

## PST<sup>®</sup> Main Scientific Presentations from 2000 to 2010

### 2010

- Jun. 4-5, 2010 PST<sup>®</sup> - TERAPIA SYGNAŁEM PULSACYJNYM. PODSTAWY NAUKOWE ORAZ METODY ZASTOSOWANIA. [*PST<sup>®</sup> - Pulsed Signal Therapy. Scientific principles and therapeutic application*].  
(Richard Markoll, MD. PhD)  
Presentation at the I Międzynarodowa Konferencja Medycyny Sportowej ESATT (European Society of Athletic Therapy & Training) pt. "Strategia postępowania z urazami w sporcie profesjonalnym", Jerzmanowice, Poland, June 4-5, 2010.
- Jun. 1, 2010 PST<sup>®</sup> - TERAPIA SYGNAŁEM PULSACYJNYM. PODSTAWY NAUKOWE ORAZ METODY ZASTOSOWANIA. [*PST<sup>®</sup> - Pulsed Signal Therapy. Scientific principles and therapeutic application*].  
(Richard Markoll, MD. PhD)  
Presentation at the Conference pt. "Urazy szyjno-barkowe – diagnostyka i leczenie", Ośrodek Medyczny Galen, Bieruń, Poland, June 1, 2010.
- Apr. 22-24, 2010 PST<sup>®</sup> - TERAPIA SYGNAŁEM PULSACYJNYM. PODSTAWY NAUKOWE ORAZ METODY ZASTOSOWANIA. [*PST<sup>®</sup> - Pulsed Signal Therapy. Scientific principles and therapeutic application*].  
(Richard Markoll, MD. PhD)  
Presentation at the Congress of the Polish Foot & Ankle Society – PFAS, Jastarnia, Poland, April 22-24, 2010.
- Mar. 27, 2010 PULSACYJNA TERAPIA POLEM MAGNETYCZNYM I JEJ WPŁYW NA PROCES ZDROWIENIA W ZMIANACH ZWYRODNIENIOWYCH STAWÓW I URAZACH SPORTOWYCH. [*PST - pulsed signal therapy in arthrosis , sport injury and trauma treatment mechanism of action*]  
(Richard Markoll, MD. PhD)  
Presentation at the Conference "Some aspects of scientific, diagnostic and therapeutic research in rehabilitation", The Fair of Rehabilitation in the Fair Exhibition Centre, Sosnowiec, Poland, March 27, 2010.

### 2009

- Oct. 31, 2009 PST<sup>®</sup> (PULSED SIGNAL THERAPY<sup>®</sup>) NO TRATAMENTO DA OSTEOARTROSE CONFERENCISTA.  
(Cecil Hershler – Canada)  
Presentation at the 41<sup>st</sup> CBOT Brazilian Orthopedics and Traumatology Congress, Rio de Janeiro – BRAZIL; oct. 31 - nov. 2, 2009.

Sept. 26, 2009 TERAPIA PULSACYJNA W LECZENIU OSTEOARTROZY: WYNIKI 70,000 PACJENTÓW W PODWÓJNIE ZASLEPIONYM BADANIU KLINICZNYM. [*Pulsed Signal Therapy<sup>®</sup> for the treatment of osteoarthritis: double-blind and clinical study results in 70,000 patients.*] (Markoll R., Toohil T., Lindecken K.-D.)  
Presentation at the XV Congress of the Polish Osteoarthrology Society and Polish foundation of Osteoporosis in Krakow, POLAND, sept 26-29, 2009.

### 2008

May 8-10, 2008 UTILIZZO DELLA TERAPIA A SEGNALI PULSANTI NEL TRATTAMENTO DEL DOLORE E DELLA LIMITAZIONE FUNZIONALE NELLA PATOLOGIA DEGENERATIVA ARTROSICA. (De Polo C., Trenca I., Frasca M.G., Rocconi F., Zorbo S., Santucci M., Caraccio V., Ceccobelli M., Lazzari M.)  
Università degli Studi Roma "Tor Vergata" Dipartimento di Medicina Critica, Medicina del Dolore e delle Scienze Anestesiologiche (Dir. Prof. A. F. Sabato). Servizio di Fisiopatologia e Terapia del Dolore Azienda Ospedaliera Universitaria Policlinico Tor Vergata (Resp. Prof. A. Gatti). Poster presentation at the AISD (Pain Management Association) Congress in Rome, May 8-10, 2008.

### 2007

Mar. 24, 2007 PST<sup>®</sup> SIGNALS FOR MOTION. (H.Z.Zveibil)  
Presentation at the First Meeting of PST<sup>®</sup> Brazil [Data Analysis], Brazil; March 24, 2007.

### 2006

Sept. 15-19, 2006 TREATMENT OF POSTMENOPAUSAL OSTEOPOROSIS WITH PULSED SIGNAL THERAPY PST<sup>®</sup> - PRIMARY DATA OF AN OPEN-LABEL TRIAL. (B. Mucche, H. Martin, R. Markoll, M. Dornacher, J. Semler)  
Poster presentation at the 28<sup>th</sup> Annual Meeting of the American Society for Bone and Mineral Research (ASBMR), Pennsylvania Convention Center, Philadelphia, Pennsylvania, USA; Sept.15-19, 2006.

Jun. 8-10, 2006 TERAPIA A SEGNALI PULSANTI NELLA PATOLOGIA DEGENERATIVA ARTROSICA: NOSTRA EXPERIENZA. [*Pulsed Signal Therapy in the Degenerative Pathology of Arthrosis: our Experience.*] (D. Rizzitano, A. Gatti, C. Croce, M. Lazzari, M.C. Guarino, C. Martucci, F. Limongi, D. Caruso, M. Proietti, M. Lazzari).  
Presentation at the 29<sup>th</sup> Congresso Nazionale AISD, Verona, Italy, June 8-10, 2006.

## 2005

- Sept. 24, 2005      PST - INNOVATIVE BEHANDLUNGSMÖGLICHKEIT BEI TINNITUS [*PST - An innovative therapeutic modality for the treatment of Tinnitus*].  
(H. Martin)  
Presentation at the Sophien und Hufeland Klinikum, Weimer, Germany; September 24, 2005.
- Sept. 23, 2005      PULSIERENDE SIGNAL THERAPIE (PST®) [*Pulsed Signal Therapy (PST®)*].  
(H. Martin)  
Presentation at the Unfallmedizinischen Tagung des LVBG (Landesverband Nordostdeutschland der gewerblichen Berufsgenossenschaften), ESTREL Convention Center, Berlin-Neukölln, Berlin, Germany; September 23, 2005.
- Sept. 23, 2005      TERAPIA A SEGNALI PULSANTI: EVIDENZE IN VITRO E CLINICHE [*Pulsed Signal Therapy: in vitro and clinical evidence*].  
(M. Barbieri, D. Da Silva Ferreira, R. Markoll)  
Presentation at the "New Trends in Cartilage Repair" Congress, Hotel Excelsior, Napoli, Italy; September 23, 2005.
- Jun. 17, 2005      HANDHABUNG UND EINSATZMÖGLICHKEITEN VON PST MOBIL™.  
[*Administration and Applications of PST Mobil™*].
- Mar. 16-19, 2005    EFFICACY OF PULSED ELECTROMAGNETIC FIELDS IN THE TREATMENT OF EARLY OSTEOARTHRITIS OF THE KNEE.  
(YW Lim, KC Chong, CO Low)  
Presentation at the ECCEO 5, Rome, Italy; March 16-19, 2005.
- Feb. 1, 2005      PULSIERENDE SIGNAL THERAPIE® - NEUE WISSENSCHAFTLICHE ERKENNTNISSE ARTHROSE & OSTEOPOROSE [*Pulsed Signal Therapy® - Latest Scientific Insights in the Treatment of Osteoarthritis and Osteoporosis*].  
(H. Martin)  
Presentation at the Fortbildung Orthopädie, Berlin, Germany; February 1, 2005.
- Jan. 28, 2005      ZUKUNFT DES GESUNDHEITSWESENS [*The Future Of Medical Health Services*].  
(R. Markoll)  
Presentation at the PHAIDROS Management Beratung, Schloss Höhenried, Starnberger See, Germany; January 28, 2005.
- Dec. 2-5, 2004      PULSED SIGNAL THERAPY® (PST®) FOR THE TREATMENT OF MUSCULOSKELETAL DISORDERS - ROLE IN DEGRADATION, REPAIR & TISSUE RESTORATION.  
(R. Markoll, D. Da Silva Ferreira)  
Presentation at the 9<sup>th</sup> World Congress of the OsteoArthritis Research Society International (OARSI), Chicago Riverwalk, Illinois, USA; December 2-5, 2004.

## 2004

- Nov.11-14, 2004 PULSED SIGNAL THERAPY® FOR THE TREATMENT OF OSTEOARTHRITIS & OSTEOPOROSIS. State of the Art Lecture. Rheumatology in the 21st Century... The Asian Perspective.  
(R. Markoll)  
Presentation provided for distribution to all registrants at the Singapore International Scientific Meeting on Arthritis & Rheumatology 2004, Sheraton Towers Hotel, Singapore; November 11-14, 2004.
- Oct.30 –  
Nov.2, 2004 AVALIAÇÃO PRELIMINAR DO TRATAMENTO POR PST EM ARTROSE.  
*[Preliminary evaluation of PST for the treatment of osteoarthritis.]*  
(E. Thober, M. Meyer, B.F. Meyer)  
Presentation at the 36° Congresso Brasileiro de Ortopedia e Traumatologia, Rio de Janeiro, Brazil; October 30 - November 2, 2004.
- Sept.30 –  
Oct. 2, 2004 PULSED SIGNAL THERAPY® FOR THE TREATMENT OF OSTEOARTHRITIS AND OSTEOPOROSIS.  
(D. Silvestri)  
Presentation at the 9th S.I.R.E.R. International Congress, The Lumbar Spine - Piacenza, Italy; October 2, 2004.
- July, 24-28, 2004 ALTERNATIVES TO NSAIDS OSTEOARTHRITIS.  
(L. McCauley)  
Presentation at the 141st AVMA Convention Pennsylvania Convention Center - Philadelphia, Pennsylvania, USA; July 24-28, 2004.
- June 23, 2004 WIRKUNGSWEISE UND EINSATZMÖGLICHKEITEN DER PULSIERENDEN SIGNAL THERAPIE®.  
(H. Martin)  
Presentation: Informationsveranstaltung - Chinazentrum Gars am Kamp, Germany; June 23, 2004.
- June 19-21, 2004 ARTHROSE UND PST®. *[Arthrosis and PST®].*  
(H. Martin)  
Presentation at Freude am Leben - Die Zweiten Gesundheitstage von Bad Füssing. (Happiness in Life - The second held Health Day in Bad Füssing), Bad Füssing, Germany; June 19-21, 2004.
- June 18, 2004 THERAPIE DER OSTEOPOROSE MIT ELEKTROMAGNETISCHEN IMPULSEN - PULSIERENDE SIGNAL THERAPIE *[Osteoporosis treatment using electromagnetic pulses - Pulsed Signal Therapy].*  
(R. Markoll, D. Da Silva Ferreira)  
Presentation: 1. Regionalsymposium - Osteoporose Diagnostik und Therapie [First Regional Symposium - Osteoporosis Diagnosis and Therapy] - Hotel am Badersee, Grainau, Germany; June 18, 2004.
- May 14-18, 2004 PULSED SIGNAL THERAPY FOR THE TREATMENT OF OSTEOPOROSIS.  
(R. Markoll, D. Da Silva Ferreira).  
Presentation at the IOF World Congress on Osteoporosis - Rio de Janeiro, Brazil; May 14-18, 2004.

- Apr.29 –  
May 2,2004      DIE BESONDERE WIRKUNG DER PULSIERENDEN SIGNAL THERAPIE [*The unique working principle of Pulsed Signal Therapy*].  
(R. Markoll, D. Da Silva Ferreira, H. Martin)  
Presentation at the 52. Jahrestagung der Vereinigung Süddeutscher Orthopäden [52<sup>nd</sup> Annual Meeting of the Union of South German Orthopedists], Baden-Baden, Germany; April 29 - May 2, 2004.
- Mar. 13, 2004      PST-THERAPIE - WIRKUNGSWEISE UND ANWENDUNG IN DER PRAXIS. [*PST - Mechanism of Action and Medical Application*].  
(H. Martin)  
Presentation at the 5. Forum Orthopädie 2004 - PST Workshop 3, Grünwald, Germany; March 13, 2004.
- 2003**
- Nov. 26-29, 2003      BASICS, EXPERIMENTAL AND CLINICAL STUDIES AND CLINICAL APPLICATION OF PULSED SIGNAL THERAPY (PST).  
(M. Faensen)  
Presentation at the XXIII Congresso Nacional de Ortopedia e Traumatologia - Organizado pela Sociedade Portuguesa de Ortopedia e Traumatologia - Hotel Tivoli Marinotel, 8125-901 Vilamoura, Algarve, Portugal; November 26-29, 2003.
- Oct. 14, 2003      CLINICAL EXPERIENCE OF PULSED SIGNAL THERAPY FOR THE TREATMENT OF OSTEOARTHRITIS AND TRAUMATIC SOFT TISSUE INJURY. [*Experiência Clínica no Tratamento da Artrose e das Lesões Traumáticas do Esporte.*]  
(C. Hershler). Presentation at the Palestra no Instituto de Ortopedia e Traumatologia, FMUSP, São Paulo, Brazil; October 14, 2003.
- Oct. 12-15, 2003      PULSED SIGNAL THERAPY® (PST®) - A NON-INVASIVE TREATMENT FOR OSTEOARTHRITIS AND OTHER MUSCULOSKELETAL DISORDERS.  
(R. Markoll, DM Da Silva Ferreira)  
Presentation at the 8th World Congress of the OsteoArthritis Research Society International (OARSI), Berlin, Germany; October 12 -15, 2003.
- Sept. 11-14, 2003      PULSED SIGNAL THERAPY. OVERVIEW CLINICAL & IN VITRO STUDIES.  
(R. Markoll)  
Presentation at the 2003 Continuing Education Course Association Of Swiss Chiropractors - Bürgenstock, Switzerland; Sept. 11-14, 2003.
- July 19, 2003      PST BEI DEGENERATIVEN HWS-SCHMERZEN [*PST for the Treatment of Degenerative Cervical Pain*].  
(M. Faensen)  
Presentation at the 3. Interdisziplinäres Rückenschmerzsymposium [The Third Interdisciplinary Symposium for Back Pain]; MRI - Klinik für Orthopädie und Sportorthopädie der Technischen Universität München, München; July 19, 2003.

May 1-4, 2003 KLINISCHE UND IN VITRO UNTERSUCHUNGEN ZUR WIRKUNG DER PST  
*[Clinical and in vitro Research Studies on PST Mechanism of Action].*  
 (M. Faensen)  
 Presentation at the 51. Jahrestagung der Vereinigung Süddeutscher Orthopäden  
 [51st Annual Meeting of the South-German Orthopaedic Association] -  
 Baden-Baden; May 1-4, 2003.

## 2002

Nov. 4, 2002 TRATAMENTO DA ARTROSE COM PST. *[Pulsed Signal Therapy (PST) for the  
 treatment of osteoarthritis.]*  
 (R. Markoll)  
 Presentation at the Palestra no Instituto de Ortopedia e Traumatologia, FMUSP, São  
 Paulo, Brazil; November 4, 2002.

Nov. 1, 2002 TRATAMENTO DA ARTROSE COM PST. *[Pulsed Signal Therapy (PST) for the  
 treatment of osteoarthritis.]*  
 (R. Markoll).  
 Presentation at the 1º Congresso Brasileiro de Pesquisa Básica em Ortopedia e  
 Traumatologia, São Paulo, Brazil; November 1, 2002.

Nov. 2002 VALUTAZIONE CLINICO STRUMENTALE ED ISTOLOGICA DI LESIONI  
 OSTEOCONDRALE DEL GINOCCHIO TRATTATE CON PULSED SIGNAL  
 THERAPY (PST). *[Clinical and histological evaluation of Pulsed Signal Therapy for  
 the treatment of knee osteochondral lesions].*  
 (M.G. Onesta, M. Di Martino)  
 Atti del Congresso della Società Medico-Chirurgica Catanese; November 2002.

Oct. 28-31, 2002 BIOPHYSICAL PRINCIPLES OF PULSED SIGNAL THERAPY.  
 (R. Markoll).  
 Presentation at the 34º Congresso Brasileiro de Ortopedia e Traumatologia, São  
 Paulo, Brazil; October 28-31, 2002.

Mar. 20-23, 2002 BIOPHYSICAL PRINCIPLES OF PULSED SIGNAL THERAPY: A SPECIFIC PEMF  
 SIGNAL  
 (R. Markoll)  
 Simpósio Pulse Signal Therapy - PST Inserido no XI Congresso Português De  
 Reumatologia Organizado pela Sociedade Portuguesa de Reumatologia, Lisboa  
 [Pulsed Signal Therapy (PST) Symposium presented at the XI Portuguese Congress  
 of Rheumatology organized by the Portuguese Society of Rheumatology, Lisbon,  
 Pavilhão Atlântico, Portugal; March 20-23, 2002.

Jan. 19, 2002 PST: VERSO IL TRATTAMENTO DI FONDO DELL'ARTROSI *[PST: Toward The  
 Leading Treatment Of Osteoarthritis]*  
 (R. Markoll)  
 Convegno Sulle Recenti Acquisizioni Terapeutiche In Campo Osteoarticolare PST e  
 SWT [Conference on the Recent Therapeutic Achievements in the PST and SWT  
 Osteoarthritis Field], Naples, Italy; Jan. 19, 2002.

- Jan. 12, 2002      MARKETING - ZUKÜNFTIGER ERFOLGSPARAMETER FÜR PRAXEN UND KLINIKEN AM BEISPIEL DER TINNITUS SIGMED THERAPY [*Marketing - Future Success Parameters for Practices and Clinics Using the Example of Tinnitus Sigmed Therapy*]  
(G. Schoberth)  
Presentation at the 1<sup>st</sup> International Tinnitus SigMed Symposium - Munich, Germany; Jan. 12, 2002.
- Jan. 12, 2002      KLINISCHE ERFAHRUNGEN MIT DER SIGNAL THERAPIE [*Clinical Experiences with Pulsed Signal Therapy*].  
(K. Pfeiffer)  
Presentation at the 1<sup>st</sup> International Tinnitus SigMed Symposium - Munich, Germany; Jan. 12, 2002.
- Jan. 12, 2002      GRUNDLAGENFORSCHUNG - PULSIERENDE TECHNOLOGIE [*Basic Research - Pulsed Signal Technology*]  
(R. Markoll)  
Presentation at the 1<sup>st</sup> International Tinnitus SigMed Symposium - Munich, Germany; Jan. 12, 2002.
- Jan. 12, 2002      POSTULAT ZUR BEDEUTUNG DER NEURO-ANATOMISCHEN STRUKTUREN IN DER FORMATIO RETICULARIS BEIM TINNITUS [*Postulate of the Meaning of the Neuro-Anatomical Structures in the Formatio Reticularis with Tinnitus*]  
(R. Breul)  
Presentation at the 1<sup>st</sup> International Tinnitus SigMed Symposium - Munich, Germany; Jan. 12, 2002.
- Jan. 12, 2002      LASSEN SICH OHRGERÄUSCHE CHIRURGISCH BEHANDELN? [*Can Surgical Ear Sounds Be Treated?*]  
(G. Geyer)  
Presentation at the 1<sup>st</sup> International Tinnitus SigMed Symposium - Munich, Germany; Jan. 12, 2002.
- Jan. 12, 2002      PSYCHOTHERAPIE BEI TINNITUS [*Psychotherapy with Tinnitus*]  
(H. Schaaf)  
Presentation at the 1<sup>st</sup> International Tinnitus SigMed Symposium - Munich, Germany; Jan. 12, 2002.
- Jan. 12, 2002      DIAGNOSTISCHER ANSATZ MÖGLICHER NEUROBIOLOGISCHER URSACHEN DES TINNITUS [*Diagnostic Base for the More Possible Neurobiological Causes of Tinnitus*]  
(J. Unger)  
Presentation at the 1<sup>st</sup> International Tinnitus SigMed Symposium - Munich, Germany; Jan. 12, 2002.
- Jan. 12, 2002      MEDIZINISCHES UND WISSENSCHAFTLICHES MODELL BEI AKUTEM UND CHRONISCHEM TINNITUS [*Medical and Scientific Model of Acute and Chronic Tinnitus*]  
(E. Biesinger)  
Presentation at the 1<sup>st</sup> International Tinnitus SigMed Symposium - Munich, Germany; Jan. 12, 2002.

## 2001

- Dec. 6-7, 2001      BIOPHYSICAL PRINCIPLES OF PULSED SIGNAL THERAPY: A SPECIFIC PEMF SIGNAL  
(R. Markoll)  
IX Jornadas Internacionais do Instituto Português de Reumatologia [IX International Days of the Portuguese Institute of Rheumatology] - Gare Maritima de Alcântara, Portugal; Dec. 6-7, 2001.
- Nov. 8, 2001        THE PST EFFECT ON 3-DIMENSIONAL CHONDROCYTE CULTURE: AN INVITRO STUDY  
(I. Krüger, M. Faensen)  
Presentation at the 1<sup>st</sup> Biennial Meeting of the Tissue Engineering Society ETES-2001 Symposium of the International Cartilage Repair Society (ICRS) - Freiburg, Germany; Nov. 7-10, 2001.
- Sept.20-22, 2001    RISULTATI PRELIMINARI NEL TRATTAMENTO DI LESIONI OSTEOCONDRALE DI GINOCCHIO TRATTATE CON PULSED SIGNAL THERAPY [*Preliminary Results in the Treatment of oa Knee Lesions Knee Treated with Pulsed Signal Therapy (PST)*]  
(M. Di Martino, S. Avondo, T.C. Russo, M.G. Onesta, G. Sessa)  
Presentation at the Italian G.I.R.C. Congress (Gruppo Italiano di Studio dei Processi Riparativi del Tessuto Osteo-Cartilagineo) - Ischia, Italy; Sept. 20 – 22, 2001.
- Sept. 4, 2001        PULSED SIGNAL THERAPY (PST) FOR THE TREAT-MENT OF JOINT DAMAGE DUE TO OSTEOARTHRITIS, SPORTS INJURIES AND OTHER TRAUMA: DOUBLE BLIND AND OPEN LABEL CLINICAL TRIAL RESULTS IN OVER 100,000 PATIENTS AND SUPPORTIVE IN VITRO STUDIES.  
(R. Markoll)  
Presentation at the 24<sup>th</sup> Annual Scientific Meeting of the Singapore Orthopaedic Association, Singapore; Sept. 2-5, 2001.
- May 19, 2001        DER EINFLUSS DER PULSIERENDEN SIGNAL THERAPIE AUF DIE SYNTHESE DER EXTRACELLULAREN MATRIX IN 3-DIMENSION HUMAN CHONDROZYTEN KULTUREN [*The PST Effect on 3-Dimensional Chondrocyte Culture: An In Vitro Study*]  
(I. Krüger, M. Faensen)  
Presentation at the Österreichisch-Deutsches PST Symposium [Austrian-German PST Symposium] - Salzburg, Austria; May 19, 2001.

## 2000

- Dec. 6, 2000        PULSED SIGNAL THERAPY (PST) STIMULATES MITOSIS OF HUMAN CHONDROCYTES IN CULTURE  
(H. Gierse., R. Breul., M. Faensen, R. Markoll)  
Presentation at the 10<sup>th</sup> International Conference on Biomedical Engineering, Singapore; Dec. 6-9, 2000.
- Nov. 30, 2000      CHANGES IN KIRLIAN PHOTOGRAPHY ENERGY FIELDS FOLLOWING PULSED SIGNAL THERAPY.  
(K. Pfeiffer)  
Presentation at the 11<sup>th</sup> International Congress On Stress - Hawaii, USA; Nov. 26 - Dec. 1, 2000.



- Nov. 30, 2000 CLINICAL TRIAL RESULTS OF PULSED SIGNAL THERAPY IN OVER 100,000 PATIENTS WITH OSTEOARTHRITIS AND EVIDENCE OF EFFICACY IN TMJ SYNDROME AND TINNITUS: SUPPORTIVE IN VITRO CARTILAGE AND CHONDROCYTE STIMULATION STUDIES  
(R. Markoll)  
Presentation at the 11<sup>th</sup> International Congress On Stress, Hawaii, USA; Nov. 26 - Dec. 1, 2000.
- Sept. 23, 2000 PULSED SIGNAL THERAPY (PST) FOR THE TREATMENT OF OSTEOARTHRITIS: DOUBLE BLIND AND OPEN LABEL CLINICAL TRIAL RESULTS IN OVER 50,000 PATIENTS; EFFICACY IN TINNITUS AND TMJ SYNDROME; IN VITRO EVIDENCE OF PROTEOGLYCAN SYNTHESIS AND CHONDROCYTE STIMULATION.  
(R. Markoll)  
Presentation at the American Academy of Pain Management, 11<sup>th</sup> Annual Clinical Meeting, Las Vegas, Nevada, USA; Sept. 23, 2000.
- Sept. 22, 2000 The JOHN LIEBESKIND RESEARCH AWARD from the American Academy of Pain Management was presented to Dr. Richard Markoll.  
This award is given to one individual each year who has made a significant accomplishment in research and/or teaching in the field of multidisciplinary pain management. Presentation at the American Academy of Pain Management, 11<sup>th</sup> Annual Clinical Meeting, Las Vegas, Nevada, USA; Sept. 22, 2000.
- June 22, 2000 PULSED SIGNAL FOR THE TREATMENT OF OSTEOARTHRITIS: DOUBLE BLIND AND RANDOMIZED STUDY RESULTS IN OVER 50,000 PATIENTS  
(R. Markoll)  
Poster presentation at the Annual European Congress of Rheumatology EULAR 2000, Nice, France; June 22, 2000.
- June 15, 2000 PULSED SIGNAL FOR THE TREATMENT OF OSTEOARTHRITIS: DOUBLE BLIND AND RANDOMIZED STUDY RESULTS IN OVER 50,000 PATIENTS.  
(R. Markoll)  
Presentation at the Bioelectromagnetics Society (BEMS) 22<sup>nd</sup> Annual Meeting, Munich, Germany; June 11-16, 2000.
- June 13, 2000 PULSED SIGNAL THERAPY (PST) ENHANCES THE PROTEOGLYCANS CONCENTRATION IN HUMAN CHONDROCYTE CULTURES  
(F. Nerucci, R. Marcolongo, R. Markoll)  
Presentation at the Bioelectromagnetics Society (BEMS) 22<sup>nd</sup> Annual Meeting, Munich, Germany; June 11-16, 2000.

