International Society of Biomechanics Newsletter

Officers

President
Dr. B.M. NIGG
University of Calgary
2500 University Drive N.W.
Calgary, Alberta, Canada

President-Elect
Dr. J.G. HAY
Dept. Physical Education
University of Iowa
Iowa City, Iowa, 52242, USA

Past President
Dr. P.V. KOMI
Kinesiology Laboratory
University of Jyväskylä
40100 Jyväskylä, Finland

Secretary-General
Dr. Bengt JONSSON
Work Physiology Division
Umeå, Sweden

Treasurer
Dr. C.A. MOREHOUSE
109 Sports Research Building
Penn State University
University Park, Pa, USA

Table of Contents

Instructions to authors .................................................. 2
Seminar "Biomechanics and teaching motor skills"Kampacz, Poland ............ 3
Laboratory Feature : Dept. of Human Movement and Recreation Studies. University of Western Australia ........................................... 4
Congress Announcements .................................................. 6
Letter to the Editor "Elimination of a Laboratory" ................................ 8
Advertisement : Kistler Instrumente AG .................................. 10
Membership of ISB ......................................................... 11
INSTRUCTIONS TO AUTHORS
In order to facilitate the editing of the ISB Newsletter, we would appreciate receiving any material according to the following criteria:
1° All material should be typewritten single spaced.
2° Typewrite within a frame of 10 cm width.
3° The title should be written in CAPITAL LETTERS.
4° Subtitles should be written in italics and/or underlined.
5° Different paragraphs should be separated by double spacing.
6° Try to use the whole text-face. There should not be any margins inside the frame.
Thank you in advance for your cooperation.
Jan P. CLARYS
Fak. Geneeskunde & Farmacie Experimentele Anatomie
Laarbeeklaan 103
B-1090 BRUSSELS (Belgium)

P.S. The ISB Newsletter is published quarterly. Material and articles should reach us prior to February 10 for the Spring issue, May 10 for the Summer issue, August 10 for the Autumn issue and November 10 for the Winter issue.

CALL FOR PAPERS
We would appreciate if I.S.B. members could participate more active in this Newsletter. Please send us material: short papers, letters to the editor, laboratory features, ... etc.

SCIENTIFIC ADVERTISEMENTS
On request of ISB members and on condition that there is no relation with a commercial circuit, all scientific advertisements will be published free of charge.

COMMERCIAL ADVERTISEMENTS
The Newsletter is open for commercial publicity at
100 US dollar per full page
50 US dollar per half page
25 US dollar per quarter page
All publicity will be advertised in the 4 issues.

When individual members have a change in a mailing address, it is important to send the new address to the Treasurer so that you are certain to receive copies of the Newsletter and dues notices.
ISB Treasurer:
C.A. Morehouse
109 Sports Research Bldg.
Penn State University
University Park, PA 16802
U.S.A.
Seminar
"BIOMECHANICS AND TEACHING MOTOR SKILLS"

The IVth School on Biomechanics and Teaching Motor Skills took place in Kar- pacz, Poland on May 6-10, 1984. The organizers was Academy of Physical Education in Wroclaw and personally Prof. Dr. Tadeusz Bober, Doc. Dr. Bogdan Czabański /cochairmen/ and Dr. Stefan Kornecki /secretary scientific/. The idea of bringing together scientists and practitioners from biomechanics and theory of learning and teaching was presented in ISB Newsletter No 6, Feb. 1982. There were 65 participants including 5 quests from abroad.

At this School the invited lectures were presented by:
1. W.Kulczycki /Wrocław/, Human activity - subjective and objective aspects
2. T.Bober /Wrocław/, Biomechanical investigations in walking and running
3. J.Töhlmann /Jena/, Spiral of motor learning
5. E.C.John /Akwasgrän/, Some didactic aspects of teaching sports
6. A.Hotz /Bern/, Optimization of learning sport skills
7. A.Kornecki /Warszawa/, Contemporary biomechanics and robotics

There were also number of papers presented:

In biomechanics
1. E.Ostrowska /Warszawa/, Energy changes of body parts in running
2. J.Zawadzki and S.Kornecki /Wrocław/, Mechanical work in human locomotion
3. A.Lisiecki and W.Nikołajczyk /Poznań/, Calculation method of optimal load parameters pushing weight bench exercise
4. T.M.Czyżkowski and J.Pietrucha /Warszawa/, Mathematical modeling ski jump as a means for optimization of movement’s technique
5. T.M.Czyżkowski and K.Kędzior /Warszawa/, Modeling the slide of luge and bobseley
6. K.Fiedelus, J.Kliaz and M.Kruszewski /Warszawa/, Search for relationship between practice loads and strength in weightlifters in different training periods
7. M.Filon /Wrocław/, Perfecting the back stroke by a system stabilizing kinematic parameters of swimming technique
8. M.Golema and G.Jaśkiewicz /Wrocław/, Objectivization of the motoric features of men utilized in the process of keeping balance
9. L.B.Dworak and W.Haremza /Poznań/, Influence of regulated static load on strength parameters of muscles performing grasps and palmar flexion
10. A.Serafin and S.Kornecki /Wrocław/, Kinematic and dynamic attributes of swinging wind-up movements in gymnastics
11. A.Dąbrowska and W.Sikorski /Warszawa/, Maximum voluntary contraction of judo athletes
12. P.Lewandowicz and I.Lenart /Poznań/, Analysis of dynamic equilibrium of the system motorcycle - rider in sagittal plane during speedway start
13. T.Fynkiewicz /Poznań/, Identification of propulsion force as a base for assessment of selected elements of paddling technique and selecting squad in wajaking
14. S.W.Alhashimi /Poznań/, The relationship between run up velocity and the take - off impulse in a high jump /Flop technique/
15. T.Nuchlewicz /Kraków/, Searching for sprint start pattern
16. Cz.Urbanik /Warszawa/, Speed - force effect of training with mixed muscle work
17. Heidrum Schewe, The kinesiology helps perfecting methods of teaching basketball in beginners
In teaching and learning
a. T. Raczkowska-Bekiesinska /Warszawa/, Teaching of sports technique and temperament of the learner
b. W. Wiesner /Wrocław/, Didactical film applied to the teaching—learning process of sports technique
c. K. Boiecz /Sofia/ and B. Czabański /Wrocław/, Application of objective feedback information to learning the vertical jump with defined force

The fifth School in planned on April 1985. The address of organizers is as follows:
Akademia Wychowania Fizycznego
Katedra Biomechaniki
Al. Olimpijska 35
51-612 Wrocław, Poland

Laboratory Feature

Department of Human Movement and Recreation Studies
The University of Western Australia
Nedlands, Western Australia 6009
AUSTRALIA
Ph. 61-09-380-3838

The University of Western Australia is situated on the banks of the Swan river just 4 kilometers from downtown Perth. More than 10,000 students are engaged in courses offered by ten faculties, including Education, Medicine, Science and Engineering. There are over 1500 academic staff and postgraduate students, supported by nearly 1200 librarians, technicians and other service personnel. Each year the university attracts more than $10 million from Government, private and University sources, and it hosts many research programmes with international reputations.

The biomechanics laboratory is the centre-piece of a new multi-disciplinary Human Movement and Recreation Studies complex, and provides 400 sq. meters of indoor laboratory space which houses a Kistler force platform, run-through synthetic surfaced track, and overhead filming gantry. Adjacent to this is a grassed oval and 25 meter swimming pool, the latter with underwater filming bays. Additional research laboratories provide facilities for neuro-muscular research, film analysis and computing.

Biomechanics Personnel:

Brian A. Blanksby, PhD (joint appointment with Anatomy and special interest in aquatics);

Bruce C. Elliott, PhD (special interest in sports biomechanics particularly racket sports);

Graeme A. Wood, PhD (special interest in neuromuscular performance and co-ordinator of post-graduate studies);

assisted by seven current PhD and Masters research students, and supported by seven electronic, photographic and mechanical workshop staff.

Currently Funded Research:

Neuromuscular mechanisms and muscular strength development;

Biomechanical determinants of pathological gait patterns;

Biomechanical factors underlying hamstring muscle strain;

Biomechanical factors underlying back strain in cricket fast bowlers;

Order Now

Biomechanics and Medicine in Swimming
Proceedings of the Fourth International Symposium of Biomechanics in Swimming and the Fifth International Congress in Swimming Medicine

Editors: A. Peter Hollander, Ph.D.
Peter A. Huijing, Ph.D.
Gert de Groot, Ph.D.

Both biomechanical and medical aspects of swimming are considered in this comprehensive volume which will be available in November of this year. Highlighting the book are the keynote addresses by L. Joubert entitled "Research on Swimming: Historical and Scientific Aspects" and a contribution by J.J. Rijnsburger, A.P. Hollander, H. van der Sleen and S.A. Lord on "Swimming: A Challenge for Sports Medicine and Swimming Science: An Editorial". In addition, 47 papers are grouped into the following topical areas:

* Medical Aspects
* Biomechanics
* Neurophysiology and Neurology
* Electromyography
* Physiology, Oplh, and Ellipticity
* Oxygen Consumption, Metabolism and Training Efficiency
* Emotions Regulated and Protocols Governing

Biomechanics and Medicine in Swimming is Volume 14 in the "International Series on Sport Sciences.

Richard C. Nelson, Ph.D. and Charles A. Murie, M.D., Seven Editors. Available November 1983
Biomechanical comparisons of tennis serving techniques;

Biomechanical appraisal of children's movement patterns including those with minimal brain dysfunction;

Anatomical characteristics and swimming performance in elite junior swimmer's growth;

Onset of menarche and its relationship with swimming performance;

A study of physical and psycho-social changes in swimmers over the age of 50.

Equipment:

Data acquisition systems include high speed 16mm phase-locking cameras (Photosonics), force platform (Kistler), video strobe (Sony), 16-channel biological instrumentation racks (Grass and Devices - the former incorporating a Tektronix 5223 digitizing oscilloscope), FM tape recorder (Schlumberger), together with several EMG, force, angle and acceleration transducers.

All analogue instrumentation is on-line to a PDP-11/23 computer equipped with 10 megabytes of hard disk (KL02) backed up by magtape (Cipher) and floppy disk (RX02). Other peripherals include high speed printer (LA100), colour graphics terminal (Tektronix 4105) and digital plotter (Tektronix 4663). A mobile PDP-11/03 system is available for fieldwork, and all laboratories have communications with a network of large main-frame computers (principally DEC-10, Cyber and Prime - the latter being available for specialised graphics work).

The film analysis laboratory houses two digitizing systems, one comprising a Numonics digitizer with Lafayette projector, the other a Calcomp digitizer with an NAC projection unit. Each is micro-processor controlled and communicates with the DEC-10 computer system.

Customized software for film motion analysis (FMAP) and real-time data acquisition and analysis (DAOS) is available, as too is a wide range of scientific applications packages.

Figure: (above) View of main Biomechanics laboratory from overhead gantry; (below) Academic staff - Graeme Wood, Brian Blanksby and Bruce Elliott (L to R).
Congress Announcement

JB/RC - July 1984

CALENDER OF WORLDWIDE SCIENTIFIC EVENTS FROM 1984 UNTIL 1987

1984

Sep. 24-26, 1984 Davos, Switzerland, 4th Meeting of the European Society of Biomechanics.


Oct. 08-12, 1984 Urbino, Italy, International Congress on "Child and Sport" (c/o Prof. Venerando, Direttore dell'Instituto de Medicina dello Sport, Via dei Campi Sportivi 46, Roma, Italy).

Oct. 22-26, 1984 Oslo, Norway, "ICOSH Seminar 1984, Sport and Politics 1918-1940" (c/o Prof. Dr. M. Olsen Norwegian College of Physical Education and Sport, Post Box 40, Kringsja, Oslo 8, Norway).

1985

Jan. 03-07, 1985 Cairo, Egypt, Int. Congress on "Sports for All in the developing countries" (c/o Prof. Allawy, Helwan Univ., Fac. of P.E. for Men, Abbasia Str. 62, Cairo, Egypt).


Jun. 24-27, 1985 Copenhagen, Denmark, "IVth World Congress of Sports Psychology" (c/o DIS CONGRESS SERVICE Linde Allé 48, 2720 Vanløse Kopenhagen, Denmark).

Jun. 25-29, 1985 Montreal, Canada, "IVth International Congress of Auxology" (c/o General Secretary Ms. M. Brault Dubuc, Int. Congress of Auxology, Univ. de Montreal, C.P. 6126, Juccursale A., Montreal, Quebec, Canada H3C 3J7).

Jul. 01-05, 1985 Glasgow, Scotland, "Xth HISPA International Congress" Themes "Sport and the History of Ideas" "Sport and Social Class" "Sport and the Middle Ages" "Sport and the Industrial Revolution" "Sport and Local History" "Sport; Open Session" (c/o Dr. J.A. Mangan, Academic Organiser, HISPA XI International Congress, Jordanhill College of Education, Southbrae Drive, Glasgow G13 1PP, Scotland).

Jul. 08-12, 1985 New York, USA, "Physical Activity, Aging and Sports" (c/o Sara Harris, Executive Director, The Center for the Study of Aging, 706 Madison Avenue Albany NY 12208).

Jul. 09-11, 1985 Budapest, Hungary, "Intern. 3% of the European Union for School and University Health and Medicine (c/o Congress Bureau M-O-TESZ, P.B. Box 32, H-1361, Budapest, Hungary).


X Congress of the International Society of Biomechanics


Sep. 19-23, 1985 Vienna, Austria, Intern. Seminar on "Sport and Aging" (c/o Dr. F. Nowak, Bundesanstalt f. Leibeserziehungen, Possingerstrasse 2, 1150 Wien, Austria).


Nov. 09-12, 1985 Cologne, FRG, 9th Internat. IAKS-Congress (c/o IAKS, Neusserstrasse 26, 5000 Köln 1, FRG)

1986

Jul. 18-23, 1986 Glasgow, Scotland, "1986 Commonwealth Games Conference on Sport" (c/o Mr. B. Wright, Director, Jordanhill College of Education, Southbrae Drive, Glasgow, Scotland).

(Date to be fixed)
Rome, "Vth Intern. Symposium of Biomechanics of Swimming".

(Date to be fixed)
Seoul, Korea, "International Sportscience Conference" at the occasion of the Asian Games.

Human Kinetics Publishers is pleased to announce a new journal.

INTERNATIONAL JOURNAL OF SPORT BIOMECHANICS

Editor
Richard C. Nelson, Ph.D.
The Pennsylvania State University

Editorial Board
Editor: Richard C. Nelson, Ph.D.
The Pennsylvania State University

Partial List of Editorial Board Members
Wolfgang Baumann, West Germany
Jan Clarys, Belgium
Charles Dillman, USA
Robert Gregor, USA
Paavo Komi, Finland
Mitsumasa Miyashita, Japan
Chauncey Morehouse, USA
Senno Nigg, Canada
James Hay, USA

IJSB Specifications
Frequency: Quarterly (February, May, August, November)
First Issue: August 1984 (Volume 1 will contain only two Issues; thereafter all volumes will contain four Issues.)
Official Language: English

Subscription Price

<table>
<thead>
<tr>
<th>Individuals</th>
<th>Institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. (surface)</td>
<td>Foreign (surface)</td>
</tr>
<tr>
<td>Volume 1 (2 issues only)</td>
<td>$12</td>
</tr>
<tr>
<td>Volume 2 (4 issues)</td>
<td>$24</td>
</tr>
<tr>
<td>Special Introductory Offer</td>
<td>$30</td>
</tr>
</tbody>
</table>

*Special offer valid until August 1, 1984.*

IJSB ORDER FORM

□ I want to subscribe! Bill me 45 days before the first issue is released.
□ I want to subscribe! At the time of publication, charge my credit card (see below).
□ I'm interested. Send me an order form before the first issue is released.

Name ____________________________

Address ____________________________

City ____________________________ State ____________ Zip ____________

□ Charge my Visa, MasterCard or American Express (circle one)

Account No. ____________________________ Exp. Date ____________

Return to: Human Kinetics Publishers, Inc., Box 5076, Champaign, IL 61820
LETTER TO THE EDITOR

June 14, 1984

UNIVERSITY OF WASHINGTON
SEATTLE, WASHINGTON 98195

DEPARTMENT OF KINESIOLOGY

Dr. Jan Pietor Clarys
Editor, International Society of
Biomechanics Newsletter
Experimental Anatomy
Vrije Universiteit Brussel
Laarbeeklaan 103
B-1090 Brussels
BELGIUM

Dear Jan:

The Department of Kinesiology and all its programs of study have been eliminated from the University of Washington. No formal course work will be available after Summer Session 1984.

Many colleagues across the country have written and spoken in our defense. It is impossible to send separate updates to all these individuals. Consequently, we are sending the enclosed report to selected professional organizations wherein a newsletter is published. We ask that you include the report in an upcoming edition of JSS Newsletter. The report is a statement of fact and is intended to provide a description of the events that occurred. It is our hope that colleagues learn from the facts of our case. We also sincerely hope that none of you ever face the situation present here at Washington.

Please do not hesitate to write or call if you need additional information.

Sincerely,

Beth Kerr
Associate Professor/Chair
for the faculty

BK:clc
enc.

The Department of Kinesiology at the University of Washington in Seattle is being eliminated as an academic discipline of study at the University effective June 84. Many colleagues have asked "why?" and "what happened?" This statement of fact, prepared by members of the Department, describes the Department when it was proposed for termination Fall 82 and briefly outlines the events that preceded and followed the Central Administration decision to target the Department for elimination. This statement is a report for the many colleagues who wrote and spoke in our behalf.

The Department of Kinesiology is housed in the College of Arts and Sciences. In Fall 82, there were nine tenured faculty, six non-tenured faculty and one research professor. Three faculty formed a separate health education division with undergraduate and master-level degrees. The remaining faculty were associated with undergraduate (approximately 200 students) and master-level (approximately 50 students) degrees in Kinesiology. At the undergraduate level, all students completed core course work and then selected liberal arts, human movement studies, or a physical education/professional option. Students who selected this third option could elect to apply to the teacher certification program in the College of Education. Options at the graduate level included (a) a M.S. thesis/research programs in human performance and motor control and in sport studies, (b) a MSPE program in exercise science, and (c) a MSPE program in sport administration.

In both 1980-81 and 1981-82, the Dean of the College of Arts and Sciences appointed intra-University faculty committees to review the Department. Reviews from these committees were positive. At one point the undergraduate physical education was proposed for elimination but this recommendation was later rescinded by the Dean. The addition of a Ph.D. program was recommended and in Summer 82 a committee to review the formal Ph.D. proposal was appointed. A site visit was scheduled for mid-fall 82.

Suddenly in October 82, the Dean, in response to a mandated budget reduction of 5.8% (4,280,000) to Arts and Sciences, proposed vertical rather than horizontal cuts. The entire department of Kinesiology, the entire Department of Nutritional Sciences and Textiles, and several other small programs/departments were proposed for elimination (the majority of these small units were later retained, e.g., dance). The stated basis for recommending the elimination of Kinesiology was "the lack of centrality to the mission of the college; the lack of a Ph.D. program and a lack of resources to develop it; the partial duplication with other programs in the State; and the lack of research orientation in some programs, particularly Health and Physical Education".

As required by the Faculty Handbook, a committee of faculty was appointed to review the Department and evaluate the impact of the proposed elimination. Following a long series of procedures, including an open public hearing,
and with the input from tours of facilities, interviews with faculty and students, a survey, and letters, the committee report filed January 31, 1983, concluded that: "the Kinesiology core program is a legitimate academic thrust of the College of Arts and Sciences, is of high quality, satisfies the College Council's criteria for centrality, and should be retained". Duplication with other state universities was found to apply only to undergraduate teacher training in Physical Education. A poll conducted by the Committee of ten major North American universities external to the Northwest Region ranked the Department in the top ten, and in some cases, the top five academic programs in the country. Yet in March 83, the Dean's final recommendation to the President of the University of Washington was to terminate the entire Department of Kinesiology. The Department appealed to the Faculty Senate. A three-member Faculty Appeal Committee, which did not hold hearings or solicit outside information, concluded that the Dean had followed the procedures specified in the Faculty Handbook. Late in May 83, the President of the University "upheld" the Dean's decision to eliminate the Department from the College of Arts and Sciences. About this time the State Legislature returned $ 8.5 million to the University budget but the Central Administration refused to use this money to restore programs still slated for elimination. In August 83, the University of Washington Board of Regents approved the termination, disregarding a pending grievance and a request by the Department to postpone this decision.

In Fall 83 the Kinesiology faculty took part in a formal hearing before the Grievance Committee of the Faculty Senate. The hearing was a follow up to a written grievance filed in April 82 and an informal review which led to the decision to move to formal procedures. The 42-page report filed by this Committee in February 84 covered affirmative action problems, probable flaws in the formal steps taken to reach the termination decision and appeal committee procedures, failure to provide an adjudicative hearing prior to the termination decision (as required by the AUP) and specific individual grievances of members of the Department. The committee noted that "the only completely just solution to the situation confronting the grievants is a recision of the Board of Regent's decision and a reopening of the appeals procedure". The President of the University however, responded that the Grievance Committee had no jurisdiction in reviewing the adequacy of program elimination procedures and dismissed grievances that related to these issues. Several members on the Grievance Committee have since resigned. The Department also tried to arrange a compromise solution which would have retained a Kinesiology Unit in some fashion on Campus. Neither the President nor the Board of Regents was willing to negotiate a compromise to total elimination. All formal avenues provided by our Faculty Handbook are now exhausted. The AAUP national and local chapters are looking into the violations that have occurred. However, no change in termination status is expected.

Department efforts included interviews with review committees, preparation of material for committees, meetings with legislative committees and representatives, a letter campaign to the legislature, the coordination of the efforts of professional groups, and publicity (e.g., T.V., newspapers).

Over 500 personal letters from all over the world have been received in defense of the Department since Fall 82. We deeply appreciate these efforts on our behalf and thank all concerned for your expressions of concern and support. We also appreciate the support of the professional organizations (AAHPERD, MAHPERD, ACSM, NASPSPA, AAFDBI an others) who sent representatives to campus and the group letters we received from other colleges and universities. We urge our colleagues to maintain their commitment to discipline-based kinesiology and physical education programs.

The details provided here outline the four year process. For more detail you may wish to consult "Proposed Termination of Kinesiology Department, University of Washington: A Precis and Implications for the State," "Washington JOHPERD, 40:3-4, 1983; "Physical Education in Higher Education," Invited Keynote Address, Western College Men's Physical Education Society, Reno, Nevada, October 1983; and "Oral Statement to the Faculty Senate Grievance Committee December 1983", and all by R.S. Hutton. Our elimination appears to be the result of resource reallocation within the University based on decisions reached by the Central Administration and the Board of Deans. Budget was used as the catalyst to justify the means in accomplishing the terminations.

Several faculty members are retiring, some plan to move next fall to other departments on campus, and some have accepted appointments at other universities. Our intent is to see our students through to completion of their degrees and to maintain contacts with the professional organizations that have provided resources for us in the past and ties with colleagues and friends.

June 1984

X Congress of the International Society of Biomechanics
Introducing: the KISTLER desktop biomechanics computer system

The unmatched performance of KISTLER force plates teams up with the latest desktop computer of Data General, offering you:

Instant video monitoring – no waiting for display
Instant video monitoring on 12 inch monitor with (640 x 240) resolution. Zooming available through single keystroke commands – much more comfortable than storage scopes. Plotting is possible while making measurements.

Fast data acquisition on hard disk, auto trigger
Up to 20,000 measurements per second, error less than 0.05%. For an eight-channel force plate this means 2000 force vectors, points of force application and torques per second. Automatic triggering by force plate signals – with possibility to see what has happened even before triggering.

Easy operation and user friendly
No computer knowledge required for operation. Menu technique to initiate different tasks. The computer completely controls the charge amplifiers, without user intervention. System may be set up easily.

Professional scientific computer system
Data General's Desktop Generation Model 10sp, incorporating a dual processor system: microECLIPSE and Intel 8086. Main memory expandable to 768 kbyte, up to two 15 Mbyte Winchester disks and cartridge tape backup available. Professional worldwide service by Data General.

Potential to keep pace with your future needs
System expandable to be used with several force plates and other signals like EMG. Digital outputs for stimulation purposes. Possibility to communicate with host computers. May be used with five operating systems including CP/M-86 and virtually all high level languages.

Recommended configuration:
Desktop Generation Model 10sp, 256 kbyte RAM, 368 kbyte floppy disk drive, 15 Mbyte Winchester disk drive, 12 inch monitor (optional 13 inch color monitor available), printer, multicolor plotter.

Over 400 KISTLER force plates are used by leading institutions in 32 countries around the world.

1959 - 25 Years
1984

Please ask for detailed information. microECLIPSE and Desktop Generation are trademarks of Data General Corp.

System will be shown at: ESB Congress Davos, September 1984

Kistler Instrumente AG
Eulachstrasse 22
CH-8408 Winterthur, Switzerland
Tel (052) 83 11 11, Tx 76458, Fax (052) 25 72 00
**Membership of ISB**

New Member List for ISB:

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forsberg, Arthur</td>
<td>Lidnlogsven 1, 11433 Stockholm Sweden</td>
</tr>
<tr>
<td>Gelabert, Raoul</td>
<td>257 W. 86th Street, New York, N.Y. 10024 USA</td>
</tr>
<tr>
<td>Morgan, William R.</td>
<td>College Park Apts., #10-C Mansfield City Road Storrs, CT 06268 USA</td>
</tr>
<tr>
<td>Nordin, Margareta C.</td>
<td>Oloc, Hosp. for Joint Dis., Orth. Inst. 301 E. 17th Street New York, N.Y. 10003 USA</td>
</tr>
<tr>
<td>Valeta, J., Chairman</td>
<td>Czechoslovak National Committee Czechoslovak Academy of Sciences Vysehradská 40, 128 00 Praha 2 Czechoslovakia</td>
</tr>
<tr>
<td>Vasku, J., Vice-Chairman</td>
<td>Czechoslovak National Committee The Inst. of Patholog. Physiology Fac. of Med., Univ. of J. E. Purkyne Komenského Nám. 2, 600 00 Brno Czechoslovakia</td>
</tr>
<tr>
<td>Carrier, Lisa</td>
<td>Dept. de Kinantrop. Univ. of Quebec at Montreal C.P. 8888, Succursale &quot;A&quot; Montreal, P.Q., Canada H3C 3P8</td>
</tr>
<tr>
<td>Olofsson, Hans</td>
<td>Uppsala University Orthopaedic Dept. Akademiska Sjuhuset S-75014 Uppsala Sweden</td>
</tr>
<tr>
<td>Wilkerson, Jerry D.</td>
<td>Univ. of N. Carolina 4104 Pheasant Road Greensboro, NC 27403 USA</td>
</tr>
</tbody>
</table>

**Memberships Reactivated:**

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ahmed, Ismail A.</td>
<td>Teacher Training Inst. Rique-Durar Camp. Block (R) P1. 113 Kuwait KUWAIT</td>
</tr>
<tr>
<td>Evans, Nancy</td>
<td>#6-15 Amos Avenue Waterloo, Ontario N2L 2N6 Canada</td>
</tr>
<tr>
<td>Kumar, Shrawan</td>
<td>Dept. of Physical Therapy 210 Corbett Hall Univ. of Alberta Edmonton, Alberta, Canada T6G 2G4</td>
</tr>
<tr>
<td>Albert, Horst</td>
<td>Guentherburgallee 93 D-6000 Frankfurt/Main 60 West Germany</td>
</tr>
<tr>
<td>Clements, Annie</td>
<td>420-9 Chandler Dr. Aurora, OH 44202 USA</td>
</tr>
<tr>
<td>Siler, William L.</td>
<td>2401 W. Southern #267 Tempe, Arizona 85272 USA</td>
</tr>
<tr>
<td>Hinrichs, Richard N.</td>
<td>Div. of Phys. Educ. &amp; Dance North Texas State University Denton, TX 76203-3857 USA</td>
</tr>
<tr>
<td>Miller, Doris</td>
<td>Faculty of Phys. Educ. Thams Hall University of Western Ontario London, Ontario, Canada N6A 3K7</td>
</tr>
<tr>
<td>Kensaku, Suei</td>
<td>Himeji Institute of Tech. 2167, Shosha, Himeji, Hyogo 671-22 Japan</td>
</tr>
</tbody>
</table>

**ISB for Inactive File:**

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boon, Jr. Kasper</td>
<td>Technische Hogeschool Twente Postbus 217 NL-7800 Enschede The Netherlands</td>
</tr>
<tr>
<td>Cook, Thomas M.</td>
<td>Krusen Research Center Moss Rehab. Hospital 12th St. &amp; Tabor Rd. Philadelphia, PA 19141</td>
</tr>
<tr>
<td>Cordy, Jacques</td>
<td>Lab. F. Exp. Chirurgie CH-7270 Davos-Platz Switzerland</td>
</tr>
<tr>
<td>Fritsch, Peter</td>
<td>Schillerstr. 15 D-1000 Berline 45 BRD</td>
</tr>
<tr>
<td>Gagea, Adrian</td>
<td>Inst. Physical Education and Sports Bucharest ROUMANIA</td>
</tr>
<tr>
<td>Gubitz, Hans</td>
<td>Inst. F. Biomechanik DSHS Zuelicherstr. 257 D-5000 Koeln 41 BRD</td>
</tr>
<tr>
<td>Ishida, Ayako</td>
<td>Sc. of Health Dept. Physiol. Juntendo University 5-Fujisaki Narashino Chiba Japan 275</td>
</tr>
<tr>
<td>Janko, Prof. dr. Hancovic</td>
<td>Dept. of Surgery University of Zagreb Nova Ves 27 41000 Zagreb, YUGOSLAVIA</td>
</tr>
<tr>
<td>Jansen, Johan G.</td>
<td>Dept. of Orthop. Surg. Rinnen Gasthuis Univ. of Amsterdam NL-1000 Amsterdam The Netherlands</td>
</tr>
<tr>
<td>Jimenez, Alvarez E.</td>
<td>C/Eduardo Benot No. 2 Madrid Spain</td>
</tr>
</tbody>
</table>

Dues Notices Returned - Address Unknown

Olofsson, Hans 428
Gubitz, Hans 512