assistant, for all their efforts in locating appropriate space and moving the office. Their willingness to pitch in with family and friends to execute the actual move allowed us to maximize the advantage of a less expensive space with minimal relocation costs. We have also changed our auditing firm and, after careful review of our financial management practices by the finance committee, it was decided to bring the Society accounting back into the business office. This last change was possible as a result of the availability of user friendly accounting software, permitting us to dispense with the need for an expensive accounting subcontractor. These reductions should allow us to realize significant savings in 2001. However, we have now essentially cut expenses to the bone, and there is little left that can be reduced without jeopardizing the society's very survival. ***Our fiscal health is now critically dependent upon increasing our revenues.***

We have added an additional staff member, Melinda Thompson, who will function as our Director of Marketing and Communications. While the cost of supporting additional staff is certainly an area of concern, it became apparent to both the finance committee and the Board that the expense was necessary. The added workload of our joint efforts with IAPTC&B have placed crippling demands upon our seriously depleted staff. We anticipate that the revenues that SIVB will receive from the IAPTC&B contract will cover this increase in cost.

Total revenue for 2000 was \$546,709 (unaudited) compared to \$649,088 in 1999 and \$597,397 in 1998 (both audited). This amount includes temporarily restricted assets (funds designated for special purposes) and funds that we are holding for the IAPTC&B Congress and Secretariat. Society net assets for 2000; including current and temporarily restricted assets, property and equipment, and liabilities; were \$124,024 (unaudited). The 2000 Annual Report lists the Condensed Balance Sheet and Statement of Revenue and Expenses for the year. The auditor's report is available from the Business Office on request.

Elizabeth J. Roemer, Treasurer
eroemer@notes.cc.sunysb.edu

INVERTEBRATE SECTION

The International Conference on Invertebrate Cell and Tissue Culture, held in conjunction with the World Congress on In Vitro Biology in San Diego, had numerous activities. First, the Invertebrate conference began with the Invertebrate Awards Forum and Reception, honoring two outstanding researchers with Life Time Achievement Awards. They were Dr. James Vaughn, U.S. Department of Agriculture, and Dr. Jun Mitsuhashi, Tokyo University of Agriculture. The Awards Forum and Reception were sponsored by Aventis CropScience, Merck Research Laboratories and Primedica. There were three Invertebrate Sessions: "Strategies for Culturing Cells from Fastidious Invertebrates" (C. L. Goodman and K. Maramorosch, co-conveners; Aventis CropScience, Merck Research Laboratories, and Primedica, sponsors), "Insect Midgut" (M. Loeb, convener; InVitrogen and Novartis Aribusiness Biotechnology Research, Inc., co-sponsors), and "Insect Hormones" (R. Wagner, convener). Additionally, there were three joint sessions with the Vertebrate section: "In Vitro Production of Recombinant Proteins and Viral Pesticides" (H. Huebner, convener; HyClone Laboratories and GlaxoWellcome, co-sponsors); "Marine Organisms as Models for Biomedical Research" (S. Pomponi, convener), and "In Vitro Biology of Tick-Borne Diseases: Lyme Disease and Ehrlichiosis" (T. Kurti and J. Benach, co-conveners). Lastly, there was a joint session entitled "Bt Transgenic Crops: Efficacy, Environmental Effects, and Resistance Management" (B. Federici and N. Stewart, co-conveners). Furthermore, there were three contributed paper sessions involving many aspects of insect and marine invertebrate cell culture.

At the 2001 SIVB Congress the Invertebrate Section will have a session entitled "Insect Hormones and Applications for Pest Control" (G. Smaghe, convener) and a joint session with Vertebrate and Toxicology sections: "Beyond the Genome: Functional Genomics" (A. Wang and E. Elmore conveners). A "Proteomics Workshop," sponsored by Amersham Pharmacia Biotech will follow this joint session. Additionally, the Invertebrate section is looking forward to honoring a distinguished researcher, Dr. Karl Mamamrosch with the Life Time Achievement Award (Sponsored by Merck Research Laboratories) at the 2001 SIVB Congress. Dr. Mamamrosch has made many important contributions to the development of insect cell lines and insect cell culture media, which have included the encouragement of their use in medical and agricultural applications. Also, the Invertebrate section will have their business meeting at the SIVB 2001 Congress in St. Louis, MO.

*Amy Wang, Invertebrate Vice-President
amy.wang@aventis.com*

CELLULAR TOXICOLOGY SECTION

The Cellular Toxicology Section (CTS) of the Society for In Vitro Biology was established to provide a forum to promote and communicate the development, validation, and application of in vitro (cell based) assays as surrogate models for target organ and systemic toxicity, as well as drug metabolism and bioavailability. The CTS has been successful in promoting and educating the scientific community and the Society itself of the scientific merit and ethical prudence of classic cellular toxicology. As was seen in most emerging sciences, success has created new challenges and opportunities for cellular biologists to develop novel, mechanistically-based, higher throughput assays to handle the onslaught of new chemical entities brought forward from the emerging sciences of combinatorial chemistry, genomics and, most recently, proteomics.

At last year's World Congress on In Vitro Biology in San Diego, the CTS provided an exciting array of *Sessions in Depth (many joint), Contributed Papers, Posters*, and support for the many *Continuing Educational Workshops* by our members active participation. The CTS sessions were well attended with particularly good participation from our European and Japanese colleagues. The *SID's* included "Marine Organisms As Models for Biomedical Research", Convener Shirley Pomponi; "In Vitro Production of Recombinant Proteins and Viral Pesticides", Convener Ing. Holger Hübner; "In Vitro Biology of Tick-Borne Disease and Lyme Disease and Ehrlichiosis", Conveners Tim Kurtti and Jorge Benach; "In Vitro Tissue Models to Study Tissue Dynamics and Cell Interactions in Stratified Epithelium", Conveners Jonathan Garlick and John Harbell; "Molecular Biology of Fish Cells In Vitro, Convener David Barnes; "Neural Stem Cell Development", Convener Theo Palmer; New Technologies for Advancing Drug Development and Discovery", Convener Patrick Sinko; and The Revolution in Molecular and Cellular Biology Presents Unique Challenges and Opportunities for High Throughput Screening", Convener Dennis Laska.

The Contributed Paper sessions included "In Vitro Models for the Study of Cancer", Moderated by Eugene Elmore; and two (I & II) sessions on "Factors Affecting Cellular Growth and Differentiation" Moderated by (I) Mutsumi Takagi and (II) Yoshinohu Matsuo.

The CTS received direct sponsorship for these projects from: American Type Culture Collection (ATCC) and Defense Advanced Research Projects Agency (DARPA), Eli Lilly and Company, Glaxo Wellcome, Harbor Branch Oceanographic Institute, Inc., Hyclone, Kent Sea Tech Corporation; Life Technologies; Trega Biosciences; and The US Army Research and Materials Command. The CTS would also like to thank the many other sponsors and exhibitors who supported the other Society sections or that made contributions to the Society's general fund.

The CTS was proud to provide the annual Cellular Toxicology Student Award to Ms. Teresa Garcia-Gasca of the Departamento de Posgrado en Alimentos, Universidad Antonoma de Queretaro, Queretaro, Mexico, for her work on a "New Calorimetric Method for In Vitro Cell Number Estimation Using Carmine as a Specific Chromosomal Dye. We appreciate all contributions and efforts of our students who submitted their work for consideration. You are all winners.

The annual Cellular Toxicology business meeting was held jointly again this year with the Vertebrate Section. The group focused primarily on the 2000-2001 programs and active solicitation of contributing papers and abstracts.

The CTS would like to thank both Drs. Yoshisuke Nishi, Director of Research for Japan Tobacco Inc. and our liaison to the Japanese Tissue Culture Association and Dr. Miho Furue to the exciting programs they brought to the 2001 World Congress. In addition, we would like to recognize the efforts and participation at the World Congress of Dr. Takumi Yamashita and Takaaki Ohkuma from Nippon Kayaku Co. Ltd.

New officers installed included Chair - Dennis Laska, Eli Lilly and Company, Vice Chair - Alda Vidrich, University of Virginia, and Secretary - James DuMond Jr., University of Alabama at Birmingham.

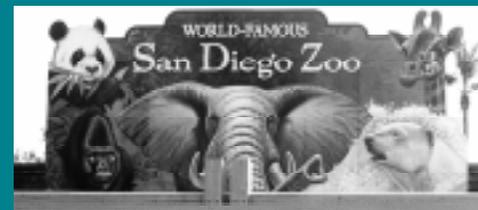
The CTS members and its Program Committee have assembled a very exciting and diverse program for the 2001 Congress in St. Louis, MO. The CTS sessions include Endocrine Disrupters; ATP Binding-cassette Transporters; and Toxicological Applications of Commercial Epithelial Models. Joint sessions include The Importance of Controls in In Vitro Biology; Frontiers in Low-Temperature Preservation; and Functional Genomics. On behalf of the Cellular Toxicology Committee, we thank you for your attendance of the annual meeting and continued support of the mission and objectives of the CTS and the Society.

*Dennis Laska, Cellular Toxicology Section Co-Chair
dalpsu@lilly.com*

PLANT SECTION

The Plant Section of the SIVB continues to be strong and vital to the organization. Some of our members have taken top leadership roles within the highest echelon of the Society. We are moving forward with several initiatives designed to increase membership, bolster our finances and raise our prominence in the national and international scientific communities. Moreover, we strive to make membership in the Plant

SOCIAL EVENTS



AWARDS



Section a rewarding experience for all of our members and there are ongoing initiatives to make that even more true. To this end, we are close to establishing a Plant Section e-mail list that will allow communication that heretofore was not possible.

We continue to show leadership within the Society by bringing in very high caliber scientists as speakers and presenters at the annual meetings. Last year the keynote speaker was the prominent plant scientist Dr. Peter Raven. We had many outstanding sessions and the attendance was wonderful. This year's keynote speaker is also an eminent plant scientist, Dr. Roger Beachy, and the entire plant section speaker list is very high quality.

Scientists in the SIVB Plant Section continue to be challenged by the ongoing global debate regarding genetically modified crops. Significant progress has been made in conveying our message to the press and the public but much remains to be done. As an optimist, I think we may have turned the corner on this issue but we certainly cannot relax. Education is, of course, the key and we have committed some of our Activity Fund to assist the SIVB Education Committee in their endeavors.

We need to redouble our efforts toward increasing our membership, improving our section finances, and fostering activity within the organization. Our situation now is good but our future depends upon further improvement in these areas. I hope to meet many more Plant Section members in St. Louis. Please feel free to approach and introduce yourself to me, and speak of any concerns or suggestions you may have.

*Michael E. Horn, Plant Section President
vonbelx@aol.com*

An ad hoc "New Horizons" committee was formed to re-evaluate short- and long-term needs of the Plant Section. Current members are Melissa Heatley, Wayne Parrott, Roberta Smith, Dave Songstad, Dwight Tomes, and Chuck Armstrong (chair). We need your input! The results of a survey which has been completed and will be mailed to the entire Plant Section membership in April and will be tabulated and presented for discussion at the Business Meeting in St. Louis in June. Please contact any of us at any time with your thoughts on how to enhance the value of the SIVB Plant Section to our members and to society.

*Charles Armstrong, Vice-President
charles.l.armstrong@monsanto.com*

Plant Section membership has continued to slowly increase each year from 1995 to a current membership of 536. There is approximately \$72,000 in the Plant Activity Fund, a portion of which will be used to cover expenses resulting from the upcoming 2001 SIVB Congress. This total reflects diligent and successful fund raising efforts by our development team, Harold Trick, David Songstad and Ray Shillito.

*Heidi Kaeppler, Secretary-Treasurer
hfkaeppler@facstaff.wisc.edu*

VERTEBRATE SECTION

The Vertebrate Section was very visible at the 2000 World Congress on In Vitro Biology, hosting or co-hosting 15 symposia and sponsoring 3 contributed paper sessions. The following were the symposia and workshops: "NASA biotechnology: Cell science in microgravity," convened by J. Milburn Jessup and Neal Pellis; "Current issues facing tissue culture collections in the new millennium," convened by Yvonne Reid; "Mechanical detection of cell form and function," convened by Elizabeth J. Roemer; "In vitro models to study cancer," convened by Gertrude Buehring; "Tissue engineering: From cells to organs," convened by Gordana Vunjak-Novakovic; "Growth factors in differentiation and carcinogenesis," convened by Miho Furue; "The new era of blood cell cultures: Breakthrough techniques and clinical applications," convened by Tadao Ohno and Masayoshi Nambu; "Stem cell technology," convened by James Robl; "Proteinases and inhibitors in angiogenesis," convened by James J. Quigley; and "Characterization of animal cells: Viral contamination and authenticity," convened by R. Ian Freshney and Glyn Stacey. In addition the Vertebrate Section hosted several joint symposia with the Invertebrate and Cellular Toxicology Sections: "Marine organisms as models for biomedical research," convened by Shirley Pomponi; "In vitro production of recombinant proteins and viral pesticides," convened by Holger Hübner; "In vitro biology of tick-borne disease: Lyme disease and ehrlichiosis," convened by Tim Kurtti and Jorge Benach; "Molecular biology of fish cells in vitro," convened by David Barnes; and "Neural stem cell development," convened by Theo Palmer. Three contributed paper sessions were sponsored by the Vertebrate Section jointly with the Cellular Toxicology Section: "In vitro models for the study of cancer," moderated by Eugene Elmore; "Factors affecting cellular growth and differentiation (I)," moderated by Mutsumi Takagi; and "Factors affecting growth and differentiation (II)," moderated by Yoshinobu Matsuo.

The business meeting of the Vertebrate Section was held jointly with Cellular Toxicology Section during the 2000 Congress. John Harbell, outgoing president of the Cellular Toxicology Division announced the new officers for both sections. The new Vertebrate Division officers for 2000-2002 are: Chair - Elizabeth Roemer, Chair-elect - Janis Demetrulias, and Secretary - Gertrude Buehring. Recognition was then given to the individuals who convened symposia (see above paragraph) and the organizations and their representatives who supported symposia at the 2000 Congress: US Army Medical Research and Materiel Command (William Smith), BioWhittaker (Jeffrey Janus), Proctor & Gamble (Rosemary Osborne), Eli Lilly (Dennis Laska), International Foundation for Ethical Research (June Bradlaw), HyClone (Spencer Parkinson), US Tobacco Company (Robert Lawrence), and Avon Corporation.

Incoming chairs Dennis Laska of Cellular Toxicology and Elizabeth Roemer of the Vertebrate Section then assumed leadership and led the discussion on possible symposia for the 2001 congress. There was strong support for using the 2002 congress as an opportunity to depart from the usual format of symposia and instead sponsor a series of workshops.

*Gertrude Buehring, Vertebrate Section secretary
buehring@uclink4.berkeley.edu*

HISTORY SOCIETY

The History Society held an informal meeting at the World Congress in San Diego (June 2000). Following a brief update of the financial status and SIVB archives at the University of Maryland, Baltimore, a couple of longtime members were recognized for their outstanding achievements in tissue culture and cell science. Dr. Karl Maramorosch introduced Dr. Jun Mitsuhashi (one of the three recipients of the SIVB Lifetime Achievement Award). Dr. James Vaughn, another Lifetime Achievement awardee, was also present. An informal gathering is planned for the 2001 meeting in St. Louis. Hope to see old friends and new faces in St. Louis.

SIVB History Society officers are: Dr. Len Schiff, President, Dr. John Ryan, Vice President, Dr. Martha Wright, Secretary/Treasurer, and Dr. Karl Maramorosch, Executive Board Representative.

The branch along with the Records and Historical Committee oversees contributions to the SIVB archives located in the library at the University of Maryland, Baltimore.

Len Schiff, History Society Chair
len.schiff@primedica.com

RECORDS AND HISTORICAL COMMITTEE

(Please see the History Society Report)

Members of the Records and Historical Committee include: Dr. Leonard J. Schiff, Chair; Dr. June Bradlaw, Toxicology; Dr. James H.M. Henderson, Plant; and Dr. Karl Maramorosch, Invertebrate.

Len Schiff, History Society Chair
len.schiff@primedica.com

Standing Committees

EDUCATION COMMITTEE

The Education Committee sponsored both a professional workshop and outreach programs for high school teachers and students at the SIVB's 2000 World Congress in San Diego. The full day professional workshop: "Foundations and Advanced Applications of Cell Culture" was organized by **Burt Lidgerding** and focused on the basic requirements for conducting animal cell culture. In the morning multiple speakers discussed media requirements, sources of cells, quality control of cells and their cryopreservation. The afternoon sessions covered topics related to the general theme of production of biological molecules from cells in culture.

The high school outreach program included a Saturday morning workshop, a student research symposium and a special poster session. The workshop: "In-Vitro Techniques for the Classroom: a Hands-On Program for High School Teachers" was designed to introduce *in vitro* biology teaching modules that can be taken back to the classroom. The program covered several topics, in two subject areas. The biotechnology modules: DNA isolation and polymerase chain reaction (PCR); were presented by **Zuzana Zachar**, **Patricia Bossert**, and **Jennifer Visconti** with the assistance of **Paul Frake**, **Youngmei Han**, and **Lindsey Paluska**. **Valerie Pence**, **Carol Stiff** and **Ken Torres** taught tissue culture with sessions that covered field collection, plant cell and tissue culture and contamination control. The Sunday symposium: "In Vitro Research by High School Students" was convened by **Sarwan Dhir** and **Zuzanna Zachar** and featured talks by both educators and students. Two educator-mentors discussed their different approaches to facilitating the research efforts of pre-college students. The three student research presentations included: "Investigation of Evolutionary Relationships Among Mammals Using the Polymerase Chain Reaction" by "Team DNA": **Paul Frake**, **Youngmei Han**, and **Lindsey Paluska** of Northport High School, NY; "Introduction of Vaccine Genes in Tomato" by **Melissa Shah** of Warner Robins High School, GA; and "Propagation of Daylily by Conventional and Non-Conventional Methods" by **Tiffany Swann** of Houston County High School, GA. The Special Poster Session featured work by high school students: **P. Frake**: "The Effect of Gastrointestinal pH on Chemically Modified Tetracyclines, an In Vitro Analysis of Potential Methods of Drug Delivery", **Y. Han**: "Cloning and Analysis of the Heart-Inducing Tbx5 Transcription Factor Gene", **L. Paluska**: "Chemically Modified Tetracycline 300 Inhibition of PMN Lysate Mediated Degradation of Alpha-1-Proteinase Inhibitor" and "Investigation of Evolutionary Relationships Among Mammals Using the Polymerase Chain Reaction", **A. Kepping** and **J. Hsieh**: "DNA Isolation - A Comparison of Two Methods for the Secondary School Science Classroom" and **A. Hess** and **R. Musalo**: "The Function of the Ey Gene in Drosophila melanogaster Eye Development". Educators' posters included: **Z. Zachar**: "LIGASE: Science Education Program: Teacher Training and In-House Research Programs", **C. Stiff**: "Affordable Plant Tissue Culture for the Classroom" and **M. Smith**: "Training for the Future: Cell Culture and Biosafety Workshops".

Thanks to generous financial and in kind support by Colgate-Palmolive, Inc., the Monsanto Fund, LIGASE, CARTS, the Cincinnati Zoo and Botanical Gardens, Phytotechnologies Laboratories, Kitchen Culture Kits and Life Technologies, Inc. the 2000 educational programs were a great success. The workshops were standing room only, and the symposium and poster presentations were very enthusiastically received.

Elizabeth J. Roemer, Education Committee Chair
eroemer@path.som.sunysb.edu

MEMBERSHIP COMMITTEE

The Membership committee held an email roundtable discussion on increasing and retaining membership in the Society. Some of the following ideas were proposed. Any member interested in becoming involved in any of these initiatives should contact me or the business office.

AWARDS



INVERTEBRATE CONFERENCE



VOLUNTEER RECOGNITIONS



HIGHLIGHTS



In general email alerts and teaser notices should be used to 'wake up' the general membership and refocus attention to their society. These could be used to remind members to vote in the elections, submit abstracts on schedule, and nominate their students and colleagues for membership or awards.

There is a need to target University Faculty and Graduate Students, especially in the Vertebrate, Toxicology, and Invertebrate areas since those groups are declining in membership. Student and post doctoral members are our future members so perhaps interesting them will pay off with continued participation as they move into permanent positions. The challenge is finding a way to contact the right people and interest them in what SIVB has to offer.

The future of the Society rests on our ability to attract new grad students and we need to do more to encourage their participation. SIVB doesn't have many graduate student members, although the scientific program is great. Graduate students in particular benefit from 1) a strong and active placement service, with well organized on-site interviews, and 2) grouped, focused poster sessions that highlight topics and draw in discussion participants. Many of us have fond memories of presenting our first talk or poster at the SIVB meeting, either as a grad student or postdoc. And we also recall the pride in being invited to chair a session as a young faculty member. There are definite advantages to our smaller, more intimate meetings that provide a user-friendly environment. We have a good variety of session topics, but maybe more workshops on how to apply for a job, how to write a grant proposal, alternative funding sources, etc., would be attractive.

Getting the membership to grow will take a group effort on the part of all of our members. We need let them know that we need their support and ask them each to encourage their colleagues or students to join and attend the meetings. Students are the future of the SIVB. Perhaps if we could take advantage of our on-going workshops by making them free for undergraduate or graduate students (but charge non-student attendees), we could encourage them to attend. Continuing the student roommate-matching and volunteer programs would be useful as well.

We might try to promote company sponsored student travel funds with a donation of \$800 - \$1000 per student, and advertise the program in the newsletter and web site. The purpose would be to sponsor students to present their data when they could not otherwise afford to do so. We could stipulate that the student mentor would have to cover a part of the expenses and that we would provide up to approximately \$800 or 2/3 of their expenses, whichever is less. Students must register for and attend the annual meeting in order to receive the awarded check. The sponsoring companies could have their name associated with an award but the SIVB would review applications and select winners.

To attract and keep more members in the Vertebrate section, maybe we need to have more sessions (like the NASA zero gravity sessions) that emphasize innovative new technologies in vertebrate in vitro biology. More focused sessions on exploitation of in vitro methods in bioengineering, bioreactors? How about some invited review articles along this line in the Journal?

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. Also 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. I think all these aspects enhance the profile and "added value" of the Society. However, the message needs to get across to more international colleagues and especially in Europe. Perhaps we could offer some kind of "New Members Pack" for first time attendance of a "Research Group" to an SIVB Congress (e.g. discount on the conference fees) and at the same time offer new members a reduced, first year membership subscription and a free/reduced first year membership (for example) of 1 of their graduate students.

We might target a concerted recruitment drive of non- US scientists who are collaborators with our current members. We ask our members for contact names and email addresses and contact the scientists directly. Perhaps these collaborators would advertise the SIVB web pages and Congresses on their web sites. SIVB might co-host an out of US meeting with an appropriate society in the host country. We could also invite these scientists to speak at meetings to increase our international base.

2000-2002 MEMBERSHIP COMMITTEE MEMBERS

Barbara M. Reed, Chair
Richard Heller
Paul Price
Warren Schaeffer
Roberta Smith
Maud Hinchee
Jayasankar Subramanian
Margaret L. Smith
Eugene Elmore
Howard Hosick
Erica Benson

reedbm@bcc.orst.edu
rheller@com1.med.usf.edu
price@lifetech.com
wschaeff@moose.uvm.edu
rsmith@ppserver.tamu.edu
mahinch@arborgen.com
js@GNV.IFAS.UFL.EDU
m2smith@ucsd.edu
eelmore@uci.edu
hosick@mail.wsu.edu
E.BENSON@mail1.tay.ac.uk

*Barbara M. Reed, Membership Committee Chair
reedbm@bcc.orst.edu*

NOMINATING COMMITTEE REPORT

The Nominating Committee will meet at the annual meeting in St. Louis to work on the final slate for the election of officers in the fall of 2001. An announcement in the In Vitro Report encouraged individuals interested in serving on the Board of Directors or as a Standing Committee Chair to contact Delia Bethell, Chair of the Nominating Committee. The Presidents of all the sections serve with the Past President of the SIVB on the Nominating Committee.

Those members are:

Elizabeth Roemer
Michael Horn
Ray Hakim
Dennis Laska
Delia Bethell

Vertebrate Section
Plant Section
Invertebrate Section
Cellular Toxicology Section
Past President (1998-2000)

Delia Bethell, Nominating Committee Chair
drbethell@aol.com

PROGRAM COMMITTEE

The World Congress On In Vitro Biology was held June 10-15 at the Town & Country Resort, San Diego California. The World Congress was sponsored by the Society of In Vitro Biology (SIVB), Japanese Tissue Culture Association (JTCA), Japanese Association for Animal Cell Technology (JAACT), Japanese Society of Plant Cell & Molecular Biology (JSPCMB), and co-sponsored by the European Tissue Culture Society (ETCS) and Swiss Tissue Culture Society (STCS). The 10th International Conference on Invertebrate Cell and Tissue Culture was held in conjunction with the World Congress. Highlights of the Congress included symposium on: models for toxicology and disease prevention in animal and plant systems; tissue engineering; genetically engineered crops; invertebrate/plant interaction; molecular biology of fish culture; stem cell biotechnology; bioinformatic / data management systems; preservation of endangered plant and animal species; and workshops on standards and characterization of cell lines, technology transfer to essential crops in the developing world, and the international issues facing tissue culture collections.

The 2000 World Congress was officially opened by **Peter Raven**, PhD, Director of the Missouri Botanical Gardens, Engelmann Professor of Botany, Washington University, and leading advocate for the preservation of bio-diversity and global conservation. Dr. Raven presented the Plenary Symposium *Preservation of Endangered Plant, Animal, and Insect Species*. Following Dr. Raven's symposium, sponsored by **Monsanto**, an evening reception and behind-the-scenes tour of the world-renowned San Diego Zoo and gardens was held in his honor.

Stanley B. Prusiner, M.D., awarded the 1997 Nobel Prize in physiology or medicine for his discovery of a class of infectious proteins called *prions*, was the World Congress Distinguished Plenary Speaker. Dr. Prusiner is Director of the Institute for Neurodegenerative Diseases and Professor of Neurology and Biochemistry, University of California, San Francisco (UCSF). Dr. Prusiner spoke on *Advances in Understanding the Molecular, Genetic, and Protein Structure*, and his contributions to neurology and scientific research in the understanding of degenerative diseases of the central nervous system (CNS). Following Dr. Prusiner's symposium, sponsored by **Corning Science Products**, a reception was held, where scientists and students had the opportunity to meet and visit with Dr. Prusiner.

The Society for In Vitro Biology *Lifetime Achievement Award(s)* were presented to **Jun Mitsuhashi**, PhD, **James L. Vaughn**, PhD, and **Atsushi Komamine**, PhD for their contributions to the development of technology for food supplies and safety for world agriculture. Professor Mitsuhashi was honored and recognized for his pioneering contributions to the development and innovations of insect cell lines and medium. Dr. Vaughn was honored and recognized for developing the pathology and understanding of in vitro production of baculovirus. Professor Komamine was honored and recognized for his pioneering contribution to plant physiology and plant cell culture. The Senior Investigator Award was presented to **Alda Vidrich**, PhD, and the Plant Fellow Award was presented to **Raymond Shillito**, PhD. Awards were also presented to **Akira Sakai**, PhD, for Honorary Membership; and to **Indra Vasil**, PhD, **Miho Furue**, DDS, PhD, and **David Altman**, PhD, for Distinguished Service to the SIVB.

The Advanced Tissue Culture Workshop, *Cell and Tissue Culture: Foundations and Advanced Applications*, held as a pre-World Congress course in San Diego, was a standing room only event. The advanced workshop, co-sponsored by *The Baker Company*, was reminiscent of the first tissue culture meetings where international scientist and students gathered to learn and exchange ideas on the latest in vitro techniques. **Burt Lidgerding**, PhD, Shepherd College, organized and convened the course with faculty: **John Ryan**, PhD, Abbott Laboratories; **Paul Price**, PhD, Life Technologies, Inc.; **Yvonne Reid**, PhD, American Type Culture Collection; **Soverin Karminol**, PhD, Biowhittaker, Inc.; **Alexis Bossie**, PhD, Biowhittaker Inc.; and **Hans G Drexler**, MD, PhD, Deutsche Sammlung von Mikroorganismen & Zellkulturen (DSMZ), German Collection of Microorganisms and Cell Culture. Workshop attendees had the additional opportunity to meet and talk with emeritus tissue culture pioneers and in vitro experts which included: **R. Ian Freshney**, MD, **Gordon Sato**, PhD, **Lionard Hayflick**, PhD, **June Bradlaw**, PhD, and **Karl Maramorosch**, PhD.

The "Hands-on" K-12 Educational Outreach Program, held in conjunctions with the World Congress in San Diego introduced in vitro biology classroom teaching modules to local high school teachers and students. The workshop, sponsored by an educational grant from **Colgate Palmolive**, included resource guides and classroom ready sample kits. The workshop faculty included: **Zuzanna Zachar**, PhD, Long Island Group About Science Education (LIGASE), State University of New York at Stony Brook; **Patricia Bossert**, PhD, and **Jennifer Visconti**, teachers at Northport High School, N.Y.; *Team DNA* students, **Paul Frake**, **Youngmie Han**, and **Lindsey Paluska**, Northport High School, NY; **Valerie Pence**, PhD, Cincinnati Zoo and Botanical Garden's Center for Research of Endangered Wildlife; **Kenneth C. Torres**, PhD, Phytotechnologies, Inc.; and **Sarwan K. Dhir**, PhD, Fort Valley State College and Agricultural Research Station. The support and efforts of **Margaret L. Smith**, PhD, University of California, San Diego; **Gabrielle Wienhausen**, PhD, University of California, San Diego; **Judi Heitz**, Biotechnology Coordinator San Diego High School and Director San Diego Science Alliance; **Michael Riggs**, PhD, University of California, San Diego; **Eugene Elmore**, PhD, University of California, Irvine; **Warren Schaeffer**, PhD, University of Vermont Medical School; **Elizabeth Roemer**, State University of New York at Stony Brook; **John Harbell**, PhD, Institute for In Vitro Sciences; **Jaunel Boyd**, PhD, Colgate Palmolive; and the **Greater San Diego Science and Engineering Fair** are acknowledged.

HIGHLIGHTS



Plan
On
Attending!



June 26 - 29, 2002
ORLANDO, FLORIDA
The Congress on In Vitro Biology

The World Congress Program Committee acknowledges the generous support of the members and companies who donated *classic and collectible* items to the Millennium "Silent" Auction. Auction donors: **R. Ian Freshney, Leonard Hayflick, Karl Maramorosch, Eugene Elmore, David Ellis, Maud Hinchee, Colette Rudd, Alda Vidrich, Delia Bethell, June Bradlaw, Life Technologies, Research & Clinical Laboratory Systems, Japanese Tissue Culture Association, RicTec, Inc./Rice Select, ProfiGen, UST, Inc., Nashville Predators Association, Town & Country Hotel, the San Diego Convention & Visitors Bureau,** and others have been acknowledged for their generous contributions. Auction chair **Colette Rudd** and committee members: **Barbara Doonan, Elizabeth Schneider, Michele Stevenson and Michele Schultz** made the auction a fun and memorable event. A special thank you to all members who generously bid on classics and collectibles items. Proceeds from the auction will enable the Society to support future education and scientific programs.

On a personal note, I gratefully acknowledge the expertise, support, and collegial friendship of **Cynthia L. Goodman, David Ellis, Ted Klein, Miho Furue, Tohru Masui, Alda Vidrich, Colette Rudd, Yoshisuke Nishi, Sanetaka Shirahata, Barbara Durrant, Paul Price, Shirley Pomponi,** and the many other members of the program committee members and Scientific Advisory Board who spend the past two years planning and facilitating this successful international event. The Society for In Vitro Biology is indebted to the World Congress Sponsors: **Corning Science Products, Monsanto, UST, Inc., U.S. Army Medical Research & Material Command, University of California Biotechnology Research & Education, Colgate-Palmolive Company,** and to the Symposium Sponsors, Contributors, and Exhibitors who financially supported the scientific and educational activities of the World Congress. The World Congress was such a successful international event due to planning, financial support, and most important to the participation by scientists representing thirty (30) countries.

*Sandra L. Schneider, 2000 World Congress Chair
drsandra@stic.net*

PUBLICATIONS COMMITTEE REPORT

In 2000, the Publication Committee achieved on-line electronic publication with the two principle journals, *In Vitro Cellular and Developmental Biology-Animal* and *In Vitro Cellular and Developmental Biology-Plant*. Other highlights include the dramatic increase in submissions and published material for *In Vitro Cellular and Developmental Biology-Plant*, a change in editorship of *In Vitro Report*, and the employment of Melinda Thompson in the SIVB Business Office to handle marketing and managing editorship functions for *In Vitro Cellular and Developmental Biology-Animal*.

In Vitro Cellular and Developmental Biology-Plant completed its second full year of publishing six issues in collaboration with the International Association for Plant Tissue Culture & Biotechnology. Each section of the journal expanded the editorial boards. Additional members of the Editorial Board for the IAPTC&B issues (numbers 2 and 5) include Daniel C.W. Brown (Canada), Paul Christou (UK), Luis Herrera-Estrella (Mexico), Magdy Madkour (Egypt), Maria Salome Pais (Portugal), and Woong-Young Soh (Korea). New Associate Editors for the regular SIVB issues (numbers 1, 3, 4, and 6) are; Erica Benson (Scotland), Kathleen D'Halluin (Belgium), Erwin Heberle-Bors (Austria), Frans Krens (The Netherlands), Mary O'Connell (USA), and David Songstad (USA).

Submissions for *In Vitro Cellular and Developmental Biology-Plant* showed a dramatic improvement. The SIVB editors received 123 manuscripts in 2000 (compared to 98 in 1999) and the IAPTC&B editors received 106 manuscripts last year (compared to 70 in 1999). Of the 123 SIVB articles, 51 were accepted, 23 were accepted pending revision and 49 were rejected. The statistics for the 106 IAPTC&B articles are 43 accepted, 19 accepted pending revision, 33 rejected, and 11 still under review. The IAPTC&B totals do not include certain special articles of note as a result of Indra Vasil's efforts, particularly the outstanding Turning Point articles by Edward Cocking and John Sanford. The articles per issue for Vol. 36 are as follows: (1) -12; (2) - 12; (3) - 14; (4) - 11; (5) - 24; and (6) - 17; total - 90.

Our publisher for *In Vitro Cellular and Developmental Biology-Plant*, CABI, has pursued an aggressive marketing effort, especially during the first half of last year, with the aim of reaching an expanded international audience, primarily in Europe. The on-line version of the journal was initiated with the first issue of volume 36 in 2000, and there are selected consortia being considered to enhance the journal's visibility and impact. The Journal Highlights, which have traditionally appeared in *In Vitro Report*, now also appear on the SIVB website.

In Vitro Report continued as a quarterly newsletter in 2000. Sandra Schneider was Editor-in-Chief during last year. Following the change of Officers for the Society, the responsibility for *In Vitro Report* was assigned to the new Vice-President, Ray Shillito, by the Board of Directors, and Ray delegated the Editor-in-Chief duties to Martha Wright who graciously agreed to return to service once again for our publications efforts. The Publication Committee would like to thank Sandra for her service and extend gratitude to Ray and Marty for taking up their present roles. The first issue of 2001 was the first publication of the newsletter under the new editorship. The Publication Committee intends to review and authorize operational protocols and guidelines for *In Vitro Report* by mid-year, which will represent the first time these governance rules will be documented in a comparable manner to SIVB's other publications.

In Vitro Cellular and Developmental Biology-Animal maintained its journal impact rating in 2000 to comparable levels for 1999. There was a reduction in manuscript submissions, with a total of 119 (compared to 128 in 1999). However, the published totals are similar for last year vs. the prior year, with 102 regular papers (99 in 1999), 16 Letters-to-the-Editor (21 in 1999), and 1 invited review (0 invited reviews, but 8 book reviews in 1999). Of those 119 submissions, 62 were accepted, 50 are still in revision or review and 7 were rejected. In addition to the USA, there were 18 countries represented among the submissions in 2000. Three originally submitted as regular papers were accepted upon revision to Letters, as suggested by reviewers and editors. Average time from receipt to first decision in the review process was 6.5 weeks compared to 6.2 weeks last year. Average time from receipt to publication was 3.5 months.

We believe that the quality of manuscripts received has improved since the stringency of review has been somewhat aided by improved choice of expert reviewers according to experts in the area by use of the Internet. The Editorial office continues to push for exploitation of electronic media and feels that this vehicle is essential to maintain the viability and growth of the journal in service of its readers and the field. The office has proposed to participate in the trend of electronic publication of preprints as soon after a decision is made and to evolve into a completely electronic submission and review process.

Melinda Thompson came on board during the fall of 2000 as Director of Marketing & Communications. The publishing contract with Allen Press for *In Vitro Cellular and Developmental Biology-Animal* differed from the arrangement with CABI for *In Vitro Cellular and Developmental Biology-Plant*, so SIVB was not having the same attention for marketing and promotion with the Animal journal. Melinda's appointment provides support for this function with *In Vitro Cellular and Developmental Biology-Animal*, and her other responsibilities include the Managing Editor duties for this journal, which are now moved back to the Business Office. The most significant item since her hire under the direction of Marietta Ellis, Managing Director, was the conclusion of a contract with BioOne for *In Vitro Cellular and Developmental Biology-Animal*. BioOne is an on-line consortium of more than 32 journals, and SIVB's participation is anticipated to increase visibility and impact of the Animal journal.

*David W. Altman, Chair - Publications Committee
102133.3263@compuserve.com*

*Gregory C. Phillips, Ph.D., Editor-in-Chief, In Vitro-Plant
gphilli@nmsu.edu*

*Wallace McKeehan, Editor-In-Chief, In Vitro-Animal
wmckeeha@ibt.tamu.edu*

*Melinda Thompson, SIVB Director of Marketing & Communications
melinda@sivb.org*

STRATEGIC LONG RANGE PLANNING COMMITTEE

The Strategic Long Range Planning Committee (SLRPC), chaired by the President-elect, is advisor to the SIVB President and Executive Board on future annual Congress and other issues that impact the long-range or future plans and growth of the society. The charge of the current SLRPC is to provide scientific and business input related to the maximum use and scientific return of the SIVB products, to include Congress programs and journals. The goals of the "Long Rangers" will be to identify methods to enhance and promote the society, continue development of scientific and educational programs, and development of international scientific program relationships. Scientists serving on the SLRPC (2000-2002) are: **Sandra L Schneider**, DrPH (*chair*), Research & Clinical Laboratory Systems; **Hans Drexler**, MD, PHD, DSZM German Collection of Microorganisms and Cell Culture; **David Ellis**, PhD, Cellfor Incorporated; **Miho**

Furue, DDS, PhD, Kanagawa Dental College; **Cynthia L. Goodman**, PhD, US Department of Agriculture, ARS BCIRL; **Maud A. Hinchee**, PhD, ArborGen; **Soverin Karmioli**, PhD, Biowhittaker, Inc.; **Hank Lane**, Lane & Associates; **Shirley A. Pomponi**, PhD, Harbor Branch Oceanographic Institute; **Yvonne A. Reid**, PhD, American Type Culture Collection; **Colette J. Rudd**, PhD, DABT, Rudd & Weiler Associates; **Roberta H. Smith**, PhD, Texas A&M University; and **William J. Smith**, PhD, US Army Medical Research Institute of Chemical Defense.

To maximize the Society's strength, and to ensure a focused direction for the annual Congress and education programs, the SLRPC will coordinate efforts with the Scientific Advisory Board (SAC). The SAC represents senior and emeritus scientists who support the SIVB to maintain an active presence and leadership position in the scientific/biotechnology community, and includes: **David Barnes**, PhD, American Type Culture Collection; **June Bradlaw**, PhD, International Foundation for Ethical Research; **Gretchen Darlington**, PhD, Texas Children's Hospital and MD Anderson Hospital; **Elizabeth D. Earle**, PhD, Cornell University; **R. Ian Freshney**, PhD, University Glasgow; **Freddi Hammerschlag**, PhD, USDA/ARS; **Leonard Hayflick**, PhD, University of California, San Francisco; **Dr.-Ing Holger Hübner**, Berlin University of Technology; **Robert Langer**, ScD, Massachusetts Institute of Technology; **Robert Lawrence, Jr.**, PhD, UST, Inc.; **Masayoshi Namba**, PhD, Okayama University Medical School; and **Sanetaka Shirahata**, PhD, Kyushu University. The SLRPC and SAC are internationally recognised scientists representing the Society Sections, as well as the supporting Japanese and European tissue culture societies. The SLRPC and SAC membership will continue to strengthen the role of the SIVB in the global scientific, biotechnology, and public community. Members, or interested scientists who have an interest in the Strategic Long Range Planning Committee, are cordially invited to attend the committee meeting during the June Congress in St. Louis, Missouri. For further committee information contact Dr. Sandra Schneider, drsandra@stic.net, or the SIVB office, sivb@sivb.org.

*Sandra L. Schneider, President-Elect
drsandra@stic.net*

Ad Hoc Committees

BUSINESS OFFICE

The Business Office activities focused on the 2000 World Congress on In Vitro Biology, 10th International Conference on Invertebrate Cell and Tissue Culture, 10th International Congress on Plant Cell and Tissue Culture & Biotechnology, publications and membership. The 2000 World Congress was held June 10 - 15, 2000, at the Town and Country Resort in San Diego, California. Attendance for the World Congress was 683 scientists and exhibitors. The Congress program included 315 abstract submissions and 30 "hot topics" posters. This was our first World Congress that showcased two plenary sessions and receptions, an Advanced Tissue Culture Workshop, an Education Outreach Program K-12, and a silent auction in addition to the 10th International Conference on Invertebrate Cell and Tissue Culture.

Highlights of the 2000 World Congress are as follows: Dr. Peter Raven spoke on the "Preservation of Endangered Plant, Animal and Insect Species" as the Opening Plenary Session. Following the symposium, the plenary reception and dinner in Dr. Raven's honor was held at the San Diego Zoo. Participants were given the opportunity to talk informally with Dr. Raven as well as having a behind-the-scenes tour of the Zoo with a reception and dinner. Later in the Congress, Dr. Stanley Prusiner gave the Distinguished Plenary Symposium. He addressed the Congress on "Advances in Understanding the Molecular, Genetic, and Protein Structure of Neurodegenerative Diseases." There was a plenary reception and luncheon following in the exhibition hall to honor Dr. Prusiner. There were several pre-Congress events at the 2000 World Congress. The Educational Outreach Program, which was held at the University of California at San Diego, focused on research and teaching strategies to mentor pre-college students in the field of in vitro biology. Also, the Advanced Tissue Culture workshop was conducted with attendance of 61 participants. The attendees will be familiar with cell culture facilities and the general understanding of aseptic techniques. Continuing education credit was available to attendees through the University of California, San Diego. The 10th International Conference on Invertebrate Cell and Tissue Culture began with an Invertebrate Awards Forum and Reception honoring two Lifetime Achievement Awards honorees, Drs. James L. Vaughn and Jun Mitsuhashi. The keynote address was made by Dr. Vaughn on "Foundation for Achievement in the New Millennium". Other awardees, honored at the Congress were Drs. Atsushi Komamine, Lifetime

Achievement Award, Raymond Shillito, Plant Fellow Award, Alda Vidrich, Senior Investigator Award, and three Distinguished Service Awardees: Drs. Indra Vasil, Miho Furue, and David Altman. The first annual Silent Auction, Millennium Auction, was held in conjunction with the World Congress. Under the leadership of Dr. Colette Rudd, Silent Auction Chair, it was a success. We received approximately 20 auction items and auctioned all the items to Congress participants.

The 2001 Congress on In Vitro Biology will be held in St. Louis, Missouri, at the Regal Riverfront Hotel. The 2001 Congress will showcase Dr. Roger N. Beachy, President of the Donald Danforth Plant Science Center. Dr. Beachy's symposium, "Opportunities and Challenges in Plant Biology to Benefit Health and Sustainability," will highlight the impact of advances in biotechnology, which have created significant breakthroughs in food production, nutrition, and sustainability. There will be a plenary reception and dinner following the Plenary Symposium at the Missouri Botanical Gardens to honor Dr. Beachy. There also will be pre-Congress workshops, Risk Communication and Advanced Tissue Culture, on Saturday, June 16 from 8:00-4:00 pm. We will continue with the Educational Outreach Program in St. Louis with a full program to help high school teachers work with students to meet the new national science education standards. The program will consist of two hands-on workshops presenting classroom-ready modules featuring techniques for DNA isolation and analysis and Plant Tissue Culture.

The Society for In Vitro Biology (SIVB) has been working jointly with the International Association for Plant and Tissue & Biotechnology (IAPTC&B) on their 10th International Congress on Plant Cell and Tissue Culture & Biotechnology to be held in Orlando, Florida on June 23 - 28, 2002. The SIVB is the IAPTC&B's Congress Secretariat and one of the Congress organizers for the upcoming meeting. The first circular announcing the 10th International Congress was developed and distributed to members of the SIVB and the second circular of the Congress has been completed and will be circulated to members at the 2001 Congress on In Vitro Biology.

The Business Office continues to work with the Publications Committee on the electronic publishing of the *In Vitro Cellular and Developmental Biology - Animal and Plant*. We worked very closely with our new publishing partner, CABI Publishing, CAB International in the UK on the *In Vitro-Plant* journal. We also partnered with Allen Press on the *In Vitro-Animal* journal. Also we hired a new member of the SIVB Business Office staff, Melinda Thompson as Director of Marketing and Communications to implement marketing and advertising strategies for the *In Vitro - Animal* journal, membership and the annual Congresses, as well as Managing Editor of the *In Vitro Animal* journal and *In Vitro Report*. The *In Vitro Report* continues to be an important vehicle to disseminate information to our membership. The Report changed editorship at the end of 2000. I wish to thank Dr. Sandra Schneider for her dedication to the Report and providing timely material for inclusion in the newsletter. We look forward to working with Dr. Ray Shillito and Ms. Martha Wright on the upcoming issues of *In Vitro Report*. I would like to thank Dr. David Altman, Publications Chair and the editors of all the SIVB's publications for their dedication to the goals and objectives of the Society. We could not effectively do our job at the Business Office without their continuous support and input.

The Business Office would like to thank all the officers, board of directors members, committee & section chairs for their support and dedication to the organization over the past year. I would also like to thank the volunteers at the 2000 World Congress for their participation at the registration desk and sessions. The success of the Society goals and objectives cannot be met without the volunteer support of its members.

*Marietta W. Ellis, Managing Director
sivb@sivb.org*

DEVELOPMENT COMMITTEE

The members of the Development Committee fund raising efforts continued with the fourth World Congress on In Vitro Biology held June 2000. The World Congress Sponsors were: the Society for In Vitro Biology, Japanese Tissue Culture Association, Japanese Association for Animal Cell Technology, and Japanese Society for Plant Cell and Molecular Biology. Participating co-sponsors were the European Tissue Culture Society and Swiss Tissue Culture Society. Direct sponsor contributions totaled \$150,400. The Development Committee is pleased to recognize the following contributors:

The Congress Sponsors (contributions up to \$25,000) were: Colgate-Palmolive Company (Educational Program Sponsor), Corning Science Products (Distinguished Plenary Sponsor), Monsanto Company (Opening Plenary and Plant Program Sponsor), University of California Biotechnology Research & Education, US Army Medical Research and Materiel Command, and UST, Inc.

The Congress Symposia Sponsors (contributions up to \$5,000) were: Advanced Cell Technology, Inc., Aventis CropScience, Becton Dickinson Labware, BioWhittaker Corporation, Defense Advanced Research Projects (DARPA), DuPont Agricultural Products, HyClone Laboratories, Incyte, Pharmaceuticals, Inc., InVitrogen Company, Japan Tobacco Company, Inc., JRH Biosciences, Inc., Life Technologies, Inc., Merck Research Laboratories, NASA – Johnson Space Center, Novartis Agribusiness Biotechnology, Pioneer Hi-Bred International, Renessen LLC, Stem Cell Technologies, Sun Microsystems, Inc., The Scotts Company, Trega Biosciences, Inc., and Zoological Society of San Diego.

The Congress Contributors (contributions up to \$1,500) were: American Type Culture Collection, Amersham Pharma Biotech, Asahi Techno Glass, Inc., Ashby Scientific, Ltd., Atox Co., Ltd., Avon Products, Inc., Baker Company, Beckman Coulter, Biotech Laboratories, Inc., Cellfor, Inc., Chuou Sanshou Co., Ltd., Cincinnati Zoo and Botanical Gardens, Daiwa Atomic Engineering Co., Ltd., DNA Plant Technologies, Dow AgroSciences, D-Squard Biotechnologies, Eli Lilly and Company, Fuji Electric Engineering, Inc., Glaxo Wellcome, ICN, Ikeda Rika Co., Inc., Immuno-Biological Laboratories Co., Ltd., Ing Co., Ltd., International Foundation for Ethical Research, International Reagents, Co., Iwai Chemicals Company, Johnson & Johnson, Kent SeaTech Corporation, Kluwer Academic Publishers, Laboratory of the Government Chemist, Nagase & Company, Ltd., Nesco Bio Company, Ltd., Nitto Best Company, Novartis Agribusiness Biotechnology Research, Inc., Novartis Institute for Biomedical Research, Oct M & D, Olympus, Inc., Organogenesis, Inc., Pacific Biotechnologies, Packard Japan, Inc., Pioneer Hi-Bred International, Inc., Plant Cell Technology, Inc., Precision Laboratories, Primedica, Procter & Gamble Company, ProdiGene, Inc., Rad Safe Company, Inc., Research Institute for the Functional Peptides, Sangyo Kagaku, Inc., Shonan Wako Company, Ltd., SIGMA, The Baker Company, The Gillette Company, Triple Red, Tsurta Kagaku Co., Ltd., Twyford Plant Laboratories, and Wyeth Ayerst Laboratories.

The Development Committee is the responsibility of the SIVB Vice President and is supported by the chairs and co-chairs of each section. The charge of the committee is to obtain sponsorship and funds for the scientific and educational SIVB programs/workshops.

The Committee and SIVB would like to thank all of the symposium speakers and the many scientists who provided their own funding to participate in the Congress. Members of the Invertebrate, Plant, Vertebrate and Cellular Toxicology sections are acknowledged for their contributions to the successful fund-raising efforts for the 2000 World Congress. We anticipate the continued momentum in fund raising efforts for the 2001 Congress on In Vitro Biology in St. Louis, MO.

Paul Price, Past Vice President (1998-2000)
pprice@lifetech.com

Ray Shillito, Vice President (2000-2002)
ray.shillito@aventis.com

LABORATORY MATERIALS AND BIOSAFETY COMMITTEE

The Laboratory Materials and Biosafety *ad hoc* 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, and 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 J. Goodwin**, NASA, Johnson Space Center; **Maud A. Hinchee**, Monsanto; **Colette Rudd**, Rudd and Weiler Associates; **Lynn Rutsky**, The University of Texas Health Science Center Houston; **William J. Smith**, US Army Medical Research Institute of Chemical Defense, **John Masters**, Institute of Urology, University College London, National Institute for Biological Standards and Control-UK; **Valerie Williamson Weed**, VivoRx; and **Alda Vidrich**, University of Virginia Health System. LMBC committee member **Glyn N. Stacey**, National Institute for Biological Standards and Control, UK, was elected to Chair of the Cell Standardization Committee. In this new role, Dr. Stacey will continue to support the goals of the LMBC and expand the direction of the Cell Standardization Committee.

The LMBC met during the 2000 World Congress in San Diego California, where they co-hosted the workshop *Current Issues Facing Tissue Culture Collections in the New Millennium*. **Yvonne Reid**, American Type Culture Collection, Chair of the Cell Standardization Committee, convened and moderated the workshop. International cell collection experts presenting included: **Tadao Ohno**, Institute of Physical and Chemical Research (RIKEN), **Hans G. Drexler**, DSM German Collection of Microorganisms and Cell Cultures, **Glyn N. Stacey**, National Institute for Biological Standards and Control, UK, and **Frank Simione**, American Type Culture Collection.

The LMBC will continue to actively promote and support topics related to science education, tissue engineering, public health policy, and risk analysis. Toward this goal, the LMBC committee members continue to work with the FDA Center for Devices and Radiological Health in the area of regulatory and standardization for biomaterials and tissue components used in medical devices and materials implants. The ASTM subcommittee has the charge to prepare tissue engineering standards and guidelines to be used for Cell-based Products, Growth Factors, and Living Cells.

Members and/or other scientists interested in serving on the LMBC, or in contributing to program development are invited to attend the 2001 committee meeting to be held during the 2001 Congress in St. Louis, Missouri should contact the SIVB office at sivb@sivb.org.

Sandra L. Schneider, Laboratory and Biosafety Committee Co-chair
drsandra@stic.net

AWARDS COMMITTEE

The Society was honored to bestow the Lifetime Achievement Award to three distinguished scientists of the Invertebrate and Plant Sections. **James L. Vaughn** has enjoyed a 30 year career in developing the pathology and understanding of *in vitro* production of baculovirus and made invaluable contributions to food supplies and safety for world agriculture. Dr. Vaughn, with the USDA/ARS/PL, has been a member of SIVB (TCA) since 1970 and made significant contributions to furthering the educational format of SIVB. **Jun Mitsuhashi**, Tokyo University of Agriculture, was a pioneer in the development and innovations of insect cell lines and medium that resulted in long term contributions to the field of entomology. Professor Mitsuhashi joined SIVB (TCA) in 1968 and also worked tirelessly to expand the educational endeavors of SIVB. **Atsushi Komamine**, Tohoku University, has had an illustrious and distinguished career in which he has always used plant cell/tissue cultures as his main experimental tool. Dr. Komamine and a graduate student in 1979 developed a method for the synchronization of somatic embryogenesis in carrot that resulted in a large amount of definitive information on the physiology, biochemistry and molecular biology of the process. He has also spent many years working on secondary metabolism. The Lifetime Achievement Award is proudly presented as a public recognition of the many lasting contributions these men have made to their respective fields of expertise. Dr. Vaughn and Professor Mitsuhashi were honored during the 10th International Conference on Invertebrate Cell and Tissue Culture just prior to the SIVB World Congress. Dr. Komamine was presented with his award during the Plant Section Social at the World Congress.

Honorary membership in SIVB was conferred upon **Akira Sakai**, Emeritus Professor of Hokkaido University, Japan. Dr. Sakai, considered the father of plant cryopreservation by many in the field, has done more than any other individual in furthering the ability to store plant cells and tissues in liquid nitrogen. From approximately 1974 to present he has explored the response of *in-vitro* cultured plant cells to cold conditions, especially to liquid nitrogen exposure. After his retirement in 1983, his work to develop the PVS (Plant Vitrification Solution) series of cryoprotectants from 1989-1993 led to one of the most successful cryopreservation techniques developed since the late 1970's. Dr. Sakai was presented with "Honorary Membership" and given the opportunity to speak on his research during the Plant Section Social at the World Congress.

The 2000 Plant Fellow Award of the SIVB was presented to **Raymond D. Shillito**, Aventis Crop Science Research Center, in recognition of his contributions to the advancement of plant genetic engineering and plant protoplast technology and his generous service to the Society. Dr. Shillito moved to the United States from England and joined Ciba, where in 1989 he regenerated the first fertile transgenic maize plants from protoplasts. He is now responsible for North American scientific support for registration of biotechnology crops with Aventis. Dr. Shillito, a member since 1988, has been dedicated to the mission of SIVB as is evident by his many years of service on the Program Committee and currently his two-year commitment as the Society's Vice-President. The Plant Fellow Plaque was presented to Dr. Shillito at the Plant Section Social of the World Congress.

The Established Investigator Award for SIVB was presented to **Alda Vidrich**, PhD., University of Virginia Health Sciences Center, in recognition of her international reputation in the fields of epithelial cell biology, gastroenterology, and advancements in the in vitro culture of intestinal epithelial cells. Dr. Vidrich has focused the last 14 years on understanding the pathogenesis of inflammatory bowel disease and has developed specific diagnostics to distinguish among several forms of the disease using colonic cell culture models. Since 1989, Dr. Vidrich has made numerous contributions to SIVB including Secretary of the Board of Directors from 1996–2000 and the 1999 Congress Chair and convening the Plenary Symposium. Dr. Vidrich was honored with the Established Investigator Award at the Millennium Banquet of the World Congress.

Three people who have given tirelessly to the Society were honored with Distinguished Service Awards, as selected by the President, Delia Bethell. Honored at the Millennium Banquet of the World Congress were Drs. **Indra Vasil**, **Miho Furue**, and **David Altman**. Dr. Vasil, a member of SIVB since 1985, is currently serving as President of the International Association of Plant Tissue Culture and Biotechnology (IAPTC&B) and is working in conjunction with SIVB to bring the 2002 IAPTC&B meeting to Orlando. His efforts to provide opportunities for joint work between the two societies are helping both organizations to share in the benefits of the scientific relationship. Dr. Furue served as the Japan Tissue Culture Association program committee representative providing interaction, translation and communication between the SIVB and the JTCA in order to develop the 2000 World Congress Program. She also organized a session on Growth Factors and Differentiation and Carcinogenesis highlighting the research of women scientists working in this area. Dr. Furue joined SIVB in 1998. Dr. Altman has served in many capacities since joining the SIVB in 1984. He was President of the Plant Section from 1996–1998. Dr. Altman is currently chair of the Publication Committee and was instrumental in developing the relationship between SIVB and CABI resulting in taking *In Vitro – Plant* online. He is also currently serving as Secretary/Treasurer of IAPTC&B.

The Phillip R. White Memorial Award for those desiring to continue training in plant tissue culture was presented to **Walid M. Fouad**, a graduate student in the Horticulture Sciences Department of the University of Florida, Gainesville. Mr. Fouad's research focuses on the metabolic adaptations plants make to drought and salt stress. He will continue his training in Dr. Bala Rathinasabapathi's laboratory where he hopes to develop a model for understanding the synthesis of the osmoprotectant, beta-alanine betaine.

The Student Affairs and Awards Committee presented the following awards at the 2000 Millennium Banquet of the World Congress. **Prakash Malla**, Institute of Pharmacognosy, Centre of Pharmacy, Vienna, Austria, received the Wilton R. Earle Award and the SIVB Student Travel Award for his paper *Micropropagation of the Threatened Medicinal Plant Allium Wallichii (Kunth) in Nepal*. **Nan Wang**, Oregon State University, Corvallis, received the SIVB Student Travel Award for her paper *Detection and Elimination of Verticillium Infections of Mint*. **Masakiyo Sakaguchi**, Okayama University Medical School, Okayama, Japan, received the SIVB Student Travel Award for his paper *Disorder of Intracellular Localization of S100C in the Process of Immortalization of Normal Human Fibroblasts*. The John S. Song Foundation Award was presented to **Alvar Carlson**, Department of Agronomy, University of Wisconsin/Madison, for his paper *Genetic Transformation of Elite Oat Cultivars*. **Marco Seandel**, State University of New York, Stony Brook, received the Honor B. Fell Award and the SIVB Student Travel Award for his paper *Involvement of MMP Proteinase Systems and Specific Collagen Cleavage in a Quantitative Angiogenesis Model*. **Krassimira Alexandrova**, School of Public Health, Department of Plant and Soil Service, University of Tennessee, received the Hope E. Hopps Award for her paper *Isolation of Genes Expressed During Somatic Embryogenesis in Orchardgrass*. The Cellular Toxicology Award was presented to **Teresa Garcia-Gasca**, Departamento de Posgrado en Alimentos, Universidad Autonoma de Querétaro, Querétaro, Mexico, for her paper *New Colorimetric Method for In Vitro Cell Number Estimation Using Carmine as a Specific Chromosome Dye*.

*Melissa E. Heatley, Awards Committee Chair
mheatley@ricetec.com*

Representatives of SIVB

AMERICAN TYPE CULTURE COLLECTION

Distribution of cell lines by the American Type Culture Collection (ATCC) during 2000 was 56,436. This represents a 4.4 percent decrease over the number provided in 1999. Replenishment stocks on 606 cell lines from CCL, CRL, TIB, HB, and HTB categories were prepared, recharacterized, and released for distribution.

Personnel in the Cell Biology Program also acquired, characterized, and preserved for distribution 159 new cell lines. Included, for example, was a series of three murine hybridomas producing monoclonals to the rat zona pellucida glycoproteins ZP1, 2, and 3, respectively; three human adenocarcinoma lines of ovarian origin, two with deletions at chromosome 3p24; five additional human skin fibroblastic strains useful as "normal" controls; a human renal angiomyolipoma immortalized by insertion of telomerase and SV₄₀ large T genes; plus over 25 human bronchoalveolar carcinomas, many with continuous lymphoid lines from the same patient donors. Additional details on these and other lines available can be obtained via the internet at <http://www.atcc.org>, now updated each weekend.

The Advisory Committee for the Cell Biology Program met at the ATCC in September 2000. The group reviews staffing, accessioning plans, research, and contract activities, and makes recommendations for future efforts. Currently, Dr. Barbara Knowles of the Jackson Laboratory is the Chairperson and Dr. Michael C. Chang is the NIH-NCRR Government Project Officer. Other external representatives include Drs. Gerard J. McGarrity (SIVB), Grace L. Picciolo (FDA), Olivia Smith (Baylor), Neil Talbot (USDA), and William R. Tolbert (San Diego).

*Robert J. Hay, American Type Culture Collection
rhay@atcc.org*

AMERICAN ASSOCIATION OF TISSUE BANKS

Meetings of the American Association of Tissue Banks (AATB) took place in Tempe, Arizona (Mid-Year), May 7-9, 2000, and in Bal Harbor, Florida (Annual), September 9-12, 2000. Emphasis was on regulatory, quality control, and accreditation issues, including screening of donors for neurological degenerative diseases, and threats posed by emerging infectious diseases.

Workshops on other pertinent topics are now being offered both in conjunction with the meetings and as separate calendar events. An example of the latter is the Quality Assurance Workshop on Tissue Banking which was offered in New Orleans, Louisiana, November 8-10, 2000.

Ms. Deborah Butler Newman was hired as the new Manager of Accreditation, replacing Robert E. Stevenson who will remain as a consultant to AATB on several programs. The next meeting (Mid-Year) will be held March 11-13, 2001, in Clearwater, Florida.

*Robert J. Hay, American Association of Tissue Banks
rhay@atcc.org*

***Camera Ready Copy
Included***