O.A.S.I. Bioresearch Foundation Gobbi ONLUS

“An OASIs for research ”

2011 Activity Report
# TABLE OF CONTENTS

**PRESENTATION**  
by Alberto Gobbi, President of O.A.S.I. Bio research Foundation Gobbi Onlus

**PART I - ORIGIN AND STRATEGIC VISION OF THE FOUNDATION**  
Concept  
Inspirational principles

**PART II – MISSION AND ORGANIZATION**  
Mission  
Activities in 2011  
Boards and Committees of the Foundation

**PART III – PROJECTS AND SCIENTIFIC INNOVATION**

**PART IV – GRANTS AND INTERNATIONAL FELLOWSHIPS**  
Guidelines for grants  
2011 International Fellowships

**PART V – MANAGERIAL AND PROMOTIONAL ACTIVITIES**  
Preliminary project works to participate in EU calls for proposals  
Improved design of the Foundation website  
Fund Raising  
Publications and media  
Sponsors

**PART VI – MEMBERSHIPS AND AWARDS**

**PART VII – PUBLICATIONS AND MEETINGS**  
Participation in events and seminars  
Scientific publications

**PART VIII**  
Conclusions
PRESENTATION

Dear Friends,

the incredibly hard period of economic crisis we are experiencing in Europe with its influences on our Foundation urge us to think seriously over the necessary actions to take in order to raise funds resources for our projects. Society is nowadays less prone to invest in medical research, as its priorities are different.

Given the difficulty in retrieving funds and our firm intention to keep the Foundation alive, we have come to the decision to contact professionals able to support us in the complex work of preparation of scientific projects in response to national and European bids, and mark a turning point which might be decisive for our future. To this end, thanks to Eng. Antonio Rinaldi and Ms. Gloria Guillot, O.A.S.I. Bioresearch Foundation Gobbi Onlus has signed a consultancy agreement with SUPI Italy in August 2011 with the double objective to help O.A.S.I. to seek sources of co-funding in the research market and develop its business with multidisciplinary collaborations (with physicians, engineers, chemists, biologists, etc.). This activity has been implemented with strong commitment and enthusiasm. As a matter of fact, the first four months of collaboration with SUPI have produced two interesting research proposals, submitted within the 7th Framework Programme and the National Program for Young Researchers of the Italian Ministry of Health. These project proposals assign an important position to O.A.S.I. and are a milestone that can pave the way for other opportunities and further development.

I wish to thank all those who persist in sponsoring our activities, particularly the Pesenti Foundation, the Zegna Foundation, the A.I.S.P.O. association of the San Raffaele Hospital, the IGEA group of research and all companies and supporters who joined our campaign: “adopt a project”.

We have helped young Italians and foreign doctors coming from Greece and India, willing to improve their knowledge of orthopaedics. We will foster our mission with dedication, by accompanying young doctors through an educational training course that brings together several experiences and cultures, all diverse but linked by a similar aspiration to increase knowledge, improve performance and strengthen abilities in the medical and scientific sectors. Every published article, every scientific work carried out and presented with the collaboration of young grantees is a joyful moment. Grantees’ eyes light up when finding their own name published in a review and this light gives meaning to our mission and lets us understand that this is a feeling, an experience, that cannot stop over the time … Intellect must govern, Will serve and Conscience judge, we do not want to loose the courage to dream!
With our young doctors coming from all over the world we try to share our faith in science, our solidarity towards people and our hope for peace: global medicine means speaking a universal language that will open the way for a better future.

Alberto Gobbi
PART I - ORIGIN AND STRATEGIC VISION OF THE FOUNDATION

Concept
The story which leads to the birth of **O.A.S.I. Bioresearch Foundation Gobbi Onlus** began a long time ago, when in the nineteen eighties Dr. Alberto Gobbi participated in humanitarian missions in Africa and Paraguay. That experience made him realize how the aid offered was inadequate when compared to the great suffering and compelling needs of those populations and, consequently, he began to think of more effective and long-term training schemes in order to promote the autonomy of local health workers.

Dr. Gobbi decided to share with other young doctors the research skills and professional expertise he had acquired in the field of Orthopedics and Arthroscopic Surgery, both during his university education in Italy and training in US. Despite several difficulties, he managed to start up the O.A.S.I. program of international scholarships.

It began as a kind of solitary fight and he was even accused of favoring illegal migration. However, thanks to his friendship with Dr Brumat (of the A.I.S.P.O. Association) and Don Luigi Verzè (San Raffaele Hospital, Milan), he managed to pursue his project. A few friends and patients offered the initial financial support, A.I.S.P.O. funded the first scholarships and so the program got started. 20 years have gone by and these scholarships have made it possible for many young doctors to come to Milan to work through scholarships and then take back their experience to their own countries.

Inspirational principles
The **O.A.S.I. Bioresearch Foundation Gobbi Onlus** has been established by Dr. Albert Gobbi to support an international scholarship program addressed to young physicians and researchers from emerging countries. The Foundation’s main goal is to help the advancement of scientific research, taking the utmost care of patients and inspired by a deep love for life.

Dr. Gobbi has always believed that the full understanding of the processes causing joint aging lies at the basis of the improvement of the quality of life and health status and the reduction of the social costs associated with degenerative joint disease. This is the reason why the field of tissue regeneration and bio-orthopedic techniques requires a sustained and dedicated effort.

To this purpose, after the involvement of Prof. Norimasa Nakamura from the University of Osaka, Prof. Lars Peterson and other leading persons from the biomedical research field, **O.A.S.I. Bioresearch Foundation Gobbi Onlus** has gathered a group of doctors, bio-engineers and researchers who study the processes through which mesenchymal stem cells and growth factors can be successfully employed in the treatment of a number of chronic degenerative joint affections.

We hope that, in the next future, biological therapy will also be applied to the treatment of spine injuries, which are unfortunately very common.

PART II - MISSION AND ORGANIZATION

Mission
The **O.A.S.I. Bioresearch Foundation Gobbi Onlus** is a non-profit organization of physicians and researchers whose mission is to work for the advancement of knowledge in the medical field. Established on 23 December 2007, the Foundation was given juridical personality by the Milan Prefecture (21 November 2008) and is now enlisted in the Public Register (n. 942 page 5192, vol. 5).

Although bio-medical research has witnessed amazing advancements in the West, we feel that current knowledge should be more widespread. This is of paramount importance for the scientific progress and improvement of health conditions in those countries which are still burdened with cultural and technological disadvantages.
Our goal is to focus on new challenges for the prevention and treatment of pathologies affecting joints and to promote the multidisciplinary collaboration between scientists and physicians from different backgrounds.

Activities in 2011
In 2011 the Foundation has worked in the following areas:
1. Cooperation with the A.I.S.P.O. association for the International Fellowships Program;
2. Participation of young foreign researchers in our studies and clinical activities;
3. Formulation of research programs by the Scientific Committee;
4. Studies in collaboration of young researchers from affiliated centers;
5. Scholarships for young European researchers;
6. Participation in scientific congresses and presentation of studies carried out in national and international congresses;
7. Publication of scientific works in international peer-reviewed, high-impact factor journals;
8. Participation in calls for scientific project proposals through SUPI Italy.

In October 2011 Ms. Elisa Negroni has replaced Ms. Laura Maggi as Coordinator of the Foundation.

Boards and Committees of the Foundation
Board of Founding Members: Alberto Gobbi (President), Giancarla Benzo (Vice President), Norimasa Nakamura, Elizaveta Kon

Managing Board: Alberto Gobbi, Giancarla Benzo, Giuliano Brumat, Elizaveta Kon, Scilla De Alessi

Board of Trustees: Lorenzo Boldrini, Matilde Cari, Eleonora Frigieri, Delfino Navarrini

Committee of Benefactors: Lars Peterson, Anna Zegna, Giampiero Pesenti, Luigi Cassar

Scientific Committee: Lars Peterson (President), Norimasa Nakamura, Alberto Gobbi, Elizaveta Kon, Bert Mandelbaum, Lisa Fortier, Laura Mazzucco, Antonio Rinaldi

PART III - PROJECTS AND SCIENTIFIC INNOVATION

The Scientific Committee of O.A.S.I. Bioresearch Foundation Gobbi Onlus has realized several scientific studies in the following areas:
1. Evaluation of efficacy of Platelet Rich Plasma (PRP) in early arthritis;
2. Treatment of severe osteochondral knee lesions with cartilage transplantation by using mesenchymal cells and biomaterials;
3. Use of pulsed electromagnetic field therapy in orthopaedics to prevent arthritis;
4. Treatment of ligament knee lesions (A.C.L.) with mesenchymal cells.
PART IV – GRANTS AND INTERNATIONAL FELLOWSHIPS

Guidelines for grants
Every year the O.A.S.I. Bioresearch Foundation Gobbi Onlus examines several applications by young doctors and researchers from all over world who show the desire to join our research programs and work in the clinical centers with our experts.
In collaboration with A.I.S.P.O., the O.A.S.I. Bioresearch Foundation accepts from two to three researchers a year. Selected fellows receive an adequate scholarship, bureaucratic assistance and good hospitality in Italy.

2011 International Fellowships
Thanks to Smith&Nephew’s contribution, Dr. Georgios Karnatzikos, an orthopedic doctor working at the Thessaloniki General Hospital in Greece, was able to join the Foundation until August 2011 and participate in several scientific projects regarding cartilage transplantation with mesenchymal cells and second generation scaffolds, use of pulsed electromagnetic field therapy and growth factors to treat early arthritis.

Dr. Vivek Mahajan, from Kasturba Medical College, Mangalore, India, has been working on the Foundation premises until March 2011. At the end of his fellowship period, he was replaced by Dr. Somanna Malchira who followed up with the ongoing researches until August 2011, thanks to the grant instituted by Eng. Giampiero Pesenti. Later on, from the same Department of this medical college, arrived Dr. Anup Kumar, to confirm the good relationship between the Foundation and Kasturba Medical College.

PART V – MANAGERIAL AND PROMOTIONAL ACTIVITIES

Preliminary project works to participate in EU calls for proposals
Due to obstacles encountered when seeking for funds to finance our Foundation, we have decided to coopt professionals in the challenging activity of drawing up of scientific projects in response to national and European calls for proposals. Thanks to Eng. Antonio Rinaldi and Ms. Gloria Guillot, in August 2011 O.A.S.I. Bioresearch Foundation Gobbi Onlus signed a consultancy agreement with SUPI Italy company with a twofold objective:
1. help the Foundation with identifying and exploiting the best opportunities in the research market, in order to invest on its own competences and self-finance its own activities;
2. link the Foundation to a wider and more multidisciplinary network of researchers and RTD performers (by involving engineers, chemists, biologists and other academic and industrial professionals not strictly related to the clinical environment) so as to increase its visibility and its growth potential in scientific clusters able to match basic research (for instance, nanotechnologies) with medical-clinic development.

These two objectives are synergic and must be met together, for example through the participation of the Foundation in research proposals within international consortia including Universities, Research Centres, companies, hospitals, associations, etc. From the operational point of view, the first four months of collaboration with SUPI have enabled the Foundation to join two project proposals within the 7th Framework Program and the National Program for Young Researchers of the Italian Ministry of Health, that assign an important role to O.A.S.I. Bioresearch Foundation Gobbi Onlus thus encouraging further initiatives. The title, goals and role of the Foundation in the above-mentioned proposals are:
1) **Title**: A clinical strategy for cartilage repair and osteoarthritis treatment combining mesenchymal stem cell (MSC) based therapy with engineered hyaluronic-based nanocarriers (acronym: AGEWELL)

This project has been submitted in response to the call “Work Program Topic: HEALTH.2012.1.4-3: Innovative Strategies for translation of stem cell based therapies in regenerative medicine (European Union-Australia cooperation)”. A specific consortium of 15 members has been created to carry out multidisciplinary activities, from synthesis and characterization of hyaluronic-based biomaterials for drug delivery and MSC differentiation, to biologic characterization in vitro and in vivo (animal models and clinical trials).

The proposal topic is articulated in three macroareas of activities, the main one being concentrated on the clinical results obtained by the Fondation with the implantation of MSC and published in 2011 on *Cartilage* review. The clinical objectives of this project proposal are as follows:

a) control (i.e. accelerating and modulating) and kinetics of the regenerative process obtained by the implantation of MSC through injection of adjuvants (like growth factors, biomolecules, therapeutic agents, PRP, ETC.)

b) the replacement of collagen scaffold used by the Foundation with a multiphase suspension of MSC and substances as collagen and hyaluronic acid; this would allow the development of a new regenerative therapy to administer thorough wave-guided intra-articular infiltration, minimally invasive and adequate to treatment of hip osteo-arthritis.

The project coordination has been assigned to Istituto Ortopedico Rizzoli (IOR) in the person of Dr. Elizaveta Kon (member of Board of Founding Members of O.A.S.I. Bioresearch Foundation Gobbi Onlus), to experiment on big animal models (e.g. sheep). The project was submitted on 4th October 2011 and the contribution requested to EU by the Foundation amounts to € 240,000 (this figure is proportionate to financial size of, and tasks assigned to, the Foundation). It is worth underlining the participation of the Australian group of research guided by Prof. Frank Caruso from the University of Melbourne, one the most renowned and innovative chemists in the world in the field of nano-biomaterials and drug delivery.

2) **Title**: A clinical strategy for cartilage repair and osteoarthritis treatment combining mesenchymal stem cell (MSC) based therapy with intra-articular hyaluronic-acid infiltration

The project has been presented to the call of the National Program 2012 for Young Researchers of the Italian Ministry of Health, and stems from a restricted Italian subgroup of the previous European consortium to finance the activities of clinic research of major impact on the National Health System. In other terms, a consortium of four groups of research has been created, including O.A.S.I. Bioresearch Foundation Gobbi Onlus, University of Rome Tor Vergata (two groups) and Fondazione ANTIAGE ONLUS, chaired by Prof. Alberto Migliore (Director of Rheumatology, San Pietro Hospital, Rome). Each group is leader of a series of activities with the general and managerial coordination of Eng. Antonio Rinaldi. This project has been built around O.A.S.I. Bioresearch Foundation Gobbi Onlus with the following primary goals:

a) to introduce the usage of FDA-approved biomaterials to better the current protocols of intervention, and further use the results as a benchmark for the study;

b) to develop a new methodology of MSC wave-guided intra-articular infiltration for the hip in collaboration with the University of Rome Tor Vergata and Fondazione ANTIAGE ONLUS, chaired by Prof. Alberto Migliore (Director of Rheumatology, San Pietro Hospital, Rome).
The first objective has an enhancing function, the second one (taken and adapted from AGEWELL project) is definitely innovative, as it wants to develop “in-house” the new technique combining in synergic and complementary ways the Foundation expertise in MSC with the wave-guided intra-articular infiltration technique, that ANTIAGE owns as proprietor since it finalized it in 2003 (only for hyaluronic acid) and due to regular maintenance of position in the national register for this typology of intervention. Due to the translational-clinic nature of the research, the proposal has been focused on the usage of validated protocols of intervention and medical devices (including nanobiomaterials) already on the market, although a consistent scientific research and multidisciplinary support activity has been planned, for instance development of ad-hoc biomaterials for drug delivery and in-vitro characterization (at Tor Vergata University). The co-funding requested to the Ministry of Health for this triennial clinic study amounts to nearly €600,000 against a total cost of €1,000,000. In addition to the prestige gained in case of success, these funds will allow O.A.S.I. Bioresearch Foundation Gobbi Onlus and the Consortium to recruit qualified personnel, with a strong impact on the planning side in the medium-long term.

At the moment the two proposals represent a potential investment but, notwithstanding the good impressions, it will be necessary to wait for reviewers’ evaluation and feedback during the next year before appreciating the financial and scientific effects. However, this new activity area has been launched by the Foundation and will be promoted in the coming months.

**Improved design of the Foundation website**
Giacomo Sasso, graduating student in Communication, has continued his work of revision and improvement of the Foundation website.

**Fund Raising**
The global financial downturn has forced some of our supporting organizations to revise the budgetary allocation and consequently to reduce the donations to O.A.S.I. Bioresearch Foundation Gobbi Onlus. In order to meet its obligations despite the reduction of aid received, the Foundation has opened new channels of fund raising with the aim of finding new companies or individuals willing to finance our projects.

**Publications and media**
A part of our resources has been reserved to communication, so as to involve an increasing number of people in our projects with a language comprehensible not only to physicians or sector personnel. To this end, Claudia Rota and Emanuela Capitanio from DSC Italy have started a specific collaboration with O.A.S.I. Bioresearch Foundation Gobbi Onlus to promote our mission on the basis of their decennial experience in journalism.

Many articles have been published in important and highly impacting reviews and others are still in press. In October 2011, Medline TV, a web magazine dedicated to medicine, invited Dr. Gobbi to present the Foundation and its research project on stem cells. The interview released by Dr. Gobbi was broadcast in the Latest News on Oct 28th as the main reportage of the day’s edition.

The awareness campaign on the most relevant aspects of our research work was managed through mailing to friends and supporters of the Foundation on the occasion of the year’s most important events.

Social networks such as Youtube and Facebook are being evaluated as additional channels of communication development by reinforcing the scientific resources of the Foundation when using its accounts.

The English brochure of the Foundation was revised and updated.
**Sponsors**
Thanks to the support of the Italcementi Foundation we have established two further grants named after Eng. Giampiero Pesenti, and assigned to two young Indian doctors: Dr. Somanna Malchira and Dr. Anup Kumar.
In 2010-2011 Smith & Nephew helped us to sustain part of Fellowships costs.
In collaboration with the IGEA company (Carpi, Modena), we are carrying out a clinical study on a group of patients affected by chondral lesions and treated with the use of pulsed electromagnetic fields.
Physiomd Srl Orthopaedic & Trauma Surgery, specialized in passive post-operatory mobilization, has also contributed to our projects.
JUST ONE Helmets, a company dealing with helmets and protection systems for bikers, has asked the Foundation’s expert team a scientific contribution to better understand the specific traumatology and create innovative and effective protections.

**PART VI – MEMBERSHIPS AND AWARDS**

Dr. **Alberto Gobbi**, founder and President of **O.A.S.I. Bioresearch Foundation Gobbi Onlus**, is International Member of the American Academy of Orthopaedic Surgeons (AAOS), Honorary Member of the Arthroscopy Association of North America (AANA) and Member of the European Society of Sports Traumatology, Knee Surgery and Arthroscopy (ESSKA), which he serves by joining the Cartilage Committee. He is Fellow of the International Cartilage Repair Society (ICRS), which appointed him Program Chair of 2011 ICRS China Sports Medicine Conference, Beijing. He is part of the Board of Directors of the International Society for Arthroscopy, Knee Surgery, and Orthopaedic Sports Medicine (ISAKOS) together with Dr. Norimasa Nakamura, and within the same organisation he is Deputy Chair of Education Committee. He is Peer Reviewer of the following Journals: Cartilage (Board of Directors), Arthroscopy, American Journal of Sports Medicine (Board of Principal Reviewers), Knee Surgery Sports Traumatology Arthroscopy - KSSTA, Sport Medicine Arthroscopy Review-SMAR, Journal of Orthopedics, Osteoarthritis and Cartilage.

Dr. **Norimasa Nakamura**, Professor at the Center for Advanced Medical Engineering and Informatics of Osaka University, is Secretary General ICRS. He is Deputy Chair of Scientific Committee and Member of Program Committee ISAKOS. He joins the General Board of the Japanese Orthopaedic Society of Arthroscopy, knee and Sports medicine, and the Editorial Board of two important scientific journals, Cartilage and Journal of Orthopaedic Science. Moreover, he is Reviewer of many other scientific reviews such as the American Journal of Sports Medicine (Principal Reviewer), Biomaterials, Tissue Engineering, Osteoarthritis and Cartilage, Knee Surgery, Sports Traumatology, Arthroscopy, Journal of Orthopaedic Research, Cells and Materials, SMAR, Clinical Orthopaedics and Related Research.

Dr. **Elizaveta Kon** is Professor of Physical Education at the University of Bologna, medical manager of the Laboratory of Nano Biotechnologies (NABI) of Rizzoli Orthopaedic Institute of Bologna and Member of the most prestigious international orthopaedic associations. She is President of the Cartilage Committee of the Italian Society of Knee, Arthroscopy, Sports, Cartilage and Orthopaedics Technologies (SIGASCOT) and ESSKA. She chairs the Fellowship Scholarships and Grants Committee ICRS and is Member of the General Board of the Society. She is Reviewer of several international scientific reviews amongst which to mention American Journal of Sports Medicine (Golden Reviewer), Arthroscopy, Clinical Orthopaedics and related research, KSSTA, Journal of Tissue Engineering, Cartilage, Biomaterials.

Prof. **Lars Peterson**, who first studied the autologous chondrocyte implantation, is Honorary Member ICRS and sponsor of the ICRS Clinical travelling Fellowship Program.
PART VII – PUBLICATIONS AND MEETINGS

Participation in events and seminars
In 2011 the Foundation members presented a number of scientific works in the following national and international meetings:

N. Nakamura
ISAKOS/COA Specialty Day, combined with the Chinese Orthopaedic Association Annual meeting
“Basic Science and Clinical Application in Cartilage Defects”
3 December, Beijing, China

E. Kon
Ricostruzione biologica articolare
“Degenerazione precoce del ginocchio: casi clinici”
18 November, Milano, Italy

N. Nakamura
1st International Congress of Indian Cartilage Society
“Classification of chondral lesions”
13 November, New Delhi, India

N. Nakamura
1st International Congress of Indian Cartilage Society
“Long term results of ACI vs Microfracture”
13 November, New Delhi, India

E. Kon
XX corso Nazionale SIA
“Analisi dei risultati (fallimenti e successi) in Italia: la clinica”
9-12 November, Milano, Italy

A. Gobbi
“The use of Bone Marrow Aspirate Concentrate and Collagen Scaffold Cartilage Repair in a One-Step Procedure”
2-4 November, Ramat Gan, Israel

A. Gobbi
“Is PRP Effective in Patients with Symptomatic Knee Osteoarthritis?”
2-4 November, Ramat Gan, Israel

A. Gobbi
“Single vs. Double-Bundle ACL Reconstruction: a Prospective Randomised Study”
2-4 November, Ramat Gan, Israel
A.Gobbi
“Why some Athletes don’t Go Back to Sport after Successful ACL Reconstruction?”
2-4 November, Ramat Gan, Israel

N.Nakamura
11th DKOU (German Orthopaedic Association Annual meeting)
“Cell-based therapy in chondral lesions. –Evidence-based Assessment”
26 October, Berlin, Germany

E.Kon
Il trattamento della patologia femoro-rotulea: dove siamo?
“Il trattamento biologico e i difetti condrali: quando e come”
21-22 October, Genova, Italy

E.Kon
4° convegno di aggiornamento ortopedico
“Sostituti osteocartilaginei”
14 October, Riva del Garda, Italy

N.Nakamura
34th Singapore Ortopaedic Association Annual Scientific Meeting
“Evidence-based cell-based therapy in chondral lesions A systematic review”
13 October, Singapore

A.Gobbi
iTech: LE BIOTECNOLOGIE APPLICATE ALLA PATOLOGIA ARTICOLARE DEL GINOCCHIO
“Cellule mesenchimali”
13 October, Naples, Italy

E.Kon
iTech: LE BIOTECNOLOGIE APPLICATE ALLA PATOLOGIA ARTICOLARE DEL GINOCCHIO
“Scaffold Bioingegnerizzati”
13 October, Naples, Italy

E.Kon
SIOT
“Scaffolds nelle lesioni osteo-cartilaginee traumatiche”
1-4 October, Rimini, Italy

E.Kon
SIOT
“Le Condropatie ed i GF: si o no?”
1-4 October, Rimini, Italy

E.Kon
3rd Stockholm Arthroscopy Conference
“Cartilage injures”
29-30 September, Stockholm, Sweden
N. Nakamura
1st Annual Congress on Stem Cell Research
“Synovial stem cell-based therapy in chondral lesions”
28 September, Spanca, Turkey

N. Nakamura
1st Annual Congress on Stem Cell Research
“Evidence-based cell-based therapy in chondral lesions A systematic review”
28 September, Spanca, Turkey

E. Kon
Aga Kongress 2011
“Cell free biomaterials in cartilage repair - do we need cells?”
22-24 September, Regensburg, Germany

N. Nakamura
ICRS Beijing 2011
“Basic research on cartilage regeneration in sports medicine. -Recent updates”
16 September, Beijing, China

N. Nakamura
ICRS Beijing 2011
“Future of Cartilage repair”
16 September, Beijing, China

N. Nakamura
ICRS Beijing 2011
“Meniscus repair, replace, regenerate?”
16 September, Beijing, China

N. Nakamura
ICRS Beijing 2011
“Where are we and where we go? New perspective in cartilage repair in Asia”
16 September, Beijing, China

A. Gobbi
ICRS China Sport Medicine Conference & The 14th China Arthroscopic Skill Course
“The use of Bone Marrow Aspirate Concentrated for Full-thickness Knee Cartilage Lesion in One-step procedure: Biological Arthroplasty”
16-18 September, Beijing, China

E. Kon
Congresso del Mediterraneo
“New nanostructured biomimetic scaffold for the treatment of osteochondral defects: Pilot clinical study at 3 years follow up”,
16-18 September, Palermo, Italy

A. Gobbi
8th Biennial ISAKOS Congress
“One-step Cartilage Transplantation for Full-thickness Lesions Treatment: A Prospective Study” : selected as finalist in Patellofemoral Award category” (podium presentation)
15-19 May, Rio de Janeiro, Brasil
A. Gobbi
8th Biennial ISAKOS Congress
“PRP and Mesenchimal Stem Cells for Cartilage Repair in Athletes” (precourse lecture)
15-19 May, Rio de Janeiro, Brasil

A. Gobbi
8th Biennial ISAKOS Congress
“One Step Cartilage Repair with Bone Marrow Aspirate, PRP and Collagen Matrix” (instructional course lecture)
15-19 May, Rio de Janeiro, Brasil

E. Kon
8th Biennial ISAKOS Congress
“Biologic treatment option of the knee” Precourse
15-19 May, Rio de Janeiro, Brasil

E. Kon
8th Biennial ISAKOS Congress
“Arthroscopic autologous chondrocyte transplantation. Prospective study: results at minimum 7 years follow up”
15-19 May, Rio de Janeiro, Brasil

E. Kon
8th Biennial ISAKOS Congress
Moderator of session: “Bone and cartilage healing and repair”
15-19 May, Rio de Janeiro, Brasil

E. Kon
8th Biennial ISAKOS Congress
“Basic science”
15-19 May, Rio de Janeiro, Brasil

E. Kon
8th Biennial ISAKOS Congress
“Bone and cartilage healing and repair”
15-19 May, Rio de Janeiro, Brasil

A. Gobbi
30th Annual AANA Meeting
“The Use of Bone Marrow Aspirate Concentrated Cells for Full-thickness Knee Cartilage Lesions in a One-step Procedure: A Prospective Study”
April, San Francisco, California, USA

A. Gobbi
30th Annual AANA Meeting
“The efficacy of PRP in degenerative lesions of the knee: Preliminary results in a sample of 80 patients” (e-poster)
April, San Francisco, California, USA

N. Nakamura
The 8th International Forum on Orthopaedic Sports Medicine and Arthroscopic Surgery
“Evidence based-medicine in cartilage repair”
28 April, Shanghai, China

**N. Nakamura**
The 8th International Forum on Orthopaedic Sports Medicine and Arthroscopic Surgery
“Stem cell therapy in Orthopaedics”
28 April, Shanghai, China

**E. Kon**
VI congresso internazionale “attualità e prospettive nella protesi di anca e ginocchio
“Impiego delle cellule staminali nella patologia degenerativa dell’anca”
12-13 April, Rome, Italy

**E. Kon**
5th Basel International Knee Congress and Instructional Course
“Platelet-rich plasma foe degeberative cartilage lesions”
9-10 April, Basilea, Switzerland

**E. Kon**
Current concepts in biologic cartilage repair
“Cartilage injuries-treatment (2) & cells”
24-25 March, Katowice, Poland

**E. Kon**
Current concepts in biologic cartilage repair
“Cartilage injuries-rehabilitation & MRI of cartilage repair”
24-25 March, Katowice, Poland

**E. Kon**
“Il ritorno al calcio dopo chirurgia della cartilagine”
12-13 March, Bologna, Italy

**E. Kon**
ESSKA CONSENSUS
“New biological solutions (prp, steam cell): Myth or realit”
10-11 March, Bologna, Italy

**E. Kon**
2° meeting corte
“Aggiornamenti sugli studi preclinici: Osso”
24-26 February, Bologna, Italy

**E. Kon**
2° meeting corte
“Aggiornamenti sugli studi preclinici: Osso”
24-26 February, Bologna, Italy

**A. Gobbi**
30th AAOS Annual Meeting
“Osteochondral Lesions of the Talus: Current treatment Dilemmas”
15-19 February 2011, S.Diego, California, USA
E.Kon
30th AAOS Annual Meeting
“Autologous osteochondral transplantation: long term out comes and joint degeneration progression”
15-19 February, San Diego, California, USA

E.Kon
30th AAOS Annual Meeting
“How to treat osteocondritis dissecans of the knee: surgical techniques and new trends”
15-19 February, San Diego, California, USA

E.Kon
30th AAOS Annual Meeting
“Use of Autologous grafts for reconstruction of osteochondral defects of the knee: 18 years follow up”
15-19 February, San Diego, California, USA

A.Gobbi
5th Global COE International Symposium
“Next Generation Cartilage Solution”
11-12 February, Tokyo, Japan
Nella stessa occasione: lecture all’Università di Kobe e all’Università di Osaka

E.Kon
Tissue engineering in osteoarticular disorder
“Stem cells in orthopaedics”
15 January, Florence, Italy

A.Gobbi
11th International Sports Medicine Fellows Conference
“Next Generation Experience: Europe and Beyond”
14-16 January, Carlsbad, California, USA

Scientific publications
Alberto Gobbi, Massimo Berruto, Giuseppe Filardo, Elizaveta Kon
“Osteochondritis Dissecans of the Knee and articular cartilage fractures”

Alberto Gobbi, Elizaveta Kon
“Treatment of articular cartilage defects with scaffolds”
Clinica Ortopedica (Brazilian Society of Orthopaedics) (In Press)

Alberto Gobbi, Georgios Karnatzikos, Somanna Malchira
“Platelet rich plasma (PRP) in osteoarthritis”

Alberto Gobbi, Emilio Lopez-Vidriero, Ramon Cougat, Somanna Malchira, Georgios Karnatzikos, Mikel Sanchez
“Platelet Rich Plasma (PRP) – A view from Europe”
Orthopaedics Today (In Press)
Alberto Gobbi, Douglas Turgeon, Georgios Karnatzikos
“Decision making in professional athletes with cartilage lesions”

Alberto Gobbi, Vivek Mahajan
“How to treat small (<2cm²) cartilage lesions in patients with different ages”

Alberto Gobbi, Norimasa Nakamura, Vivek Mahajan
“Biologic Arthroplasty”

Alberto Gobbi, Georgios Karnatzikos, Vivek Mahajan
“Second and Third Generation Cartilage Transplantation”
Chapter in: Doral M, Tandoğan RN, Mann G, Verdonk R. Sports Injuries - Prevention, Diagnosis, Treatment and Rehabilitation. 2011 Springer Verlag, pp 731-738

Alberto Gobbi, Georgios Karnatzikos, Norimasa Nakamura, Vivek Mahajan
“Next Generation Cartilage Solutions”
Chapter in: Doral M, Tandoğan RN, Mann G, Verdonk R. Sports Injuries - Prevention, Diagnosis, Treatment and Rehabilitation. 2011 Springer Verlag, pp 739-749

Alberto Gobbi, Lorenzo Boldrini, Georgios Karnatzikos, Vivek Mahajan
“Clinical outcomes after ACL Primary Repair and Bone Marrow Stimulation”
Chapter in: Doral M, Tandoğan RN, Mann G, Verdonk R. Sports Injuries - Prevention, Diagnosis, Treatment and Rehabilitation. 2011 Springer Verlag, pp 475-484

Alberto Gobbi, Georgios Karnatzikos, Somanna Malchira
“Biortopedia: nuove possibilità di trattamento delle lesioni cartilaginee”
Sport e Medicina, 2011; 6: 17-22

Alberto Gobbi, Georgios Karnatzikos, Vivek Mahajan, Somanna Malchira
“Platelet-rich Plasma treatment in symptomatic patients with knee Osteoarthritis: Preliminary results in a group of active patients”

Kenneth Zaslav, Timothy McAdams, Jason Scopp, Jason Theosadakis, Vivek Mahajan, Alberto Gobbi
“New Frontiers for Cartilage Repair and Protection”
Cartilage 2012 3: 77S DOI: 10.1177/1947603511411050

“Scaffold-free tissue engineered construct (TEC) derived from synovial mesenchymal stem cells: Characterization and demonstration of efficacy to cartilage repair in a large animal model”

(Ed.) Karlsson, J., Marx, R.G., Nakamura, N., and Bhandari, M.


Georgios Karnatzikos, Anup Kumar, Malchira Somanna, Alberto Gobbi “Rehabilitation protocol after cartilage repair with BMAC and a collagen-based matrix” ICRS Newsletter 2011 Winter Issue 14; 36-38


Alberto Gobbi, Somanna Malchira, Georgios Karnatzikos “Platelet rich plasma (PRP) in osteoarthritis” Minerva Ortopedica e Traumatologica 2011 October;62(5):331-336
Filardo G, Kon E, Di Martino A, Iacono F, Marcacci M.  
“Arthroscopic second-generation autologous chondrocyte implantation: a prospective 7-year follow-up study”  

“Regenerative medicine for the treatment of musculoskeletal overuse injuries in competition horses”  

Kon E, Filardo G, Drobnic M, Madry H, Jelic M, van Dijk N, Della Villa S.  
“Non-surgical management of early knee osteoarthritis”  

“Osteochondral tissue engineering approaches for articular cartilage and subchondral bone regeneration”  
Knee Surg Sports Traumatol Arthrosoc. 2011 Sep 11

Kon E, Filardo G, Berruto M, Benazzo F, Zanon G, Della Villa S, Marcacci M.  
“Articular Cartilage Treatment in High-Level Male Soccer Players: A Prospective Comparative Study of Arthroscopic Second-Generation Autologous Chondrocyte Implantation Versus Microfracture”  

Alberto Gobbi, Georgios Karnatzikos, Somanna Malchira, Douglas Turgeon  
“Techniques of cartilage repair in athletes”  
Minerva Orthopaedica e Traumatologica 2011 August;62(4):297-309

Kon E, Filardo G, Condello V, Collarile M, Di Martino A, Zorzi C, Marcacci M.  
“Second-generation autologous chondrocyte implantation: results in patients older than 40 years”  

Alberto Gobbi, Somanna Malchira, Georgios Karnatzikos  
“Platelet rich plasma (PRP) in osteoarthritis – our early experience”  
ICRS Newsletter – Summer Issue 13; 29-30

Alberto Gobbi, Georgios Karnatzikos, Celeste Scotti, Vivek Mahajan, Laura Mazzucco, Brunella Grigolo  
“One-step Cartilage Repair with Bone Marrow Aspirate Concentrated Cells and Collagen Matrix in Full-thickness Knee Cartilage Lesions: Results at 2 year follow up”  
Cartilage, pub. online Feb.2011, July 2011;2(3)

Nakamura N., Takeuchi R., Sawaguchi T., Ishikawa H., Saito T., Goldhahn, S.  
“Cross-cultural adaptation and validation of the Japanese Knee Injury and Osteoarthritis Outcome Score (KOOS)”  

“Effects of medial patellofemoral ligament reconstruction on patellar tracking”  
Kon E, Delcogliano M, Filardo G, Busacca M, Di Martino A, Marcacci M.
“Novel nano-composite multilayered biomaterial for osteochondral regeneration: a pilot clinical trial”

“Surface Morphology and Stiffness of Cartilage-like Tissue Repaired with a Scaffold-free Tissue Engineered Construct”

Shino K, Mae T, Nakamura N.
“Surgical Technique: Revision ACL Reconstruction With a Rectangular Tunnel Technique”


Alberto Gobbi, Vivek Mahajan, Georgios Karnatzikos, Norimasa Nakamura
“Single versus Double Bundle ACL Reconstruction: is there any difference in stability and function at 3-year follow up?”

Alberto Gobbi, Vivek Mahajan, Georgios Karnatzikos
“Tibial Plateau Fracture following Primary Anatomical Double Bundle ACL Reconstruction- A Case Report”
Arthroscopy, Vol 27, No 5 (May), 2011: pp 735-740

Tanaka Y, Shino K, Horibe S, Nakamura N, Nakagawa S, Mae T, Otsubo H, Suzuki T, Nakata K.
“Triple-bundle ACL grafts evaluated by second-look arthroscopy”

Alberto Gobbi, Georgios Karnatzikos, Vivek Mahajan
“The Use of Bone Marrow Aspirate Concentrated for Full-thickness Knee Cartilage Lesions in a One-step Procedure: A Prospective Study
Arthroscopy Suppl. (SS-25) (May 2011), 27 (5), pg. e43-e43

Sakai T, Koyanagi M, Nakata K, Fujisaki H, Yamagata T, Hidaka K, Suzuki Y, Nakamura N.
“Posterior shear force and posterior tibial displacement using a sling bridge in patients with posterior cruciate ligament insufficiency”

Kon E, Filardo G, Di Martino A, Marcacci M.
“Platelet-rich plasma (PRP) to treat sports injuries: evidence to support its use”

“Lights and shadows concerning platelet products for musculoskeletal regeneration”
Front Biosci (Elite Ed),2011 Jan 1;3:96-107

20
PART VIII

Conclusions
Europe’s economic crisis, despite a few signs of recovery, has impacted negatively on enterprises and households’ budget. However, the Foundation has fulfilled the commitments undertaken, by training and giving opportunities of professional growth to young doctors and researchers. The intense clinic and research work and participation in various congresses have been possible only thanks to those who have sustained us with their invaluable help.

The Managing Board of **O.A.S.I. Bioresearch Foundation Gobbi Onlus**