



June 27 – 29, 2013, Salzburg, Austria

June 26, 2013:
Instructional Certification Course

**Programme** 





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#### General information

#### Venue

Best Western Plus Parkhotel Brunauer Salzburg, Austria

## **Congress language**

The congress language is English



## Organizer

International Society for Medical Shockwave Treatment (ISMST) Ebelsberger Schlossweg 5 4030 Linz, Austria

## In cooperation with

**AUVA** (Allgemeine Unfallversicherungsanstalt, Österreich)

**AK-ESWT Österreich** (Arbeitskreis ESWT der Österreichischen Gesellschaft für Orthopädie und Orthopädische Chirurgie)

**DIGEST** (Deutschsprachige Internationale Gesellschaft für Extrakorporale Stoßwellentherapie)

**OCC** (Ondas de Choque de Colombia)

**ONLAT** (Federacion Iberoamericana de Ondas de Choque en Medicina)

**SBTOC** (Sociedade Brasileira de Terapia por Ondas de Choques)

**SEOCE** (Sociedad Espanola de Ondas de Choque Extracorporeas)

**SETOC** (Sociedad Española de Tratamientos con Ondas de Choque)

**SFOCAL** (Société Française pour les Ondes de Choc sur l'Appareil Locomoteur)

**SGST** (Schweizerische Gesellschaft für Stoßwellen-Therapie)

**SITOD** (Societa' Italiana Terapia con Onde D'Urto)

**SVOCHUM** (Sociedad Venezolana de Ondas de Choque de Uso Medico)

**TOCH** (Capitulo Argentino de Terapia por Onda de Choque)

## **Organizing committee**



**Dr. Rainer MITTERMAYR**Austria
President 2012-2013



**Prof. Dr. Carlos LEAL**Colombia
1. Vice President



**Dr. Markus GLEITZ**Luxembourg
General Secretary



**Dr. Wolfgang SCHADEN**Austria
Scientific Secretary



**Dr. Richard THIELE**Germany
Trade Coordinator



**Dr. Vinzenz AUERSPERG**Austria
Treasurer



**Dr. Andreas GRESLEHNER**Austria
Medical Director AUVA



Catherine AUERSPERG Austria ISMST Secretary

## **Scientific organization**

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## **Congress secretariat**

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## Opening hours of the registration desk

## **DFP Points and European CME Points**

DFP Points at the "Österreichische Akademie der Ärzte GmbH" have been approbated (21 fachspezifische Punkte). European CME points have been requested.



# **Welcome**Dear colleagues, dear friends,

t is my honor and privilege to invite you to the 16<sup>th</sup> ISMST Meeting taking place in Salzburg, Austria from June 27 – 29, 2013. One day earlier – June 26 – the Instructional Certification Course will also be held at this meeting due to the enormous interest during the past meetings and major demand for high treatment quality standards among shockwave therapists. I am convinced that the upcoming meeting will again provide a perfect platform for all interested in this exciting and rapid expanding technology.

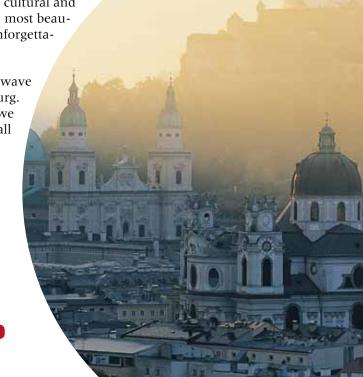
In the past meetings we learned a lot about the basic mechanism on the cellular and molecular level affected by shockwave treatment, which significantly improved our understanding of this technology. This certainly supports us in adapting treatment specifications in the various indications by translating these findings into the clinical environment. However, we are still in an early stage to understand this complex interplay of shockwaves with the biological system which on the other hand makes it also a highly attractive field of research. It is my firm conviction that expert knowledge exchange as well as close and excellent cooperation that can be found throughout our society are key elements to succeed in this ambition. As young investigators are the experts of tomorrow, we should continue to inspire these young and enthusiastic people to participate in the scientific advancement of this fascinating therapeutic tool. In parallel to the great efforts accomplished by the basic research community the consolidated indications gained further clinical evidence and have become the treatment of first choice in some fields. Especially this year meeting venue gives us the great opportunity to review and discuss the recent research and clinical progress and the future perspectives as it is exclusively reserved for our congress participants.

Abstract submission expired on April 21 and we received numerous and highly interesting papers from various topics in shockwave treatment. What is new at this meeting is that we have implemented three specific sessions addressing hot issues from basic research, politics to quality standards in shockwave treatment which are highlighted by keynote lectures and subsequently discussed in round tables. This concept in conjunction with the submitted abstracts will definitively give new impulses in discussions and future research activities. As a further novelty an award endowed with € 500 will be granted to the best congress paper.

Take the advantage of getting cutting edge knowledge in shockwave treatment in one of the most beautiful cities in the heart of Europe – Salzburg, which was nominated by UNESCO as part of the world's cultural and natural heritage. Now the city officially ranks among the most beautiful cities in the world, certainly making your stay an unforgettable experience.

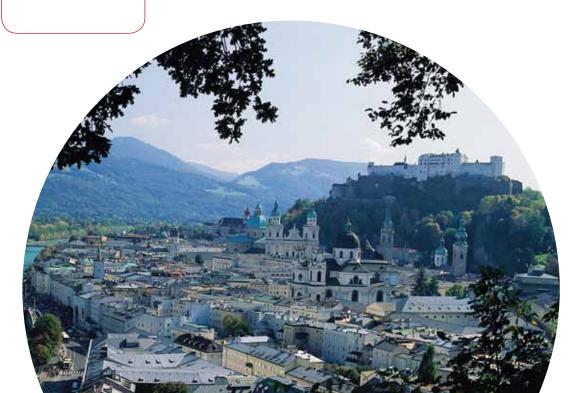
On behalf of the International Society for Medical Shockwave Treatment, I look forward to welcoming you all in Salzburg. With Mozart's spirit and the "Gemütlichkeit" of Austria we will improve the development of shockwave therapy in all medical fields.

Sincerely yours, Rainer Mittermayr, M.D. President of ISMST



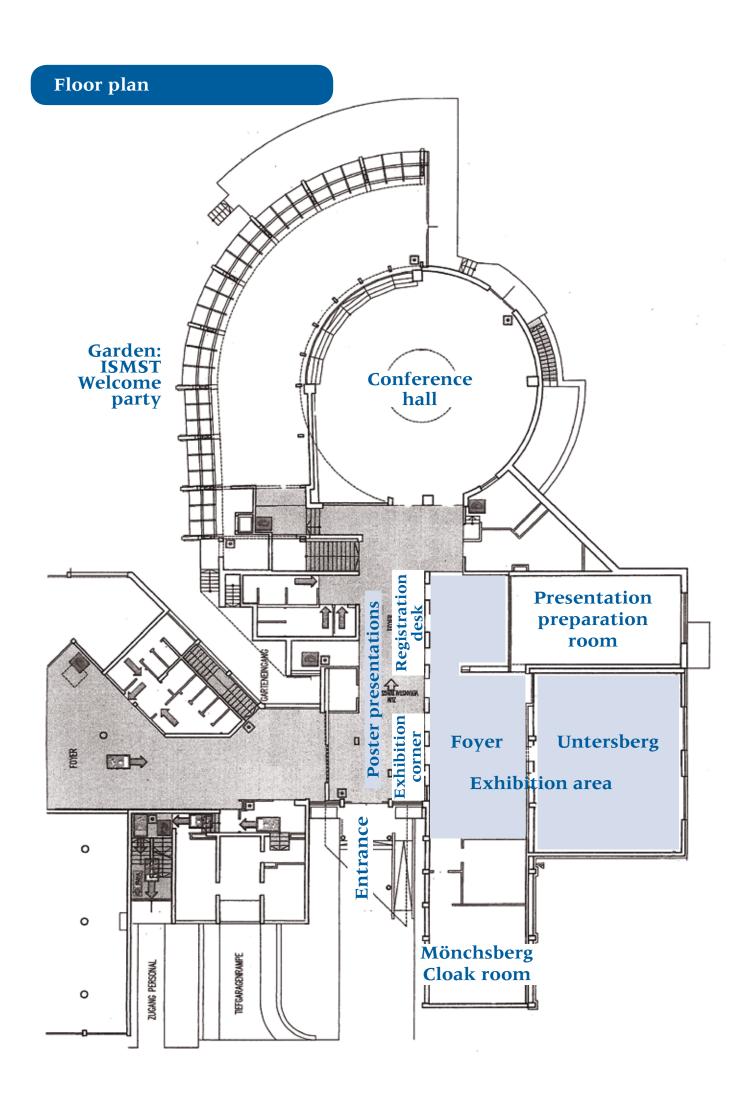
## Programme at a glance

07:30 – 18:00 11:00 Press Conference Instructional Certification Course 17:00 – 19:00 As of 19:30 ISMST Welcome Party Austrian Barbecue at the Brunauer Hotel  Thursday, June 27, 2013  07:30 – 18:00 Registration Industrial exhibition 08:00 – 08:30 Opening ceremony – Welcome 08:30 – 11:00 Session I ESWT and biological reactions – What do we know? What should we know?  11:00 – 11:30 Coffee break and exhibition 11:30 – 12:30 Session II ESWT and pain 12:30 – 14:00 Lunch break and exhibition  14:00 – 15:00 Session III ESWT and heel 15:00 – 15:30 Coffee break and exhibition  15:30 – 17:00 Session IV Tissue diagnostics and results 17:00 – 19:00 ISMST AGM (Annual General Meeting) Dinner at Stiegl Keller	Wednesday,	June 26, 2013
17:00 – 17:00  17:00 – 19:00  As of 19:30  Managing Board Meeting  ISMST Welcome Party Austrian Barbecue at the Brunauer Hotel  Thursday,  June 27, 2013  07:30 – 18:00  08:00 – 18:00  08:00 – 08:30  Opening ceremony – Welcome  08:30 – 11:00  Session I ESWT and biological reactions – What do we know? What should we know?  11:00 – 11:30  Coffee break and exhibition  11:30 – 12:30  Session II ESWT and pain  12:30 – 14:00  Lunch break and exhibition/Poster presentations  14:00 – 15:00  Session III ESWT and heel  15:00 – 15:30  Coffee break and exhibition  15:30 – 17:00  Session IV Tissue diagnostics and results  17:00 – 19:00  ISMST AGM (Annual General Meeting)	07:30 - 18:00	Registration
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	As of 19:30	Dinner at Stiegl Keller



## Programme at a glance

Friday,	June 28, 2013
07:30 - 17:10	Registration
08:00 - 17:10	Industrial exhibition
08:00 - 10:15	Session V 20 years of ESWT – What is the acceptance of patients, physicians, healthcare providers and scientific community?
10:15 - 10:45	Coffee break and exhibition
10:45 - 12:30	<u>Session VI</u> Miscellaneous I
12:30 - 13:30	Lunch break and exhibition
13:30 - 15:00	<u>Session VII</u> Tendinopathies
15:00 – 15:30	Coffee break and exhibition
15:30 - 17:10	<u>Session VIII</u> Miscellaneous II
As of 18:10	Guided tours from Brunauer Hotel
20:00	Dinner Party at the Hohensalzburg Castle
Saturday,	June 29, 2013
07:30 - 14:00	Registration
08:00 - 14:00	Industrial exhibition
08:30 - 10:00	<u>Session IX</u> Shockwave therapist – is there any qualification necessary?
10:00 - 10:30	Coffee break and exhibition
10:30 - 12:30	<u>Session X</u> ESWT and bone pathologies
12:30 - 13:30	ISMST Award
	Closing ceremony
	Closing ceremony



**Director:** 

#### **ISMST Instructional Certification Course ESWT**

Dr. M. Gleitz

Coordinator: Dr. R. Thiele

07:30 - 18:00 Registration Introduction 08:00 - 08:10M. Gleitz / R. Thiele **Physical principles** 08:10 - 08:35 V. Auersperg - Austria **Biological principles** 08:35 - 09:00 W. Schaden - Austria Principles of shockwave application 09:00 - 09:20 M. Gleitz - Luxembourg **Demonstration of devices** 09:20 - 09:4509:45 - 10:00 **Coffee break** 10:00 - 10:20 Approved standard indication 1: Tendinosis calcarea L. Gerdesmeyer - Germany Approved standard indication 2: Lateral epicondylitis 10:20 - 10:40 L. Gerdesmeyer - Germany 10:40 - 11:00 Workshop 11:00 - 11:20 Approved standard indication 3: Plantar fasciitis M. Ringeisen - Germany Approved standard indication 4: Achilles tendinopathy 11:20 - 11:40 M. Ringeisen - Germany 11:40 - 12:00 Workshop 12:00 - 12:20 **Empirically-tested indications** S. Thiele - Germany 12:20 - 12:45 **Exceptional and experimental indications** L. Guiloff - Chile 12:45 - 14:00 Lunch break Myofascial treatment 14:00 - 14:30 M. Gleitz - Luxembourg **Bone indications** 14:30 - 14:55 R. Mittermayr - Austria 14:55 - 15:20 Skin indications C. Leal - Colombia Workshop and coffee break 15:20 - 15:40 **Socio-political issues** 15:40 - 16:10 R. Thiele - Germany Multiple choice test + certificates 16:10 - 16:30 End 16:30 - 17:00 17:00 - 19:00 **Managing Board Meeting** As of 19:30 **ISMST Welcome Party** Austrian Barbecue at the Brunauer Hotel

## Thursday,

## June 27, 2013

07:30 - 18:00 Registration

08:00 – 18:00 Industrial exhibition

08:00 – 08:30 Opening ceremony – Welcome

Rainer Mittermayr, President of the ISMST Markus Gleitz, General Secretary of the ISMST Heinz Kuderna, Honorary President of the ISMST

# 08:30 – 11:00 ESWT and biological reactions – What do we know? What should we know?

Chairmen: Mittermayr, Wang

Session time	Session title	Abs- tract Nr.	Pres. time	Discus. time
08:30 - 08:41	Modulation of early inflammatory response prevents from calcification in an aortic valve xenograft model  C. Tepeköylü, S. Blunder, K. Heinz, R. Kozaryn, M. Dietl, M. Theurl, D. Bernhard, M. Grimm, J. Holfeld, Austria	1	8	3
08:41 - 08:52	Extracorporeal Shockwave Therapy modulates post-surgical inflammation and prevents postoperative ileus in mouse animal model A.J. Bauer, V. Antonic, M.J. Izadjoo, A. Stojadinovic, USA	2	8	3
08:52 - 09:03	Extracellular ATP enhances proliferation after in vitro shockwave treatment by ERK dependent pathways  A.M. Weihs, C. Fuchs, A. Teuschl, H.H. Sitte, D. Rünzler, Austria	3	8	3
09:03 - 09:14	In vitro shockwave treatment influences lymphatic endothelial cell marker expression and proliferation  S. Riedl, A. Weihs, M. Groeger, H. Redl, W. Holnthoner, Austria	4	8	3
09:14 - 09:25	Adipose derived stem cells: In vitro treatment with Extracorporeal Shockwaves enhances stemness and preserves multipotency C. Schuh, A. Teuschl, A. Weihs, P. Heher, R. Mittermayr, H. Redl, D. Rünzler, Austria	5	8	3
09:25 - 09:36	Reactive oxygen species and ERK phosphorylation mediate osteoblast differentiation of human adipose derived stem cells (hASC) induced by Extracorporeal Shockwaves  L. Berta, R. Frairia, M.G. Catalano, F. Marano, L. Rinella, S. Meschieri, O. Bosco, Italy	6	8	3
09:36 - 09:54	KEYNOTE LECTURE: ESWT and biological reactions – stem cells S. Russo, Italy	K1	15	3
09:54 - 10:12	KEYNOTE LECTURE: ESWT and biological reactions – wound healing R. Mittermayr, Austria	К2	15	3
10:12 - 10:40	KEYNOTE LECTURE: The link between shockwaves and innate immunity – the main working mechanism?  J. Holfeld, Austria	К3	25	3
10:40 – 11:00	Round table J. Holfeld, R. Mittermayr, S. Russo, CJ. Wang		20	
11:00 – 11:30	Coffee break and exhibition			

## Thursday,

June 27, 2013

# 11:30 – 12:30 ESWT and pain Session II

Chairmen: D'Agostino, Gleitz

Session time	Session title	Abs- tract Nr.	Pres. time	Discus. time
11:30 – 11:41	Comparison of effectiveness of the ESWT combined home stretching exercise in patients with cervical myofascial pain F. Uguz, U. Bas Aslan, Turkey	7	8	3
11:41 – 11:52	High energy Extracorporeal Shockwave Therapy versus radial shockwave therapy in lumbar facet joint pain – searching for optimal treatment protocol  T. Nedelka, J. Nedelka, J. Schlenker, Czech Republic	8	8	3
11:52 – 12:03	High-energetic focused Extracorporeal Shockwave (ESWT) reduces pain levels in the nodular state of Dupuytren's disease (DupuyShock) – a randomised study  M. Kühn, H. Sorg, P.M. Vogt, K. Knobloch, Germany	42	8	3
12:03 – 12:14	The effects of shockwave application frequency on pain in normal subjects C. Leal, D. Lemus, M.C. Gallo, Colombia	10	8	3
12:14 - 12:30	Round table M.C. d' Agostino, J. Eid, M. Gleitz, K. Knobloch		16	
12:30 – 14:00	Lunch break and exhibition/Poster presentations			

# 14:00 – 15:00 ESWT and heel <u>Session III</u>

Chairmen: Souza, Rompe

Session time	Session title	Abs- tract Nr.	Pres. time	Discus. time
14:00 - 14:12	Extracorporeal radial Shockwave Therapy for the treatment of achilles tendinopathies E.A. Serrano, Peru	11	8	4
14:12 - 14:24	Achilles tendinopathy and the risk of rupture M.C. Ottone, E.M. Roldi, Italy	12	8	4
14:24 - 14:36	ESWT the treatment of choice for plantar fasciitis – 12 years' experience K. Raveendran, Malaysia	13	8	4
14:36 - 14:48	Plantar fasciitis treatment – physical therapy with US versus Extracorporeal Shockwave Therapy: a long-term follow-up S. Messina, P. Buselli, Italy	14	8	4
14:48 - 15:00	Is Extracorporeal Shockwave Therapy an effective treatment for chronic plantar fasciitis? A double-blind, randomized, placebo-controlled trial with two years of follow-up  M. Ibrahim, R. Donatelli, C. Schmitz, USA	15	8	4
15:00 - 15:30	Coffee break and exhibition			

## 15:30 – 17:00 <u>Session IV</u> Tissue diagnostics and results

Chairmen: Guiloff, Holfeld

Session time	Session title	Abs- tract Nr.	Pres. time	Discus. time
15:30 – 15:42	Evaluation of factors possibly influencing the outcome of focused Extracorporeal Shockwave Treatment (ESWT) of recalcitrant plantar fasciitis with calcaneal spur R. Scheuer, M. Friedrich, J. Hahne, M. Pallamar, Austria	16	8	4
15:42 – 15:54	Evaluation of the fibrillar pattern as an ultrasound parameter for clinical co-relation in patients with plantar fascitis treated with Shockwave Therapy: one year follow-up G. Verratti, Venezuela	17	8	4
15:54 – 16:06	Extracorporeal Shockwave Therapy could induce an up- and down regulation of vascularity in patients with chronic plantar fasciitis S.n. Fu, H. Chen, China	18	8	4
16:06 - 16:18	Results of Shockwave Treatment in lateral epicondylitis in relation to tendon changes in power Doppler M. Gleitz, Luxembourg	19	8	4
16:18 – 16:30	Consideration of energy flux density on modulation on vascularity and pain for Extracorporeal Shockwave Therapy in patients with chronic plantar fasciitis S.n. Fu, H. Chen, China	20	8	4
16:30 – 17:00	Round table M.C. d' Agostino, M. Gleitz, L. Guiloff , J. Holfeld		30	
17:00 – 19:00	AGM (Annual General Meeting)			
As of 19:30	Dinner at Stiegl Keller	12		



## Friday,

June 28, 2013

07:30 – 17:10 Registration 08:00 – 17:20 Industrial exhibition

08:00 – 10:15 20 years of ESWT – What is the acceptance of patients, physicians, healthcare providers and scientific community?

Chairmen: Leal, Thiele

Session time	Session title	Abs- tract Nr.	Pres. time	Discus. time
08:00 - 08:12	International survey on Extracorporeal Shockwave Therapy for the treatment of rotator cuff calcific tendinopathies  D. Moya, Argentina	21	8	4
08:12 - 08:24	A survey about how Brazilian doctors are working with ESWT P. Kertzman, Brazil	22	8	4
08:24 - 08:36	Referral regulations and economic valorization of the ESWT within the framework of the health technology assessment in Italy in the Lombardy region P. Buselli, S. Messina, Italy	23	8	4
08:36 - 08:48	How to create a shockwave competence centre F. Bätje, Germany	24	8	4
08:48 - 09:03	<b>KEYNOTE LECTURE:</b> 20 Years of ESWT – Acceptance of patients, physicians, health care providers and scientific world in Italy <b>R. Frairia</b> , Italy	K4	10	5
09:03 - 09:18	KEYNOTE LECTURE: 20 Years of ESWT – Acceptance of patients, physicians, health care providers and scientific world in Brazil J. Eid, Brazil	K5	10	5
09:18 - 09:33	<b>KEYNOTE LECTURE:</b> 20 Years of ESWT – Acceptance of patients, physicians, health care providers and scientific world in Latin America C. Leal, Colombia	K6	10	5
09:33 - 09:48	<b>KEYNOTE LECTURE:</b> 20 Years of ESWT – Acceptance of patients, physicians, health care providers and scientific world in Germany/Europe R. Thiele, Germany	K7	10	5
09:48 - 10:15	Round table P. Kertzman, C. Leal, W. Schaden, R. Thiele		27	
10:15 - 10:45	Coffee break and exhibition			

## 10:45 – 12:30 Miscellaneous I Session VI

Chairmen: Auersperg, Russo

Session time	Session title	Abs- tract Nr.	Pres. time	Discus. time
10:45 – 10:57	Porphyrin loaded nanoparticles improve in vitro anticancer sonodynamic treatment L. Serpe, G. Varchi, R. Canaparo, M. Ballestri, F. Foglietta, G. Sotgiu, A. Guerrini, R. Frairia, Italy	25	8	4
10:57 – 11:09	Extracorporeal Shockwaves (ESW) trigger drug release and enhance cytotoxic effects of doxorubicin-loaded nanobubbles in anaplastic thyroid cancer  M.G. Catalano, F. Marano, L. Rinella, C. Bellonio, N. Fortunati, L. Berta, R. Frairia, Italy	26	8	4

## Friday,

## June 28, 2013

Session time	Session title	Abs- tract Nr.	Pres. time	Discus. time
11:09 – 11:21	Selective destruction of vemurafenib resistant melanoma cells in ballistic pressure fields. FEM simulation of the ballistic pressure wave propagation in tumor tissue  T. Dietrich, Germany	27	8	4
11:21 - 11:33	Why the mechanisms of Shockwave Therapy are still not understood K. Dietz-Laursonn, R. Beckmann, A. Goetzenich, T.T. Sönmez, K. Radermacher, M. de la Fuente, Germany	28	8	4
11:33 - 11:45	ESWT – an extraordinary tool for tissue regeneration and remodelling M.C. d'Agostino, E. Tibalt, E. Abati, S. Respizzi, Italy	29	8	4
11:45 – 11:57	The influence of SW on the morpho-functional state of the kidneys with chronic pyelonephritis  B. Garilevich, R. Valerievich Royuk, U. Kudriavtsev, V. Kirpatovskiy, Russia	30	8	4
11:57 – 12:09	Improved axonal regeneration and improved functional results by Extracorporeal Shockwave Treatment after peripheral nerve injury in the rat  T. Hausner, K. Pajer, R. Schmidhammer, A. Nógrádi, Austria	31	8	4
12:09 – 12:30	Round table V. Auersperg, R. Frairia, R. Mittermayr, S. Russo		21	
12:30 - 13:30	Lunch break and exhibition			

## 13:30 – 15:00 Tendinopathies Session VII

Chairman: Hoffelner, Moya

Session time	Session title	Abs- tract Nr.	Pres. time	Discus. time
13:30 - 13:42	Focal ESWT in greater trochanteric pain syndrome O. Patiño, D. Moya, Argentina	32	8	4
13:42 - 13:54	Radial extracorporeal pressure pulse therapy for the primary long bicipital tenosynovitis – a prospective randomized controlled study G.Y. Xing, China	33	8	4
13:54 – 14:06	Extracorporeal Shockwave Therapy (ESWT) in impingement syndrome of the shoulder  A.E. Balabel, F.R. Al-Kandary, A.A. Yacoub, S.S. Othman, Kuwait	34	8	4
14:06 - 14:18	Effectiveness of RSWT in the treatment of shoulder adhesive capsulitis: 52 weeks follow-up RCT M. Ibrahim, R. Donatelli, A. Zaky Hussein, USA	35	8	4
14:18 – 14:30	Extracorporeal radial Shockwave Therapy for lateral epicondylitis E.A. Serrano, Peru	36	8	4
14:30 - 14:42	Piezoelectric Shockwave Therapy for the treatment of chronic lateral epicondylitis P.R. Rockett, Brazil	37	8	4
14:42 – 14:54	Epicondylitis: a problem of difficult solution M.C. Ottone, F.M. Roldi, E.M. Roldi, Italy	38	8	4
15:00 – 15:30	Coffee break and exhibition			

June 28, 2013

## 15:30 – 17:20 Miscellaneous II <u>Session VIII</u>

Chairmen: Coombs, Kuderna

Session time	Session title	Abs- tract Nr.	Pres. time	Discus. time
15:30 - 15:42	Shockwave Treatment for musculoskeletal infection R. Coombs, M. Hafez, M. Hanna, UK	39	8	4
15:42 – 15:54	Extracorporeal Shockwave Therapy in spastic children with Cerebral Palsy A. Mirea, G. Onose, L. Padure, Romania	40	8	4
15:54 – 16:06	Combined non-invasive treatment for plantar fibromatosis (Ledderhose's disease) – high-energetic focused ESWT and antifibrotic therapy using jet peel K. Knobloch, Germany	41	8	4
16:06 - 16:18	First high definition 3 Tesla MRI-Imaging pictures before and after piezoelectric focused ESWT with low energy level of a myofascial trigger point  H. Müller-Ehrenberg, B. Ertl-Wagner, F. Heinen, Germany	9	8	4
16:18 – 16:30	Unusual skin reaction following repetitive focused ESWT for chest wall pain in serial rib fracture in a triathlon athlete – a case report K. Knobloch, Germany	43	8	4
16:30 - 16:42	Extracorporeal Shockwave Therapy for chronic foot ulcers at one and five years  CJ. Wang, Taiwan	44	8	4
16:42 - 16:54	The scar treatment with ESWT and manual therapy associated to I-coone system: a complex analysis of results P. Saggini, R.G. Bellomo, I. Doday, N. Scuderi, Italy	51	8	4
16:54 - 17:10	Round table R. Coombs, H. Kuderna, D. Moya, J.D. Rompe		16	
As of 18:10	Guided tour from Brunauer Hotel			
20:00	Dinner party at the Hohensalzburg Castle			

## Saturday,

### June 29, 2013

07:30 – 14:00 Registration 08:00 – 14:00 Industrial exhibition

# 08:30 – 10:00 Shockwave therapist – is any qualification necessary? <u>Session IX</u>

**Chairmen:** Gleitz, Leal

Session time	Session title	Abs- tract Nr.	Pres. time	Discus. time
08:30 - 08:45	<b>KEYNOTE LECTURE:</b> Shockwave Therapist – Is any qualification necessary? Situation in Italy R. Frairia, Italy	K8	10	5
08:45 - 09:00	<b>KEYNOTE LECTURE:</b> Shockwave Therapist – Is any qualification necessary? Situation in Brazil J. Eid, Brazil	К9	10	5
09:00 - 09:25	KEYNOTE LECTURE: Shockwave Therapist – Is any qualification necessary? Plans for Germany M. Ringeisen, Germany	K10	20	5
09:25 - 10:00	Round table E. Amelio, M. Gleitz, C. Leal, W. Schaden		35	
10:00 - 10:30	Coffee break and exhibition			

## 10:30 – 12:30 ESWT and bone pathologies Session X

Chairmen: Schaden, Wang

Session time	Session title	Abs- tract Nr.	Pres. time	Discus. time
10:30 - 10:42	Extracorporeal Shockwave Therapy reduces progression of knee osteoarthritis in rabbits by reducing nitric oxide level and chondrocyte apoptosis G.Y. Xing, <b>Z. Zhe</b> , China	45	8	4
10:42 - 10:54	Molecular changes after Extracorporeal Shockwave Therapy in osteoarthritic knee in rats CJ. Wang, Taiwan	46	8	4
10:54 – 11:06	Extracorporeal Shockwave Treatment for osteonecrosis of the femoral head – case report A.C. Souza, Brazil	47	8	4
11:06 – 11:18	Early outcome of high energy shock wave in osteonecrosis of the femoral head W. Sun, China	48	8	4
11:18 – 11:30	Extracorporeal Shockwave Therapy (ESWT) in osseous non-unions: a German cohort study F. Bätje, Germany	49	8	4
11:30 - 11:42	Combined treatment of scaphoid non-union by operation and additional Extracorporeal Shockwave (ESWT)  S. Quadlbauer, C. Pezzei, J. Jurkowitsch, T. Beer, W. Schaden, H. Redl, M. Leixnering, Austria	50	8	4
11:42 – 11:52	<b>KEYNOTE LECTURE:</b> ESWT for bone treatment: Are there clear principles?  J. Eid, Brazil	K11	10	
11:52 – 12:30	Round table R. Coombs, R. Thiele, W. Schaden, CJ. Wang		38	
12:30 – 13:30	ISMST Award Closing ceremony Dr. Rainer Mittermayr, President of the ISMST Dr. M. Cristina d' Agostino, Future President of the ISMST			

### Poster programme

Posters are exhibited during the entire congress in the foyer. Poster presentations are scheduled for Thursday June 27, 13:00 – 14:00.

- PO 1: ESWT for patellar spur (case study)
  A.E. Balabel, F.R. Al-Kandary, S. Abubacker, Kuwait
- PO 2: Retrospective comparative study F. Dujo Rodriguez, Spain
- PO 3: Radial ESWT for nonunions is it possible?
  P. Kertzman, Brazil
- PO 4: Piezoelectric shockwave therapy for the treatment of chronic tendinopathy of the rotator cuff
  P. R. Rockett, Brazil
- PO 5: The effectiveness of the ESWT in patients with myofascial pain U. Bas Aslan, F. Uguz, Turkey
- PO 6: Extracorporeal shockwave therapy combined with arthroscopy for the treatment of osteochondral lesions of the talus
  G.Y. Xing, China
- PO 7: Long term effectiveness of ESWT associated to manual release in chronic lateral epicondylitis

  R. Saggini, R.G. Bellomo, G. Barassi, L. Scarcello, Italy
- Po 8: The rehabilitative treatmen plan on ankylosing spondylitis with ESWT R. Saggini, R.G. Bellomo, G. Barassi, L. Scarcello, Italy
- Po 9: Piezoelectric Shockwave Therapy for the treatment of calcifying tendinopathy of the shoulder
  P.R. Rockett, Brazil



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## Promoting members and exhibitors

#### **Promoting members**

Zimmer

**BTL** 

**STORZ** 

**EMS** 



CellSonic

GymnaUniphy

Richard Wolf







#### **Exhibitors**

Zimmer Storz

**EMS** Dornier PUSCH Elvation CellSonic

### Social events

## **ISMST** Welcome Party Typical Austrian Barbecue at the Brunauer Hotel

On Wednesday, June 26, all participants are cordially invited to participate in the ISMST welcome party, which will be celebrated in the beautiful and huge garden of the meeting hotel. In this extraordinary atmosphere you will have the opportunity to enjoy a typical Austrian barbecue and listen to traditional Austrian folk music in a mild June summer night. This evening is a wonderful opportunity for meetings, fruitful discussions and networking.

This event is included for meeting participants. Congress participants are also invited to bring accompanying guests (€ 40,-- per accompanying guest).



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## **Social events**

Dinner in a typical Austrian brewery – Stiegl Keller

On **Thursday**, **June 27**, a visit to a downtown restaurant of one of the most famous Austrian breweries will introduce you to the unique Austrian brewing culture. Enjoy your fresh beer straight from the barrel along with typical Austrian culinary specialties in a convenient and relaxing environment. Experience the Austrian hospitality and "Gemütlichkeit".

Congress participants with their accompanying person(s) are cordially welcome to join this social evening at a fee of  $\in$  60 per person.



## Guided tour and dinner party at the Hohensalzburg Castle

On **Friday, June 28**, the official ISMST gala dinner will bring you to the world famous fortress (Festung Hohensalzburg) with a unique and spectacular view over Salzburg and its wonderful countryside. A guided tour through the city's most famous sites will immerse you in the fascinating history of Salzburg before you reach conveniently the Festung Hohensalzburg by cableway.

This event is included for meeting participants. Congress participants are also invited to bring accompanying guests. The fee is € 60 per accompanying guest.



Coming next...



Dear colleagues, dear friends,

it is a great honour and a pleasure to invite you all to the 17<sup>th</sup> International Congress of the ISMST that will be held in Milan in May/June 2014.

The meeting Agenda will include Basic Science and daily clinical practice, with a special focus on Regenerative Medicine and new therapeutical indications, besides classical popular fields of application.

In the best traditions of the ISMST, with scientific rigor, in a friendly and informal way, we will share our experiences, ideas, new scientific hypothesis and perspectives, thus further contributing to the growth of our shock wave community all over the world.

That's why I invite you all to participate to the Meeting actively, making your scientific contribution.

Besides the scientific commitments, you will also have the chance to spend a nice and relaxing time in our glamorous city with your families. Tourist and cultural attractions, fashion, sport events and fine Italian cuisine will make your stay unforgettable.

Save the date! I'm looking forward to meeting you all in Milan in 2014! Yours

M. Cristina d'Agostino

Detailed information about the congress will be available, starting from July 2013, on our websites: www.ismst.com - www.shockwavetherapy.org

The official language of the congress is English.

An industrial exhibition will be held during the congress, to introduce innovations and technological progress in ESWT.

Social and cultural events will be proposed to the Congress' partecipants and their families, to welcome and accompany them all over Milan, discovering our amazing city. Furthermore, several other pleasant locations can be easily reached by train from Milan. You can find some useful informations at the following websites:

www.turismo.milano.it - www.visitamilano.it - www.regione.lombardia.it .
For a customized tour assistance, please contact: reception@veloxpoint.it



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