



American Society of Biomechanics Newsletter

Vol. 5

December, 1992

No. 1

FROM THE PRESIDENT Ron Zernicke

The Second North American Congress on Biomechanics, NACOB II, was a superbly organized and run meeting--furthermore, the scientific content was excellent. The Congress confirmed the strong roles that the ASB and CSB play in advancing biomechanics in North America. The Society gives its congratulations and heartfelt thanks to those key individuals who made the Congress a success. In particular, Lou Draganich (Meeting Chair) and Joan Bechtold (Program Chair) were outstanding. Prior to the Congress, they put enormous efforts into the structure of the meeting and program, and during the meeting they could be seen diligently working to assure a seamless experience for the registrants. Certainly, the impressive efforts of the CSB Program Chair, Rich Wells, are recognized and appreciated. The "free trade" of ideas, science, and effort was readily apparent between the ASB and CSB Program Chairs.

The ASB Education Committee, chaired by Mary Rodgers, recruited outstanding speakers to give interesting tutorials prior to the start of the regular program. The topics included: Biomechanics and Physiology of Lifting, Quantification of Motor Dysfunction in Neurologic Disorders, Biology and Biomechanics of Ligaments, and Quantitative Kinesiology. Each of the tutorials was well attended, and the speakers (G. Andersson, Z. Rymer, S. Woo, and Z. Ladin) are to be congratulated for the quality of information that they disseminated.

During the meeting, one of my "high points" was listening to the Borelli Lecture, delivered by Dr. Y-C. Fung. In introducing Dr. Fung, Tom Andriacchi (Past-President) said that Dr. Fung should be considered as the "Father of Modern Biomechanics"; I strongly concur with that statement, and the ASB received reflected glory by honoring Dr. Fung.

The 1993 meeting at the University of Iowa promises to maintain and, likely, enhance the tradition of excellence in ASB meetings. Vijay Goel (Meeting Chair) and Andy Biewener (Program Chair) are enthusiastically planning the meeting organization and recruiting keynote speakers. The large contingent of well-known biomechanists at Iowa provides a base on which to build a strong meeting. Looking beyond Iowa, the 1994 ASB meeting will be held at Ohio State University, in collaboration with biomechanists at the

Cleveland Clinic.

During NACOB II, several transitions happened--in personnel and in ideas. One important transition occurred in the office of Secretary/Treasurer as Melissa Gross finished her three-year term and Mark Grabiner began his new term. The Secretary/Treasurer is one of the most important members of the Society; she/he is the "administrative glue" that holds the Society together. Melissa did an outstanding job, and for that, we say THANKS. We look forward to Mark's continuing steady hand at this linchpin position. Another pivotal change occurred in the Editorship of the ASB Newsletter. Keith Williams was an innovative, exacting, and humorous Editor, and he set a high standard for those who follow. The Society thanks Keith for his excellence, and we can be assured of continued excellence in our Newsletter because Kit Vaughan has agreed to assume the duties of Editor (the quality of this issue attests to the wisdom of his appointment).

In other "transitions", this past meeting marked the "emergence" of the ASB student members. Students, in recent years, have become more active and vocal in the Society. This is important, because they are the "life blood" of the ASB; they are sources of new ideas, and they should be encouraged to increase their participation and contributions to the Society. Rosemary Speers (Northwestern University) is the newly elected student representative to the Education Committee, and students with ideas for changes in meetings and the ASB should let her know what you are thinking.

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Finally, I must say that I am pleased to be able to serve the Society as President in the coming year. I welcome any and all suggestions for improving the Society--its meetings, activities, and structure. Contact me with your ideas and suggestions; the ASB is YOUR Society, and the Executive Board needs to hear from you to know what you want.

As we approach the holiday season, I wish each of you the very best, personally and professionally. As a New Year's resolution, be sure to submit at least one paper to the upcoming meeting at Iowa City.

ELECTION RESULTS

Congratulations to the winners of the ASB elections conducted earlier in the year and announced at the NACOB II meeting in Chicago. The President-Elect for the Society is Tom Brown, who will assure presidential duties at next year's ASB (in his home town, incidentally!). Our new Secretary-Treasurer is Mark Grabiner who takes over from Melissa Gross. (I don't think Melissa told Mark how much time the job demands!). The new Program Chair-Elect is Bob Gregor of UCLA. The other election result was on approval for modification of the constitution such that only the President and President-Elect need to be from different membership categories.

1993 ASB MEETING RETURNS TO ITS ROOTS

The American Society of Biomechanics was formed at the University of Iowa in 1977. Next year it will return to Iowa City. The Meeting Chair is Dr. Vijay Goel and he and his colleagues are busy preparing for a great meeting! In an effort to encourage student participation, the society will have a nominal registration fee of \$25. The meeting will be held Thursday through Saturday, 21-23 October 1993. Mark your calendar now and plan to submit a paper! The Program Chair is Dr. Andy Biewener of the University of Chicago. Your abstracts must be received by Andy by 15 April 1993. Information concerning the meeting, accommodations, and a "Call for Papers" packet may be obtained from Vijay. The addresses for Andy and Vijay are contained elsewhere in the newsletter where members of the executive board are listed. The editorial board (3 of them are ex-Hawkeyes!) encourages you to give this meeting the support it deserves.

A VIEW FROM THE ACADEMICAL VILLAGE **Kit Vaughan**

As Ron Zernicke stated in his report, my predecessor Keith Williams has done a marvelous job as the ASB newsletter editor these past few years. He certainly set a high standard for those who follow. Keith's editorial "The Tilted Perspective" combined humor with thought-provoking ways that we could improve our society. It is my intention to have an editorial piece in each issue of the newsletter in which I will raise issues which are relevant to the members of the American Society of Biomechanics. Before introducing my topic for this issue, I thought it might be appropriate to explain the origin of the title to this editorial. Most of you probably know Thomas Jefferson as our 3rd president and author of the Declaration of Independence. Less well known, perhaps, is the fact that he lived in Charlottesville and was the founder of the University of Virginia. Not only did he establish the university in 1819, but he also designed the original buildings (and hired the first faculty!) which he called an "academical village". If you ever have a chance to visit Charlottesville, I urge you to stop by and explore Mr. Jefferson's academical village!

Let us move on now to the topic I wanted to discuss. It is the area of grantsmanship, or raising funds to support your research agenda. Success in grant-writing will often determine how a young faculty member (or even an independently-minded entrepreneur) advances in his or her career. Despite the pivotal role this activity plays in our academic institutions there are few, if any, course options for graduate students to learn the necessary skills for competing successfully in the grant-writing arena. I think that this is a great pity. I believe that grant-writing skills can be taught and universities are hurting themselves by not emphasizing such courses. Our society took the lead a couple of years ago in Miami when Al Schultz (from the University of Michigan) and Stephen Gordon (from the National Institutes of Health) provided an excellent tutorial on the NIH funding system. In 1988 I was fortunate to attend a one-day workshop given by Dr. Wendell F. McBurney who is Dean of Research and Sponsored Programs at Indiana University. At the beginning of his presentation he had a slide which stated:

1. Most proposals never get written
2. Most of those that do get written, don't get funded.

That's the bad news. The good news is that despite what you may have heard to the contrary, there is money out there. The sources are the federal government (NIH will spend almost \$10B next year),

private foundations (the IRS requires them to spend 5% of their assets each year) and corporations (some of whom are sustaining members of the ASB). As Dr. McBurney encouraged us:

Write Proposals
Get Grants
Right?
Write!

One of the keys to writing a good proposal is to have a good (preferably original!) idea. You then have to convey that idea to the reviewers in a way that is convincing. If you care passionately about your work, that enthusiasm will come through in your writing and you will be on the first step to a successful proposal. In short, your research proposal must be intellectually exciting. Whenever you get the opportunity (and this will hopefully be when you're still a graduate student), you should try to become involved in grant-writing. By observing, and assisting, your successful colleagues you too will be able to "stand on the shoulders of giants" and succeed in your own right. For those among you who may be frustrated, I say to you: don't give up! Good ideas will eventually be recognized and implemented if they are clearly articulated. Remember the Latin saying: "Inveniam viam aut faciam" which means "I will find a way or make one". I will finish this editorial by suggesting a number of references that I have found to be helpful in my own grant-writing efforts.

Baily, AL (1987) "Writing proposals grants more exacting as the competition for grants heats up", *Chronicle for Higher Education*, 14 January.

Bauer DG (1988) "The 'How To' Grants Manual", Second Edition, Macmillan, New York, 229 pages.

Belcher JC and Jacobsen JM (1992) "From Idea to Funded Project: Grant Proposals that Work" Oryx Press, Phoenix, AZ, 138 pages.

Eaves GN (1984) "Preparation of the research-grant application: opportunities and pitfalls", *Grants Magazine*, 7(3):151-157.

Gordon SL (1989) "Ingredients of a successful grant application to the National Institutes of Health", *Journal of Orthopaedic Research*, 7(1):138-141.

Heaney RP and Dougherty CJ (1988) "Research for Health Professionals: Design, Analysis and Ethics", Iowa State University Press, Ames, IA 268 pages.

McBurney WF (1984) "Writing between the lines", *Grants Magazine*, 7(2):119-122.

McBurney WF (1982) "Objectives are not things you do", *Grants Magazine*, 5(1):16-17.

Ogden TE (1991) "Research Proposals: A Guide to Success," Raven Press, New York, 397 pages.

Sultz HA and Sherwin FS (1981) "Grant Writing for Health Professionals", Little and Brown, Boston, MA, 229 pages.

MINUTES OF THE 1992 ANNUAL BUSINESS MEETING

1. The minutes of the 1991 Annual Business Meeting were approved.
2. Melissa Gross presented the Secretary/Treasurer's report. Tom Brown was elected President-Elect. Mark Grabiner was elected Secretary-Treasurer, and Bob Gregor was elected Program Chairperson-Elect. The bylaw modification was approved, so that only the President and the President-Elect must be from different membership categories. Membership continues to increase, but the distribution of members by discipline, gender, and member type is similar to last year. Income continues to exceed expenses, and total ASB assets now exceed \$40,000.
3. Lou Draganich presented the Meeting Chairperson's report. The meeting set a record for attendance at 490 participants. The relatively low cost of the hotel venue encouraged student attendance at the meeting. The coordination of the ASB and the CSB in all areas of conference planning and execution was commended. Many countries besides the US and Canada were represented at the meeting.
4. Joan Bechtold presented the Program Chairperson's report. The format of the ASB and the CSB individual annual meetings were blended successfully into the program. The efforts of Richard Wells, Program Chairperson for the CSB, were important for planning the meeting.
5. Tom Brown presented the Membership Committee Chairperson's report. The total number of applicants to the Society are greater than ever. Membership continues to be dominated by Engineering and Applied Physics, and Tom recommends encouraging colleagues in the areas of Biological Sciences, Ergonomics, and Health Sciences to apply for membership.
6. Mary Rodgers presented the Education Committee Chairperson's report. The tutorials were a great success. Evaluation forms at the annual meeting are an important source of feedback for improving future meetings. The new Student Representative on the Education Committee is Rosemary Speers.
7. Tom Andriacchi announced that the 17th ASB Annual Meeting will be held at the University of Iowa on 21-23 October 1993. He also announced an increase in dues of \$10 for regular and student members, effective in 1993 related to a cost increase from Pergamon Press for the *Journal of Biomechanics*. Tom presented plaques to Keith Williams, outgoing Newsletter Editor, and Melissa Gross, outgoing Secretary/Treasurer, and expressed his appreciation for their contribu-

tions to ASB over the past several years. He introduced the new President, Ron Zernicke.

8. Ron presented a plaque to Tom in appreciation for his service to the Society. In his brief presentation Ron suggested that mentors encourage their students to compete for the Society's Young Investigator Awards.
9. Vijay Goel made several brief remarks about the 1993 ASB meeting at the University of Iowa. Of particular interest was that the meeting would be held Thursday through Saturday.
10. Two members made comments under the topic of new business. Roger Enoka commented on a need for institutional memory, remarked that as the membership of ASB increases the Executive Board consider the administrative structure of the Society. Specifically, a recommendation was made that the Executive Board review the administrative structures of other professional societies and seek potential models for ASB. Don Chaffin suggested that the financial health of the Society may free it to consider additional services or programs to better serve members.

EDUCATION CHAIR'S REPORT

Mary M. Rodgers

I. Tutorials

The four tutorials presented at the NACOB conference were well-attended. Thanks to the tutors (Savio Woo, Zvi Ladin, Zev Rymer, and Gunnar Andersson) for sharing their expertise with the society. Requests for tutorial proposals for next year's conference are included in this newsletter. Please send in yours today!

II. Survey of participants

Forty-five participants of the NACOB conference provided feedback via the evaluation forms. Generally participants were very happy with the NACOB conference. Program features which they liked included program organization, the shorter sessions, the cruise, the monitoring of podium session, the combination of exhibit and posters, the symposium idea, and the facilities. Features they would like to see in future conferences include more biofluids topics, more discussion time, food at breaks, and more time for posters. Appreciation is expressed to the conference organizers for a job well done. Specific feedback from the evaluation forms will be provided to the organizers for next year's conference to continue to improve the ASB conference.

III. ASB database

A form is included in the Newsletter for an ASB Referral Database. The ed committee will be evaluating the responses and making recommendations to the board at the mid-year meeting regarding usefulness and format for the database. Any comments/opinions from members regarding the database are welcome.

IV. Student member

Thanks to the interim student representative member, Norman Murphy, for doing a great job of bringing ASB student members together and starting the process for more active student participation in ASB. The new student representative, Rosemary Speers, was elected at NACOB and will continue to represent student interests as a member of the Education Committee.

ASB AWARD NOMINATIONS

BORELLI AWARD

The American Society of Biomechanics annually awards the Giovanni Borelli Award to an investigator who has conducted exemplary research in any of the many areas of biomechanics. The Awards Committee will consider submissions by individuals or groups in the form of (a) an original unpublished research paper; or (b) a series of up to five published research papers on a single topic or theme. ASB members may also nominate others for consideration within the second category. If such a nomination is to be made, the member making the nomination must obtain permission from the nominee before submitting his or her name. The Borelli award is open to all scientists except members of the ASB Awards Committee and officers of the Society. Membership in the ASB is not a prerequisite for eligibility.

Criteria for selection will include originality, quality, depth of the research, and its relevance to the field of biomechanics as a whole. The award consists of a \$500 cash prize and an engraved plaque. The winner of the award will be expected to present the research at the Borelli lecture at the 17th Annual Meeting of the Society in Iowa City, Iowa, October 21-23, 1993.

YOUNG SCIENTIST AWARD

The American Society of Biomechanics annually awards one postdoctoral and one predoctoral ASB Young Scientist Award. ASB young scientists will receive an award certificate, a \$200 cash prize, and a waiver of conference fees for the annual meeting in which they present their research. Eligibility criteria for the two awards are similar, with the information specified below in italics for the predoctoral award.

Candidates may be self-nominated or nominated by an ASB member, must be a current or pending member of ASB, and must have completed a doctoral degree within the past four years (pre-doc: must not have completed a doctoral degree prior to the Annual Meeting at which the award is given). Candidates must supply a current copy of the curriculum vitae (pre-doc: provide a short description of the research involvement at undergraduate and/or graduate levels). The candidate must be the first author or only author of the paper(s) and must present the research (if accepted) at the Annual Meeting. His or her work may be in several formats: e.g., unpublished doctoral dissertation, papers submitted for publication, published articles (pre-doc: a letter endorsing candidate in support of his or her research from the department head or graduate research adviser must also be submitted). The candidate must also submit both a short and long abstract according to the ASB Annual Meeting format.

ASB TRAVEL AWARD

The American Society of Biomechanics annually awards a travel fellowship of up to \$1000 to facilitate collaborative research and interaction among researchers. All ASB members are eligible to apply. The fellowship is intended to cover travel and lodging costs, and matching funds (from the host's or candidate's institution or grants) are desirable, but not required. The funding period is from July 1 through June 30. Applications must include a current curriculum vitae, a candidate's cover letter, a letter from the host indicating support for the travel, a synopsis (two pages maximum) describing the purpose and significance of travel, and a detailed budget of justification (when appropriate, matching funds should be indicated).

A short report (two pages maximum) explaining the significant outcomes of the travel must be submitted by the fellow ship awarded to the Awards Committee of the ASB prior to August 31 of the following year, or at the end of the fellowship. Fellows will be expected to write a report for publication on the newsletter and are encouraged to present a report at the Annual Meeting following the award of the fellowship. This presentation should emphasize the significant outcomes of the travel. Notice of the award will be given by June 1 to allow at least thirty days' notice before the earliest date of proposed travel.

AWARDS SUBMISSIONS

Nominations must be received by April 15, 1993. Requests for information and supporting materials for nominations should be sent to: Dr. Thomas P. Andriacchi
Dept. of Orthopaedics
Rush-Presbyterian St. Lukes Medical Center
1653 W. Congress Pkwy.
Chicago, Illinois 60521

MISCELLANEOUS NEWS

NEW JOURNAL: GAIT & POSTURE

Butterworth-Heinemann have announced the publication of a new journal called Gait & Posture. It will provide a vehicle for the publication of up-to-date basic and clinical research on all aspects of locomotion and balance. The topics covered include: measurement techniques; studies of normal and pathological gait; treatment of gait and postural abnormalities; biomechanical and theoretical approaches to gait and posture; evolution of upright posture and bipedal locomotion; and patient education. The editor is:

Dr. James R. Gage
Medical Director
Gillette Children's Hospital
200 East University Avenue
St. Paul, MN 55101

JOURNAL NAME CHANGE

Human Kinetics Publishers and Bob Gregor (Editor, Journal of Applied Biomechanics) just announced that there will be a change in title and "mission" of the former International Journal of Sport Biomechanics. Apparently there was growing concern that the IJSB was too limited in its focus. Thus the title will be changed to: Journal of Applied Biomechanics. Its new mission will be to publish articles that pertain to the applied aspects of human biomechanics in sport, exercise, and rehabilitation. Relative topics will include the effect and control of forces that act on and are produced by the human body, studies related to modeling and human movement simulation, effects of internal and external forces on body structures during skill development, and rehabilitation. JAB will publish original research reports, invited review papers, and "target" articles on selected current issues in the field. It also includes book reviews, technical notes, an editorial section, and special features. Anyone interested in submitting a manuscript should contact:

Dr. Robert Gregor
UCLA Dept of Physiological Science
405 Hilgard Avenue
Los Angeles, CA 90024-1527

INTERNATIONAL SOCIETY OF BIOMECHANICS

Another item recently came from Dr. Simon Bouisset, related to the upcoming ISB Congress in Paris. Simon asked that the ASB, as an affiliated society with ISB, help to "make the Congress known by (our) compatriots." Be aware that the deadline for abstract submission is 31 December 1992 so time is short! There are four tutorials offered at ISB93: Three-dimensional analysis of human movement; Biology and biomechanics of tendons and ligaments; Clinical gait analysis; and Biomechanical assessment of worksite tasks. There are also two satellite conferences, on 3D human movement and computer simulation, that may be of interest to ASB members. Further information is contained in the calendar of coming events.

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STUDENTS' CORNER

Rosemary Speers

Hello ASB Student Members! I'm the new Student Representative, and began my term of office during the NACOB meeting in August. Currently, I am in my second year of graduate study in biomedical engineering at Northwestern University. I'm particularly interested in the biomechanics of gait, and am doing my thesis research at the Rehabilitation Institute of Chicago. I've been a member of ASB for two years.

My duties in this position are to further student involvement, convey information from students to the Executive Board, and establish contacts for educational and professional opportunities. One of my goals for the year is to recruit more members in an effort to more fully represent the issues of biomechanics education from a student's viewpoint. Another project is to create an e-mail database for student members to allow for better exchange of information and ideas. Additionally, I would like to establish a roommate network for students attending the next conference.

At NACOB II, the first student reception was held for all students attending the conference. This was very successful with over 60 students participating. During the meeting, numerous comments and suggestions were made regarding the next conference at the University of Iowa. At the executive board meeting following NACOB, several decisions of interest to students were made. First, ASB will subsidize student registration fees for the next conference, reducing the cost to about \$25. Wow! Second, rather than a student reception, a student breakfast (also paid for by ASB!) will be held and the student meeting will take place at that time. I was very impressed with the commitment of the executive board to student members, and hope many students will take advantage of these opportunities to participate in the next conference.

To successfully complete these tasks, I need your input. Please send any information, ideas, comments, or concerns you have regarding biomechanics education and ASB. Particularly, it would be extremely helpful if students who have access to e-mail would send their e-mail addresses, so we can establish the database and use it for communication among students. If you know of other students who are not registered members of ASB, but who are interested in biomechanics and have e-mail accounts, please encourage them to send their addresses to also be included in the database. This information can be sent to me, at: rosemary@casbah.acns.nwu.edu

And finally, if you think you might be interested in this office, new elections will be held within the year for a term beginning at the next ASB conference. It's a great chance to meet professionals in the field of biomechanics and to provide input from a student's viewpoint to the society. Keep posted (the next newsletter) for more information about the position and the elections. I draw your

attention to the following student paper contest:

Papers on all aspects of finite element analysis by students and recent graduates are being sought for Duke University's 1993 Robert J. Melosh Medal Competition. Robert J. Melosh Competition; Department of Civil and Environmental Engineering; Duke University; Durham, NC 27706 Tel: 919-660-5200

Have a good year and I hope to see you in Iowa!

ADDRESS CORRECTION

Motion Analysis Corporation
3650 North Laughlin Road
Santa Rosa, CA 95403-1026

Their address was incorrect in the NACOB II proceedings.

OBITUARY: HERMAN J. WOLTRING

The field of biomechanics was saddened to hear of the death of Dr. Herman J. Woltring in a car accident on Tuesday 3 November 1992. We quote from a letter sent by Dr. Peter Cavanagh to Herman's family on behalf of the International Society of Biomechanics:

"While those of us who knew Herman feel a deep sense of personal loss, we feel too that Herman will be an irreplaceable loss to the scientific community where he will be remembered as a dynamic figure of towering intellect. He made contributions to the field of numerical analysis and three dimensional reconstruction in Biomechanics that will stand as beacons in the literature for many years to come. There is no single individual in the world who has the breadth and depth of knowledge in this area that Herman possessed. In the last five years, he spent much of his energy on the new field of electronic communication to which he became passionately devoted. He served as moderator of the BIOMCH-L bulletin board which provided an immediate link between biomechanical scientists all over the world. Through this medium, it true to say that Herman influenced almost every single worker in our field and was constantly exploring new avenues for bringing scientists together. His erudite comments and voluminous contributions to ongoing intellectual debates in these electronic forums were second to none".

Over 20 scientists from around the world felt moved to write messages of condolence to the BIOMCH-L bulletin board, praising the contributions that Herman had made to them as individuals and to the field of biomechanics. He will certainly be missed.

CALENDAR OF COMING EVENTS

15-18 February 1993 ORTHOPAEDIC RESEARCH SOCIETY ANNUAL MEETING, San Francisco, CA Orthopaedic Research Society; 6300 N. River Road, Suite 727; Rosemont, IL 60018-4226 Tel: 708-698-1625

5-9 May 1993 EAST COAST CLINICAL GAIT CONFERENCE, Rochester, MN Tom Cahalan, P.T.; Orthopedic Biomechanics Laboratory; Mayo Clinic/Mayo Foundation; Rochester, MN 55905 Tel: (507) 284-8941 Fax: (507) 284-5392

12-17 June 1993 REHABILITATION ENGINEERING SOCIETY OF NORTH AMERICA (RESNA) '93, Las Vegas, Nevada RESNA; Suite 700; 1101 Connecticut Ave, NW; Washington, DC 20036 Tel: 202-857-1199

25-29 June 1993 ASME/AICHe/ASCE Summer Bioengineering Conference, Breckenridge, CO. Noshir A. Langrana, Dept. of Mechanical & Aerospace Engineering, Rutgers, The State University of New Jersey, P.O. Box 909, Piscataway, NJ 08855-0909, Tel: 908-932-3618, Fax: 908-932-5313

30 June to 3 July 1993 SECOND INTERNATIONAL SYMPOSIUM ON 3-D ANALYSIS OF HUMAN MOVEMENT, Parc du Futuroscope, Poitiers, France. Dr. Paul Allard; Permanent Secretariat; Centre de Recherche; Hopital Sainte-Justine; 3175 Cote Ste-Catherine; Montreal, Canada PQ H3T 1C5 Tel: 514-345-4740, Fax: 514-345-4801

30 June to 2 July 1993 FOURTH INTERNATIONAL SYMPOSIUM ON COMPUTER SIMULATION IN BIOMECHANICS, Montlignon, France. Dr. Bernard Landjerit, Laboratoire de Biomecanique, CER de l'ENSAM, 151 Boulevard de l'Hospital, 75013 Paris, France. Tel & Fax: (33-1) 44246365.

4 July to 8 July 1993 XIVth CONGRESS OF INTERNATIONAL SOCIETY OF BIOMECHANICS, Paris, France. Convergences ISB93, 120 Avenue Gambetta, 75020 Paris, France. FAX: (33-1) 40310165

28-30 August 1993 THE SOCIETE INTERNATIONALE DE RECHERCHE EN ORTHOPEDIQUE ET DE TRAUMATOLOGIE (SIROT) Seoul, South Korea Charles H. Rivard, M.D.; Ste-Justine Hospital; 3175 Cote Ste-Catherine; Montreal, Canada H3T 1C5 Tel: 514-345-4687 Fax: 514-345-4822

21-23 October 1993 17TH ANNUAL MEETING OF AMERICAN SOCIETY OF BIOMECHANICS, Iowa City, IA. Dr. Vijay Goel, Department of Biomedical Engineering, University of Iowa, Iowa City, IA 52242-1527 Tel: (319) 335-5638 Fax: (319) 335-3533.

ASB BROCHURE AND DATABASE

During the past year the Education Committee has received a number of inquiries from various individuals, mostly from students. Inquiries have been from students, national and international, undergraduate to doctoral, looking for specific types of information or particular types of academic programs related to biomechanics. Less numerous have been requests by members of the legal profession who have a need for experts in biomechanics. These requests were either responded to directly by Education Committee member Mark Grabiner, or a contact person within ASB was supplied. In order to respond to these types of inquiries more effectively, an ASB Referral Database is being developed. If you will fill out the form below you will be added to the database. Return the form to Dr. Mark Grabiner, whose address may be found on page 6.

Full Name _____ Present Position _____

Highest Degree _____ Degree Awarded From _____ Date _____

Affiliation Address _____

Phone _____ Fax _____ e-mail _____

Home Address(Optional) _____ Phone _____

Keywords Related to Area of Expertise (Both general and very specific terms that reflect areas of expertise)

ASB TUTORIAL PROPOSAL

Title: _____

Principal Presenter:

Name _____ Degrees _____

Affiliation/Organization: _____

Address/City/State/Zip: _____

Telephone Number: _____ Fax Number _____

e-mail address: _____

Other Presenters:

Name _____ Degrees _____

Affiliation/Organization _____

Course Description (150 words or less):

Audiovisual Needs

Please Return to: Dr. Mary Rodgers, ASB Education Chair
Institute for Rehabilitation Research and Medicine
Wright State University Research Center
3171 Research Blvd.
Dayton, OH 45420

Deadline for submission is 31 December 1992 or as soon as possible thereafter.