

# Connective Issues

## BSMB Newsletter

British Society for Matrix Biology

**Committee:** Prof. Bruce Caterson (Chairman), Prof. Anthony Hollander (Secretary), Dr. Jay Dudhia (Treasurer), Dr. Malcolm Lyon, Dr. Robert Lauder, Dr. Graham Riley, Dr. Drew Rowan, Dr. John Tarlton, Dr. Anne Vaughan-Thomas

Registered Charity no. 281399

No. 63 January 2004

### Contents

**Your 2004 subscriptions are now due**  
*Please see the editorial on page 2 for details*

- 2 Editorial *by Anthony Hollander*
- 2 Current BSMB committee *Contact Information*
- 2 Change of treasurer *Details*
- 2 New committee member *Call for nominations*
- 3 Young researcher to join the committee *Call for nominations*
- 3 Publication of meeting abstracts *Details*
- 3 Forthcoming BSMB meetings *Meeting details for 2004-2006*
- 3 BSMB bursaries for the Spring 2004 meeting *Application details*
- 4 FECTS meeting and bursaries *Details*
- 4 BSMB autumn 2003 meeting report *by Aled Jones, Briedgeen Kerr, Hanane Gouizi and Sophie Flood*
- 9 Details and registration form for Spring 2004 meeting *Please register NOW*
- 15 Details and registration form for FECTS 2004 meeting *Please register NOW*

## Editorial

*By Anthony Hollander*

Welcome to the 63<sup>rd</sup> edition of Connective Issues. Your membership subscription fee is now due. Members can pay by cheque if they prefer, however it is considerably easier for the committee if you pay by Standing Order. You can do this using the membership application form on our website:

<http://www.BSMB.AC.uk/FRAMES/GENERAL/Membership.htm>

We have recently conducted an audit of membership and subscriptions. There are currently 597 people listed as members. However 200 of these did not pay any subscription in 2003 and a further 20 paid the wrong amount because they had not updated their Standing Order to reflect an increased fee. If you pay by Standing Order then please can you make sure that you are paying the correct subscription fee. You should only be paying the reduced fee of £2 if you are still a student. Otherwise you should be paying £10. We will conduct a follow-up audit in a few weeks time and anyone who has not paid their 2004 subscription will be notified that they are no longer a member.

We have about 100 paid-up members in the UK and abroad for whom we have no e-mail address. It costs the society a large amount of time and money to mail hard copies of the newsletter to these people. The committee has decided that from now on it will only send out electronic copies of the Newsletter, except in cases where this is impossible.

Please can I urge all of you to register early and submit your abstracts for the Spring meeting in Manchester and for the FECTS meeting in Taormina, Italy (details of both meetings elsewhere in the Newsletter).

## Current BSMB Committee

### Officers:

Chairman, Prof. Bruce Caterson (University of Cardiff; [Caterson@Cardiff.ac.uk](mailto:Caterson@Cardiff.ac.uk))

Honorary Secretary, Prof. Anthony Hollander (University of Bristol; [A.Hollander@Bristol.ac.uk](mailto:A.Hollander@Bristol.ac.uk))

Treasurer, Dr. Jay Dudhia The Royal veterinary College, London; [jdudhia@rvc.ac.uk](mailto:jdudhia@rvc.ac.uk))

### Elected Members:

Dr. Malcolm Lyon (University of Manchester; [MLyon@PICR.man.ac.uk](mailto:MLyon@PICR.man.ac.uk))

Dr. Robert Lauder (Lancaster University; [r.lauder@lancaster.ac.uk](mailto:r.lauder@lancaster.ac.uk))

Dr. Graham Riley (Addenbrookes Hospital, Cambridge; [gpr1003@cus.cam.ac.uk](mailto:gpr1003@cus.cam.ac.uk))

Dr. Drew Rowan (University of Newcastle; [A.D.Rowan@newcastle.ac.uk](mailto:A.D.Rowan@newcastle.ac.uk))

Dr. John Tarlton (University of Bristol; [John.Tarlton@bristol.ac.uk](mailto:John.Tarlton@bristol.ac.uk))

Dr. Anne Vaughan-Thomas (University of Liverpool; [avt4460@liverpool.ac.uk](mailto:avt4460@liverpool.ac.uk))

## Change of Treasurer

Dr. Jay Dudhia has worked as treasurer for the society since 1999 and will leave this position in April 2004. The committee has agreed that Dr. Graham Riley, whose committee membership ends in April, will take over as treasurer. Jay will advise Graham for an overlap period. I want to express my enormous thanks to Jay, not only for being an excellent treasurer but also a first-class adviser to me when I took over as Secretary. Jay's skills in managing the society's finances were shown at their best in his stewardship of the 2002 FECTS meeting in Brighton, which against all the odds ended with no shortfall. I've no doubt that Graham will keep up the good work.

## Call for Nominations for a New Committee Member

With Graham stepping down from the elected committee in April we need to find a replacement. If you would like to give some of your energy and ideas to the society then please write to me by email with your name, contact details and a short paragraph explaining why you would be the right person for the job. Please also name the 2 members who will propose and second your candidacy and ensure that they write to me accordingly.

**Deadline for Nominations: Friday 20<sup>th</sup> February**

If more than one nomination is received then a ballot will be organized

## Call for Nominations for a Young Researcher to Join the Committee

The committee has decided to seek a young member of the society to join the committee for up to 3 years in order to represent the views of our junior membership. If you are a graduate student or postdoc within 2 years of completing your PhD and you would like to represent your peers on the committee then please write to me by email with your name, contact details and a short paragraph explaining why you would be the right person for the job. Please also name the 2 members who will propose and second your candidacy and ensure that they write to me accordingly.

**Deadline for Nominations: Friday 20<sup>th</sup> February**

If more than one nomination is received then a ballot will be organized

## Publication of Meeting Abstracts

After a regrettable delay, a meeting report and abstracts for the Autumn 2001 meeting held at the University of East Anglia, Norwich on "The Impact of Proteinases on Matrix Biology" were published in the 4<sup>th</sup> August 2003 issue of in the International Journal of Experimental Pathology (IJEP).

A meeting report and abstracts for the Spring 2003 meeting held at the University of Oxford on "Extracellular matrix: from structure to function" were published in the 5<sup>th</sup> October 2003 IJEP.

The report and abstracts for the Autumn 2003 meeting in London will be published in IJEP shortly. The report can also be read elsewhere in this Newsletter.

## Forthcoming BSMB Meetings

The **spring 2004 meeting** will take place on 5<sup>th</sup>/6<sup>th</sup> April at Hulme Hall, University of Manchester,

and is being organised by Dr Malcolm Lyon (University of Manchester) and Dr Robert Lauder (University of Lancaster). Further details and the abstract and registration forms can be found at the end of this Newsletter.

The **autumn 2004 Meeting** is to be held at the University of Bristol on September 13<sup>th</sup>/14<sup>th</sup> and will be run jointly with the UK Cell and Tissue Engineering Society. The theme will be "Cell Based Therapies" and the meeting organizers are Professor Anthony Hollander and Dr. John Tarlton. Invited speakers will include Bob Nerem (Atlanta GA), Anders Lindahl (Gothenburg), Alessandra Pavesio (Abano Terme), Ivan Martin (Basel), Ranieri Cancedda (Genoa) and John Wozney (Cambridge MA) as well as several UK experts in the field.

### Early warning of future meetings:

Spring 2005, Liverpool University; Dr Anne Vaughan-Thomas; "Collagens - from genes to fibrils"

Autumn 2005, University of Manchester; Dr. Mike Briggs; "Pathobiology of Bone and Cartilage"

Spring 2006, University of Cambridge; Dr. Graham Riley; "Proteases: the cutting edge of cell biology"

## BSMB Bursaries for the Spring 2004 Meeting

Members of BSMB may apply for bursaries to assist in travelling to the Spring BSMB meeting in Manchester. Young members of the Society are encouraged to apply for bursaries (up to a maximum of £100 for BSMB). Eligibility criteria are stated below.

Bursaries will only be considered if they are submitted on a current BSMB Bursary application form. **Applications should be sent to the Society Secretary (Anthony Hollander)** and not to the meeting organiser. The application should be accompanied by a copy of the abstract to be presented at the meeting and a one page curriculum vitae.

The deadline for receipt of bursaries applications to attend this meeting is Friday 27<sup>th</sup> February 2004. The applications will be reviewed rapidly

by the Committee and applicants will be informed of the outcome as soon as possible.

### **Criteria for Bursaries**

Applicants should have been members of the Society for at least 1 full calendar year prior to the Meeting start date.

Applicants should be submitting an abstract and presenting a poster for the meeting to be attended.

Applicants should be at an early stage of their career (i.e. <5 years from award of PhD) and unlikely to have access to travel funds. Emphasis is always given to young researchers who are generally in short term contract positions, i.e. mainly graduate students and occasionally early post-docs.

The work described in the abstract must be novel and likely to be of a quality that would reflect well as a BSMB supported contribution.

The Bursary Application form can be found on our web site:

<http://www.BSMB.AC.uk/FRAMES/GENERAL/Bursaries.htm>

## **FECTS Meeting and Bursaries**

This year's FECTS meeting is organized by Alberto Calatroni and will be held in the Sicilian resort of Taormina. Full details are at the end of this Newsletter. Please make sure you submit abstracts and register early. Some bursaries will be available for young members of the society. Details will be circulated nearer the date of the meeting.

## **BSMB Autumn 2003 Meeting Report, London**

### **“The molecular basis of fibrosis”**

By Aled Jones, Briedgeen Kerr, Hanane Gouizi and Sophie Flood

The autumn 2003 meeting of BSMB was held at Imperial College, London, and had as its theme the molecular basis of fibrosis, with a particular emphasis on the kidney. It was also a special meeting held to mark the retirement of Professor

Roger Mason. The meeting was organised by Professor John Couchman and Dr Graham Riley and was generously sponsored by the National Kidney Research Foundation, The Wellcome Trust and Imperial College. Additional support was also provided by the following companies: Applied Biosystems, BioRad, BMG Lab. Technologies, Camlab, Fisher, Invitrogen, Jencons PLS, Kendro, Labtech International, Promega, Qiagen, Quidel, R&D Systems, VWR International and Wiley publishing. There were 132 delegates registered for the meeting, comprising 79 members of the society (including 15 graduate students) and 53 non-members (including 16 graduate students). There were 17 invited speakers, with three from the USA, five from the EU and five from the UK.

**Jean Schwarzbauer** (Princeton University, USA) opened the meeting by describing her recent findings concerning the events that control fibronectin (Fn) matrix assembly. The assembly of Fn matrix fibrils is influenced by extracellular factors such as availability of Fn and other matrix molecules, and intracellular signalling pathways mediated by integrin receptors. Jean's group has investigated two kinases downstream of integrin receptors, focal adhesion kinase (FAK) and pp60-Src. Mouse fibroblasts lacking FAK were found to assemble reduced amounts of Fn fibrils. Src family kinases phosphorylate FAK, and it was found that fibroblasts without Src family kinases (SYF cells) or wild type cells treated with a Src inhibitor (PP1) also lack Fn matrix. The extracellular influence of tenascin-C was also discussed. In fibroblasts on a 3D Fn matrix FAK was constitutively phosphorylated, whereas in the presence of tenascin-C FAK is transiently activated and there is a reduction in the assembly of Fn matrix fibrils. Other aspects of integrin-Fn interactions were also described, including the stimulation of Fn matrix formation by dexamethasone in the tumourgenic cell line HT1080.

**Karl Kadler** (University of Manchester) summarised findings on the molecular and cellular basis of collagen fibrillogenesis. The talk focussed on the sorting and secretion of type I collagen in organ cultures of embryonic chick tendon. It was found that around 50% of newly synthesised type I procollagen is cleaved to collagen type I inside the cell with around 50% cleaved in the ECM. In a particularly striking 3D model, created using serial section reconstructions

and immunoEM, it was shown that cross-striated nascent collagen fibrils are enclosed within tube-like secretory vesicles within cells and are secreted via plasma membrane protrusions known as nozzles. It was proposed that the nucleation phase of collagen fibrillogenesis takes place in secretory vesicles, whilst the propagation phase occurs after secretion of early fibres into tunnel-shaped extracellular spaces through nozzles.

**John Couchman** (Imperial College, London) talked about recent work with the basement membrane molecule entactin-1, also known as nidogen-1. Entactin often originates from the mesenchymal compartment as opposed to other major components that are synthesised by epithelia. The renal epithelial cell line MDCK does not express entactin-1, and the effect of recombinant entactin-1 expression in these cells was investigated. MDCK cells expressing entactin-1 constitutively or under tetracycline-responsive regulation (Ent-1 cells) adopt a flattened phenotype as opposed to the normal, cuboidal phenotype, and exhibit altered integrin expression profiles and increased expression of Fn. These results indicate that entactin-1 binding to  $\alpha 5 \beta 1$  integrin can lead to Fn matrix assembly, and that Fn ligation through  $\alpha 5 \beta 1$  integrin promotes a flattened phenotype with prominent microfilament bundles. The relevance of this mechanism was discussed with respect to carcinomas and epithelial-mesenchymal transitions.

**Andrew Chantry** (University of East Anglia, Norwich) discussed the regulation of TGF  $\beta$  / Smad signalling pathways. Their work focuses on decorin mediated  $Ca^{2+}$  dependent phosphorylation and its regulation of Smads and TGF  $\beta$ . Their work shows that decorin disrupts the TGF  $\beta$  / Smad dependent transcriptional events in human mesangial cells through phosphorylation of Smad 2 at serine-240 by  $Ca^{2+}$  activation of Cam kinase II. Decorin induces serine -240 phospho-Smad hetero-oligomerisation with Smad 4 in the nucleus, independent of TGF  $\beta$  receptor activation. Part 2 of the talk covered work on MMP/TIMP expression in Smad 3 and 4 knockout cells. The response of Smad 3 and 4 knockout and wild type cells to treatment with TGF  $\beta$  was analysed. TIMP 1 was induced by TGF  $\beta$  and is therefore a TGF $\beta$  dependent gene. TIMP 3 was completely Smad dependent. Wild type cells behave differently between Smad 3 and Smad 4. Adenoviral expression of Smad 4 in Smad 4

knockout cells recovers TGF  $\beta$  induced ADAM-12 expression. This is preliminary data and the work is ongoing. Part 3 of the talk focused on identification of novel therapeutic targets within the TGF  $\beta$  pathway. These include ubiquitin C-terminal hydrolases to deubiquitinate or remove mono or poly ubiquitin side chains, targeted ubiquitination by Smurfs leading to Smad degradation and Smad 3 interacts with ubiquitin-c-hydrolyase 37 (UCH37) and effects the transcriptional response from a Smad binding element reporter. The findings may help development of novel approaches in treatment of fibrotic diseases.

**Nadia Wahab** (Imperial College, London) discussed the role of connective tissue growth factor (CTGF) in mediating the pathogenesis of diabetic nephropathy. Chronic hyperglycemia is the primary cause of the development of mesangial cell dysfunction and diabetic nephropathy. CTGF levels are increased markedly in the glomeruli of patients with diabetic nephropathy and in experimental animal models. TGF  $\beta$  is a major fibrogenic growth factor implicated with the pathogenesis of renal scarring. Over expression in transgenic mice leads to sclerosis. CTGF expression enhances the phosphorylation and nuclear transfer of activated TGF  $\beta$  receptors Smad2 and Smad3 formation of a complex with Smad4. They localise at the nucleus where they act in cooperation with coactivators and coreceptors as transcription factors regulating gene expression. Smad 7 is an inhibitor of TGF  $\beta$  signalling. It binds to Smad 2 and Smad 3 and inhibits phosphorylation and therefore limits the effects of TGF  $\beta$ . Work carried out in this lab has found that CTGF suppresses expression of Smad 7 within 2 hours of addition to mesangial cells. This inhibition was found to be due to a CTGF related increase in TIEG protein levels. TIEG is a repressor of Smad 7 and therefore may allow continuous activation of TGF  $\beta$ . These findings suggest that CTGF mediates TGF  $\beta$  dependent increase in expression of ECM molecules in mesangial cells leading to fibrosis under diabetic conditions.

**Liliana Schaefer** (University of Muenster, Germany) discussed the antifibrotic properties of decorin and biglycan in renal disease and how it is more than an inhibitor of TGF  $\beta$ . Decorin is involved in assembly of matrix suprastructures, control of cell growth, differentiation and death, and it modulates cytokine activities. Based on

studies carried out in this lab, two mechanisms for modulation of TGF  $\beta$ -mediated fibrosis by decorin were described. 1) Increased quantities of decorin / TGF  $\beta$  complexes are removed via glomerular capillaries or the urinary tract. 2) Along with collagen I, decorin forms complexes with TGF  $\beta$  and can sequester it in the ECM therefore withdrawing the TGF  $\beta$  from its receptors. Wild type (+/+) and decorin knockout (-/-) mice models with unilateral obstruction (UO) were used to analyse decorin and urinary tract removal of decorin / TGF  $\beta$  complexes and their effect on development of tubulointerstitial fibrosis. Decorin (-/-) UO mice developed enhanced apoptosis prior to TGF  $\beta$  up-regulation. Enhanced inflammation was a consequence of TGF  $\beta$  activity and there was an increased rate of collagen I degradation in decorin (-/-) UO mice, suggesting that decorin protects collagen fibrils against proteolytic digestion. An increase in TGF  $\beta$  leads to an increase in biglycan after 7 days. Decorin (-/-) UO kidneys were more atrophic than (+/+) kidneys. Biglycan (-/-) UO mice were also analysed. There was a loss of mechanical stability of renal tissue in biglycan deficiency and a decrease of fibrillin 1 in the glomerulus. Biglycan was found to protect the survival of mesangial cells.

**Josef Pfeilshifter** (Klinikum der Johann Wolfgang Goethe-Universität, Germany) presented the post transcriptional regulation of matrix metalloproteinases (MMPs) through mRNA destabilization *in vitro*. MMPs are important in the turnover of ECM and are thus major players in many inflammatory processes in the kidney. The process in which nitric oxide (NO) inhibits the mRNA stabilizing ELAV-like protein HuR, and hence reduces the half life of MMP-9 mRNA was described. NO action is attributed to the 3' untranslated region (UTR) of MMP-9 mRNA. MMP-9 is synthesized and secreted in high levels by glomerular mesenchymal cells (MC) upon treatment with proinflammatory cytokine IL1 $\beta$ . Dr Pfeilshifter described the switch mechanism of MMP-9 regulation by NO and O $_2$  $^{\cdot-}$ . NO and O $_2$  $^{\cdot-}$  differentially modulate cytokine induced MMP-9 gelatinolytic content and steady state mRNA levels, where NO attenuates MMP-9 expression and O $_2$  $^{\cdot-}$  amplifies it as a response to cytokine induction. The O $_2$  $^{\cdot-}$  effect occurs via the activation of different MAPK pathways. Future work will concentrate on confirmation of these results *in vivo*.

**Detlef Schlöndorff** (Ludwig Maximilians University, Germany) presented the recently characterized expression of chemokines and their receptive receptors during progressive renal fibrosis after unilateral ureteral obstruction (UO) in the mouse, which is widely used as a model for this disease. This is important because there is evidence from human renal biopsy studies that the expression of some chemokine receptors on the surface of infiltrating leukocytes is important in the progression of renal fibrosis. The attempt to block the CCR1 chemokine receptor using non-peptide antagonist BX471 in order to analyse the effect on leukocyte infiltration and thus on renal fibrosis after UO was also described. UO kidneys from BX471 treated mice had 40-60% reduction in interstitial macrophage and lymphocyte infiltrate compared to controls as well as a marked reduction in CCR1 and CCR5 mRNA levels, of CD8 $^+$ /CCR5 $^+$  T cells, and of markers of renal fibrosis such as mRNA and protein expression of collagen I, interstitial volume and interstitial fibroblasts. This suggests a new therapeutic strategy for reducing cellular infiltration and renal fibrosis by blockade of chemokine receptors.

**Jill Norman** (Royal Free and University College Medical School, London) presented evidence gathered from *in vitro* and *in vivo* studies showing the role of hypoxia in the pathogenesis and progression of renal scarring and its possible contribution to the fibrotic process in other tissues. A known mechanism for transmission of glomerular injury to the tubulointerstitium is via protein/macromolecules that pass through the compromised glomerular basement membrane. These macromolecules induce tubular epithelial cell injury leading to recruitment of inflammatory cells and interstitial cells activation. However, some diseases with heavy proteinuria do not progress, suggesting the presence of other mechanisms of transmission. The chronic hypoxia hypothesis described by Dr Norman proposes endothelial cell injury leading to interstitial hypoxia as an alternative mechanism for activation of interstitial cells. Cortical microvascular pO $_2$  was measured in a rat model of progressive fibrosis and was shown to decline with time of disease. This fall preceded histological accumulation of ECM. *In vitro*, the effect of hypoxia was consistent with increased accumulation of ECM. Collagen I and TIMP-1 were used as representatives of changes in ECM

synthesis and turnover in order to investigate hypoxia-induced gene expression. Changes in expression of TIMP-1 and COL1A1 were shown to be independent of hypoxia-induced growth factors; instead there is a direct transcriptional effect of low oxygen levels on the two genes.

**Professor Charles Pusey** (Imperial College, London) opened the last session of the day with a comprehensive talk on regulation of inflammation and scarring in glomerulonephritis. He presented results from studies using a model of crescentic glomerulonephritis in the Wistar-Kyoto (WKY) rat induced by the administration of a rabbit anti-rat GBM antibody. The effects of treatment with an anti-TNF (tumor necrosis factor) antibody and anti-inflammatory cytokines were determined. If administered from day 0 anti-TNF antibody prevented kidney disease and if administered from day 4 it reduced inflammation. The anti-inflammatory cytokines interleukin 4 (IL-4) and IL-11 were also shown to reduce inflammation. In addition, blockade of the integrin very late antigen 4 (VLA-4) prevented acute inflammation and also reduced scarring however blockade of VLA-1 did not have the same effect on inflammation but did reduce scarring. Altogether his results indicated that anti-TNF therapy was the most successful, which was further backed up by a pilot study on 15 anti-neutrophil cytoplasmic antibody (ANCA) associated systemic vasculitis patients treated with infliximab.

**Meguid El-Nahas** (University of Sheffield, UK) outlined the role of tissue transglutaminase in renal fibrosis. He gave an overview of the transglutaminase gene family and the role and function of tissue transglutaminase and highlighted its involvement in scarring and fibrosis. Results presented included light and confocal microscopy showing an increase of tissue transglutaminase and its cross-link product exoression in the renal interstitium and glomerular component of diseased human kidneys. He also presented investigations into the inhibition of tissue transglutaminase in a subtotaly nephrectomised (SNX) rat model and showed that inhibitors injected in the rat kidney from 90days reduced scarring and fibrosis and preserved clearance of creatinine and therefore kidney function.

**George Bou-Gharios** (Hammersmith Hospital, London) gave a presentation on the promoter and enhancer sequences of the type I collagen gene col

I<sub>2</sub>(1). Type I collagen is expressed in different cell lineages of common origin and George presented work that investigated how its temporal and spatial expression is determined. Data presented from work using transgenic mice showed a far-upstream enhancer which directs expression of collagen I during development and in response to tissue injury. Further analysis by deletion studies looked at the minimal functional region required for the enhancer effect. He showed regions that were identified as needed for essential function of the enhancer and as tissue-specific elements. Comments were also made on the different rearrangements of the enhancer elements between human and mouse species.

**Kathleen Flanders** (Wakayama Medical University, Japan) discussed Smad 3 as a mediator of the fibrotic response. She discussed her group's work on radioprotection, and protection against tubulointerstitial fibrosis following UUO in Smad 3 -/- and +/+ mice. Smad 3 -/- mice appear to be resistant to ionizing radiation. The effect of radiation on Smad 3 -/- and +/+ UUO mice was analysed when the skin flank of each mouse was exposed to 30 Gy of localized g-irradiation. The group used histology and gene expression at time points post irradiation to analyse this. Smad 3 -/- mice showed less inflammation in response to irradiation compared to +/+ mice 6 weeks post irradiation. But Smad 3 -/- did show increased numbers of neutrophils compared to Smad 3 +/+ skin at 6-8 hours post irradiation. Smad 3 -/- dermal fibroblasts did not migrate but did differentiate in response to TGF b. Also, picosirius red staining of the flank at 6 weeks post Gy irradiation shows an increase in scarring in Smad 3 +/+ compared to -/- mice. Smad +/+ but not Smad -/- fibroblasts showed an increase in TGF b and CTGF mRNA following irradiation and TGF b treatment. Primary culture systems of Smad 3 +/+ renal tubular epithelial cells underwent phenotypic changes when treated with TGF b, this did not occur in Smad 3 -/- mice. Smad 3 -/- mice maintain normal renal architecture and reverse ETM 14 days after UUO compared to +/+ mice where the kidneys are enlarged with an influx of mononuclear cells, collagen and TGF b.

**Christos Chatziantoniou** (Tenon Hospital, Paris, France) described the mechanisms by which vasoconstrictors such as angiotensin II and endothelin induce renal vascular and glomerular fibrosis in experimental hypertension, by using

transgenic mice expressing reporter genes controlled by the collagen I gene promoter. The talk was a summary of a number of papers from his laboratory. Angiotensin II was found to induce renal fibrosis via an endothelin mediated activation of the collagen I gene. This fibrinogenic mechanism involves activation of TGF $\beta$  and tyrosine kinase growth factor receptors, and MAPK/ERK and Rho signalling pathways. Protection of renal vasculature was observed during treatment with the receptor antagonists AT1 or ETA/B, apparent in the inhibition of collagen I gene activation independently of systolic blood pressure levels. To introduce a relevance to clinical medicine, they then looked at regression (as opposed to prevention) of renal fibrosis by treating animals with angiotensin and/or endothelin after the occurrence of fibrotic lesions. A regression was observed, which appeared to be due to inhibition of collagen I synthesis and the activation of collagen-degrading enzymes such as MMPs -2 and -9.

**Michael Ryan** (University College Dublin) presented emerging evidence for the involvement of epithelial-mesenchymal transdifferentiation (EMT) in tubulointerstitial fibrosis. EMT is the loss of epithelial and the gain of mesenchymal characteristics by cells. It is a normal physiological process in development and wound healing but it may be involved in tissue fibrosis and in early stages of transformation, invasion and metastasis of carcinoma cells in the adult. Dr Ryan described the developed models of renal cell transdifferentiation whereby epithelial tubular cells (HK-2 cells) were exposed to various factors and indices of EMT were investigated. Suppression subtractive hybridization (SSH) or Affymetrix gene microarrays were used to analyse altered gene expression. TGF $\beta$ , CTGF, HMGB1,  $\beta$ -catenin translocation to nucleus, PKC $\delta$  and Ras family of small GTPases were shown to have a possible involvement in EMT. Understanding of EMT through the investigation of the various molecular switches and their effectors may lead to the development of therapeutic targets for renal fibrosis.

**Frank Strutz** (Georg-August-University) presented the recent findings of the potential role of integrin linked kinase (ILK) in the mediation of epithelial-mesenchymal transition (EMT). ILK, which is stimulated by TGF $\beta$ 1, mediates the effects of integrins and their function in cell-matrix interactions. ILK sense and anti-sense

cDNA were overexpressed in murine tubular epithelial cells. This resulted in the downregulation of epithelial markers and upregulation of mesenchymal markers such as FSP-1 and vimentin. Another observed effect was the dramatic increase in fibronectin synthesis and the stimulation of cell migration. On the other hand, a negative effect on apoptosis was noted. Strutz also described the inhibitory effect of BMP-7 on TGF $\beta$ 1 mediated mesenchymalisation. BMP-7 had a positive effect on E-cadherin expression and a negative effect on smad mediated EMT. Moreover, BMP-7 reversed interstitial fibrosis and tubular atrophy in various animal models suggesting a novel therapeutic approach to chronic progressive renal disease through the inhibition of EMT.

**Aled Phillips** (University of Wales College of Medicine, Cardiff) discussed the regulation of proximal tubular cells (PTC) phenotype and function by TGF $\beta$ . The group have looked at how TGF $\beta$  effects cell-cell contact, cell phenotype, migration and matrix degradation. Using light microscopy on cultured PTC cell lines TGF $\beta$  was shown to cause cells to lose their epithelial phenotype and gain a fibroblastic phenotype, along with the loss of cell-cell contact, rearrangement of the actin cytoskeleton, formation of stress fibres and focal adhesions. Cytochalasin D mediated disruption of the actin cytoskeleton prevented phenotypic changes associated with the addition of TGF $\beta$ . TGF $\beta$  mediated functional changes showed an increase in collagen III and IV. Transient transfection with Smad 2/4 or Smad 3/4 expression vectors showed that phenotypic changes are not Smad related. Replacement of TGF $\beta$  with 1% FCS reversed the phenotypic change to epithelial cells, demonstrating that the cells were not permanently differentiated. TGF $\beta$  mediated phenotypic changes, including a decrease in expression of E-cadherin and cytokeratin and an increase in expression of  $\alpha$ SMA, were augmented by interstitial collagens as shown when cells were grown on tissue culture dishes coated with collagen I and III, where TGF $\beta$  had no such effect by itself. TGF $\beta$  added to cells grown on type IV collagen had no greater effect than TGF $\beta$  alone. In conclusion, a combination of the pro-fibrotic cytokine TGF $\beta$  and exposure to certain interstitial ECM components, after damage to the tubular basement membrane, is involved in regulation of PTC phenotype and function.

# British Society for Matrix Biology

## “Grappling with the Glycome”

Hulme Hall, University of Manchester  
5<sup>th</sup>-6<sup>th</sup> April 2004

### Information

The Spring meeting of the BSMB will be held at Hulme Hall (University of Manchester), Oxford Place, Victoria Park, Manchester on Monday 5<sup>th</sup> April and Tuesday 6<sup>th</sup> April 2004. The meeting is organised by Malcolm Lyon (University of Manchester; 0161 446 3202; [mlyon@picr.man.ac.uk](mailto:mlyon@picr.man.ac.uk)) and Bob Lauder (University of Lancaster; 01524 593561; [r.lauder@lancaster.ac.uk](mailto:r.lauder@lancaster.ac.uk)), who can be contacted for any further details. The focus of the meeting will be on developments in structural and functional glycomics with relevance to cell surface and extracellular matrix biology, including a major session on glycosaminoglycans. Speakers from the USA, Europe and the UK are contributing to the Programme, and we are especially fortunate to have Prof. Robert Haltiwanger (New York, USA) and Prof. Ulf Lindahl (Uppsala, Sweden) headlining two major sessions

The venue for the meeting will be Hulme Hall, which was the first residence established by the University in 1870. It is conveniently situated only 1\_ miles (2\_ km) south of the City Centre. All accommodation will be within the Hall, and both “standard” and “en-suite” rooms are available. The Meeting will take place in the Hall’s recently refurbished large Lecture Theatre, which is a popular conference venue. Posters, trade stands, catering and provision of refreshments, will all be located close by.

There will be a Conference Dinner on the Monday evening in the function room of the “New Tabak Asian Restaurant”. This is located only a short walk away from the Hall, in the heart of Rusholme’s renowned “Curry Mile”.

Please note that no lunch will be provided on Monday 5<sup>th</sup> April, prior to the start of the meeting. However, there are many opportunities for obtaining snacks, either while in transit in the City Centre, or within a short walk from Hulme Hall itself.

General directions on getting to the University of Manchester can be found at <http://www.man.ac.uk/about/city.html> and <http://www.man.ac.uk/about/direct.html>. The map of the University campus at <http://www.accommodation.man.ac.uk/map.htm> will allow you to locate Hulme Hall (site number 17). There is limited car parking provision at the Hall and spaces are available only on a first-come-first-served basis. It is also possible to park in the side-streets of the surrounding residential area. Upon arrival, please report to the

Porter's desk if you have pre-booked accommodation. The registration desk will be situated close by.

The deadline for registration, submission of abstracts, and applications for BSMB bursaries to cover costs of attendance at the meeting, will be Friday 27<sup>th</sup> February. Early application is greatly appreciated as it reduces the administrative burden on us, and aids in the provision of services at the Hall. Submission of abstracts is strongly encouraged, as there will be a BSMB/IJEP-sponsored poster competition (for eligible applicants, i.e. PhD students and young post-doctoral workers in their first 3 years) with 3 x £100 cash prizes to be awarded. For the first time, poster prizes will be awarded on the basis of votes cast by delegates themselves. Also, significant opportunities exist within the programme for short talks (10 minutes duration + 5 minutes for discussion) to be given, based upon prior selection by the organisers from the submitted abstracts. As usual, all abstracts will be published in the International Journal of Experimental Pathology.

### Meeting Sponsors

**This meeting is supported by:**

EUROPA / Prozyme

Dionex

Sigma

Calbiochem /VWR

## Meeting Programme

**Monday 5<sup>th</sup> April**

Registration from 10.00

**12.30 Tea / Coffee available**

**12.50 Welcome**

### **Session 1. Recognition and Signalling**

**13.00 Robert Haltiwanger** (State University of New York at Stony Brook, USA)  
*Regulation of Signal Transduction by Glycosylation*

**13.40 Paul Crocker** (University of Dundee, UK)  
*Does the Cellular Glycome influence the Binding Properties and Signalling Functions of Siglecs in the Immune System?*

**14.10 Anne Imberty** (CERMAV-CNRS, Grenoble, France)  
*Conformations of Cell Surface Oligosaccharides and Recognition by Lectins from Pathogens*

**14.40** One talk (selected from submitted abstracts)

**15.00 – 15.30 Tea / Coffee + Posters / Trade Exhibits**

### **Session 2. Technical Developments in Glycomics**

**15.30 Anne Dell** (Imperial College, London, UK)  
*MS Strategies for High Throughput Glycomics and Glyco-Proteomics*

**16.00 Ten Feizi** (Imperial College, Harrow, UK)  
*Carbohydrate Microarrays and the unravelling of Ligands for Effector Proteins of the Immune System*

**16.30** Two talks (selected from submitted abstracts)

**17.00 – 17.30 BSMB Annual General Meeting**

**17.30 – 19.00 Posters / Trade Exhibits (with Wine Reception at 18.00)**

**19.30 Conference Dinner**

**Tuesday 6<sup>th</sup> April**

**Session 3: Mucins and Hyaluronan**

09.00 **Joyce Taylor-Papadimitriou** (Guy's Hospital, London, UK)  
*Mucins in breast cancer*

09.30 **Tony Day** (University of Oxford, UK)  
*Hyaluronan: a Simple Polysaccharide with Structural Plasticity and Functional Diversity*

10.00 Two talks (selected from submitted abstracts)

10.30 – 11.00 **Tea/Coffee + Posters / Trade exhibits**

**Session 4: Complex Glycosaminoglycans (Part I)**

11.00 **Ulf Lindahl** (Uppsala University, Sweden)  
*Biosynthesis of Heparan Sulphate - how regulated does it need to be?*

11.40 **John Gallagher** (University of Manchester, UK)  
*New Insights on the Molecular Structure of Heparan Sulphate*

12.10 Two talks (selected from submitted abstracts)

12.45 – 14.15 **Lunch**

**Session 5: Complex Glycosaminoglycans (Part II)**

14.15 **Toin van Kuppevelt** (NCLMS University Medical Centre, Nijmegen, Netherlands)  
*Phage Display-derived Antibodies: New Tools to Study Heparan Sulphate Diversity*

14.45 **James Fawcett** (University of Cambridge, UK)  
*ECM in Brain and CNS Repair*

15.15 Two short talks (selected from submitted abstracts)

15.45 **Close of Meeting + Tea / Coffee**

**BSMB SPRING MEETING, 5th-6th April 2004**  
**GRAPPLING WITH THE GLYCOME**  
Hulme Hall, University of Manchester

**Registration Form:-** (Please write or type in CAPITALS)

Family Name:.....First Name:.....(Prof/Dr/Mr/Mrs/Ms)

Correspondence

Address:.....

.....

.....

Postcode:.....Country:.....Tel:.....

Fax:.....E-mail:.....

Special Dietary Requirements (e.g. vegetarian):.....

Registration Fees (includes coffee/tea both days; lunch on Tuesday):

BSMB Members £35 .....

Student BSMB Members £25 .....

Non-Members £45 .....

Student Non-Members £35 .....

Accommodation (at Hulme Hall; includes breakfast)

Single standard room, £25 per night; Single en-suite room, £35 per night

Sunday 4<sup>th</sup> April .....

Monday 5<sup>th</sup> April .....

Tuesday 6<sup>th</sup> April .....

Conference Dinner:

Monday 5<sup>th</sup> April, New Tabak Asian Restaurant, £25 .....

TOTAL ENCLOSED = \*£.....

(\*All cheques should be made payable to **“British Society for Matrix Biology”**)

Please return registration form with payment to :-

Dr Malcolm Lyon, Senior Research Fellow

Cancer Research UK Department of Medical Oncology

Paterson Institute for Cancer Research

Christie Hospital NHS Trust, Wilmslow Road

Manchester M20 4BX

For further information, contact Malcolm Lyon on 0161 446 3202,

or E-mail: [MLyon@picr.man.ac.uk](mailto:MLyon@picr.man.ac.uk)

CLOSING DATE FOR RECEIPT OF REGISTRATION FORM:

**FRIDAY 27<sup>th</sup> FEBRUARY 2004.**

INSTRUCTIONS FOR SUBMISSION OF ABSTRACTS  
BSMB SPRING MEETING, 5th-6th April 2004  
**GRAPPLING WITH THE GLYCOME**  
Hulme Hall, University of Manchester

Abstracts should be submitted by email and structured according to the format below using Times New Roman font, text size 12-point as a ms-word document.

The text should fit within a box size of 16 cm x 26cm.

Abstracts not conforming to these specification or with incomplete information may NOT be published.

**Information for Poster Presenters**

The poster boards will be 1m high by 1m wide. We suggest using A1 paper size. Posters must be fixed with Velcro. Some velcro will be available at the meeting, but please try and bring your own!

Please ensure that you also complete a Registration form and return with your payment as detailed on the [Registration Page](#).

---

**Title in bold**

**Authors in bold**

Affiliations

Introduction

Materials and Methods

Results

Discussion

**References**

Authors (Date) Title *Journal Name* vol. xx-xx

---

**The deadline for submission of abstracts is Friday 27th February, 2004.** Submit abstracts as an email attachment to the email address below.

Email abstracts to: Malcolm Lyon, [mlyon@picr.man.ac.uk](mailto:mlyon@picr.man.ac.uk)

When you submit your abstract by email, please indicate the name of **Corresponding Author, with fax and telephone numbers.**

**Please indicate whether you wish your abstract (i) to be submitted for the Poster Prize competition (presenter must be a PhD student or be within their first 3-year post-doc appointment) or (ii) to be considered for an oral presentation (10 mins. + 5 mins. discussion).**

# XIXth

## FECTS MEETING

### Final Announcement and Call for Abstracts

Taormina – Giardini Naxos , Italy

9<sup>th</sup> to 13<sup>th</sup> JULY, 2004

web site: [www.facts2004.it](http://www.facts2004.it)

#### Summary

Introductory message	Section	Online registration, accommodation	Section
Venue	1	booking, abstract submission,	6
Committees	2	Instructions for abstract preparation	7
General information – Deadlines	3	Accommodation	8
Meeting schedule	4	Social events and Tours	9
Plenary lectures – Workshop Topics	5	Travel information	10

#### LOCAL ORGANISING COMMITTEE AND SECRETARIAT

Angela AVENOSO [aavenoso@unime.it](mailto:aavenoso@unime.it) Alberto CALATRONI [alberto.calatroni@unime.it](mailto:alberto.calatroni@unime.it)

Giuseppe M. CAMPO [giuseppe.campo@unime.it](mailto:giuseppe.campo@unime.it) Salvatore CAMPO [scampo@unime.it](mailto:scampo@unime.it)

Department of Biochemical, Physiological and Nutritional Sciences, Faculty of Medicine,  
University of Messina, Policlinico Universitario, Torre biologica, I-98125 Messina, Italy

Tel + 39.090.2213331/2 – fax +39.090.2213330

Daniela ALBERGHINA [d\\_alberghina@yahoo.com](mailto:d_alberghina@yahoo.com) Alida M. FERLAZZO [aliferl@tin.it](mailto:aliferl@tin.it)

Department of Morphology, Biochemistry, Physiology and Animal Production, Faculty  
of Veterinary Medicine, University of Messina, Polo Annunziata, I-98168 Messina, Italy.

#### PROFESSIONAL FECTS SECRETARIAT

LISCIOFFO VIAGGI s.n.c.,

Ufficio Congressi, Via Camiciotti, 8 – I-98123 Messina, Italy

Tel. +39.090.2982262/263 – fax +39.090.2929890 – e-mail: [meetings@lisciotto.it](mailto:meetings@lisciotto.it)

## **Introductory Message**

The Italian Society for Connective Tissue is pleased to invite you to attend the XIXth Meeting of the Federation of European Connective Tissue Societies, in Taormina-Giardini Naxos, on July 2004.

In line with the tradition of previous FECTS Meetings, the latest developments in specific areas of Connective Tissue research will be covered, in plenary lectures and in concurrent workshop sessions. Presentations in workshop sessions will be chosen from the submitted abstracts. Young scientists will have then the opportunity to illustrate their contribution orally. The submitted abstracts will be displayed in poster exhibition.

The Italian Society for Connective Tissue feels highly honoured to organise the XIXth FECTS Meeting. We hope for a friendly get-together with lively exchange of ideas and remarkable scientific enrichment. Furthermore, we hope that the fascinating atmosphere of sea transparency and colours in charming Taormina and Giardini bays, the impressive elevation of the volcano Etna, the superb artistic treasures of Sicily, heritage of several high level human civilisations, may contribute to make your stay an everlasting memory.

The Scientific and Organising Committee

## **Venue**

The conference will begin on Friday 9<sup>th</sup> July 2004, and will be held at the Congress Centre of Naxos Beach Hotel, on Friday 9<sup>th</sup> July and on Saturday 10<sup>th</sup> July, and at the Congress Centre of the Ramada Hotel, from the afternoon of Saturday 10<sup>th</sup> July to the morning of Tuesday 13<sup>th</sup> July. The Naxos Beach and Ramada hotels, both located on the seaside, contrada Recanati, Giardini Naxos, are about 300 metres from each other.

Registration will begin in the late morning of Friday 9<sup>th</sup> July 2004, at the Congress Centre of Naxos Beach Hotel. The opening ceremony, opening lectures and welcome reception are scheduled for the afternoon of the same day, in the Auditorium of Naxos Beach Congress Centre.

Plenary lectures will be presented in the Naxos Beach Hotel Auditorium on Friday afternoon and on Saturday morning and in the Ramada Hotel Auditorium, on Sunday morning and on Monday morning. Concurrent Workshops will be held in three lecture halls at the Ramada Hotel Congress Centre, on Saturday 10<sup>th</sup> July in the afternoon, and in following days.

The Posters will be exhibited in Room Hibiscus at the Ramada Hotel Congress Centre from Saturday 10<sup>th</sup> July to Monday 12<sup>th</sup> July. The meeting will end on Tuesday 13<sup>th</sup> July, at 13.00 hrs.

A conference concert is planned at the Ramada Hotel Auditorium at 21.00 hrs, Saturday 10<sup>th</sup> July. The conference dinner will be held at Villa Diodoro Hotel, in Taormina, on Monday 12<sup>th</sup> July, 2004, at 21.00 hrs. Coaches will leave the Congress Centre at 19.30 to allow a walk in Taormina before dinner. The Congress Centre is easily accessible to coaches from Catania Airport (1 hour journey). Regular (20 minutes interval) coach services also operate from Taormina (a 15 minutes journey).

The Congress Centre is located in the luxuriant vegetation of the Recanati district, within walking distance of the archaeological area of Naxos, the first Greek colony in Sicily, founded in the VIII<sup>th</sup> century B.C. (734-733 B.C.), and of the town of Giardini, on the magnificent gulf of Giardini Naxos, closed off to the northeast by Cape Taormina and to the south by Cape Schisò, a little lava peninsula formed in prehistoric times as a result of a flow of basalt which came out on the side of the great Etna volcano. Giardini Naxos is, together with its sister town Taormina, a main tourist resort in Sicily: the development of Giardini Naxos has been favoured not only by the beauty of its site and its rich archaeological patrimony, but also by its excellent geographical position and the ease of rapid connections both with the most important places in Sicily and – thanks to the proximity of Catania airport – with the main European cities.

Taormina, famous for its splendid location and its scenario of natural beauties, preserves a major historical and artistic patrimony, including the famous Greek-Roman theatre.

**Committees**

**SCIENTIFIC & ORGANISING COMMITTEE**

***Italian Society for Connective Study (SISC) Management Board***

Alberto CALATRONI (SISC President), Messina

Chairman of the XIXth FECTS Meeting

Ranieri CANCEDDA, Genova

Daniela QUAGLINO, Modena

Vittoria OTTANI, Bologna

Michele SPINA, Padova

Alberto PASSI, Varese

Antonio M. TAMBURRO, Potenza

Ida PUCCI MINAFRA, Palermo

Ruggero TENNI, Pavia

***FECTS Contact Persons:***

Milan ADAM, Czech Republic - Edward BANKOWSKI, Poland - Stephan BAYDANOFF, Bulgaria

Peter BRUCKNER, Germany - Ruth CHIQUET, Switzerland – Jack P.M. CLEUTJENS, Netherlands

Carl Christian DANIELSEN, Denmark - Guido DAVID, Belgium - Jyrki HEINO, Finland

Anders HJERPE, Sweden - Anthony HOLLANDER, U.K. – Nikos KARAMANOS, Greece

Rudolf MALLINGER, Austria - Lázló MODIS, Hungary - Yoshifumi NINOMIYA, Japan

Sylvie RICARD-BLUM, France - Naphtali SAVION, Israel

**SISC SCIENTIFIC COMMITTEE MEMBERS**

Aurelio BAIRATI, Milano - Cesare BALDUINI, Pavia – Paolo BONALDO, Padova

Giuseppe CETTA, Pavia – Giancarlo DE LUCA, Varese – Spiridione GARBISA, Padova

Salvatore MINAFRA, Palermo - Ivonne PASQUALI RONCHETTI, Modena

Antonio ROSSI, Pavia - Alessandro RUGGERI, Bologna – Dino VOLPIN, Padova



**WITH THE SPONSORSHIP OF THE UNIVERSITY OF MESSINA, ITALY**

**LOCAL ORGANISING COMMITTEE AND SECRETARIAT**

Angela AVENOSO [aavenoso@unime.it](mailto:aavenoso@unime.it)

Alberto CALATRONI

[alberto.calatroni@unime.it](mailto:alberto.calatroni@unime.it)

Giuseppe M. CAMPO [giuseppe.campo@unime.it](mailto:giuseppe.campo@unime.it)

Salvatore CAMPO [scampo@unime.it](mailto:scampo@unime.it)

Department of Biochemical, Physiological and Nutritional Sciences, Faculty of Medicine,

University of Messina, Policlinico Universitario, Torre biologica, I-98125 Messina, Italy

Tel + 39.090.2213331/2 – fax +39.090.2213330

Daniela ALBERGHINA [d\\_alberghina@yahoo.com](mailto:d_alberghina@yahoo.com)

Alida M. FERLAZZO [aliferl@tin.it](mailto:aliferl@tin.it)

Department of Morphology, Biochemistry, Physiology and Animal Production, Faculty of Veterinary  
Medicine, University of Messina, Polo Annunziata, I-98168 Messina, Italy.

**PROFESSIONAL FECTS SECRETARIAT**

**LISCIOFFO VIAGGI s.n.c.,**

Ufficio Congressi, Via Camiciotti, 8 – I-98123 Messina, Italy

Tel. +39.090.2982262/3 - fax +39.090.2929890 – e-mail: [meetings@lisciotto.it](mailto:meetings@lisciotto.it)

## Section 3

### General Information

#### *Registration Desk & Information Desk*

The registration desk will be located in the hall of the Naxos Beach Auditorium, Friday 9<sup>th</sup> and Saturday 10<sup>th</sup> July 2004. The registration will begin at 11.00 a.m. on Friday 9<sup>th</sup>, 2004. Registration during the following days will be possible at the Secretariat desk, at the Ramada Hotel. Messages will be placed on a bulletin board at this desk. A representative of “Lisciotta Viaggi” will be present on Friday through to Tuesday, 8.30 a.m. – 12.30 a.m., and on Saturday and Monday afternoons, 15.30 – 19.30 hrs, and will handle questions regarding registrations, hotel reservations, social events and excursions.

#### Tickets

Congress Dinner and excursions are not included in the Congress fee. Those who have signed up for these events will find tickets in their registration envelopes.

#### **Transportation**

Most Hotels other than the two Hotels involved in the Meeting are located close or within walking distance of the Congress Centre. A bus service connects Giardini with the Congress Centre.

#### *Climate and Clothing*

In July the weather in Sicily is typical of summer time in the Mediterranean basin. Temperatures are around 20-30°C and sunny weather time is usually continuous. Light clothing is needed. The Meeting place is on the seaside, and both Ramada and Naxos Beach Hotels have private sea beaches, together with several facilities, as possibilities of sailing, windsurfing, boating; swimming pools, tennis, basket, volley ball, mini-football, bowling, walking. Excursion to Etna mountain requires mountain boots and correct clothing: the volcano is 3,300 m high.

#### **Lunches.**

Lunches will be available at the Congress Centres, Italian style, with 3 courses and service, charge included, at table (about 1 hour). The price will be about € 30 per person. For hotel guests it may be included in the half-board. A number of rapid food services, pizzerias and fast food, and restaurants are also available in the area.

#### *Coffee Breaks*

Coffee breaks will be available at the Congress Centres every morning from July 10<sup>th</sup> to July 13<sup>th</sup>, and in the afternoons of July 10<sup>th</sup> and 12<sup>th</sup>.

#### *Entry Formality - Letter of Invitation*

Italy is a member of the European Community. Visitors from many other European Countries and from the USA and Japan do not need visas. However, visas may be required for travel to the European Community by some Countries. Please contact your personal travel agency or the Italian Embassy or Consulate.

Delegates requiring a letter of invitation in order to obtain a visa to attend the Meeting should contact the Professional FECTS Secretariat,

LISCIOTTO VIAGGI s.n.c. – Ufficio Congressi, Via Camiciotti, 8 - I-98123 Messina, Italy

**Tel. 090-2982262/3 - fax +39.090.2929890 - e-mail: [meetings@lisciotto.it](mailto:meetings@lisciotto.it)**

The letter of invitation will specify that its only purpose is to obtain a visa, and no delegate expense is supposed to be covered by the invitation.

### **Travel Fellowships for young scientists from Eastern Europe.**

Limited funds will be available to assist young scientists from Eastern Europe to attend the Meeting. Application should include a copy of the abstract submitted for scientific contribution, a copy of curriculum vitae with scientific publications, and a letter of recommendation from the Head of Department or Supervisor. Applications should arrive no later than Friday 27<sup>th</sup> February 2004, and should be addressed to the Local Organising Committee (Prof. Alberto Calatroni, Dipartimento di Scienze Biochimiche, Fisiologiche e della Nutrizione, Policlinico Universitario, Torre biologica, I-98125 Messina, Italy. Tel +39-090-2213331/2 – Fax. +39-090-2213330 - e-mail: [alberto.calatroni@unime.it](mailto:alberto.calatroni@unime.it)).

### **Badges**

Admittance to the auditoriums and lecture halls, the poster area, coffee points is by badge. Please wear the badge, clearly visible, during the Meeting.

### **Tourist Information**

The Tourist office is located downtown Giardini, sea-front, at Via Tysandros, 54 – Tel. +39-0942-51010, fax +39-0942-52848. E-mail: [aast@naxos.i](mailto:aast@naxos.i); <http://www.aastgiardininaxos.it>

### **Smoking - Computers**

Smoking is not allowed inside any of the spaces of the Meeting.

Four computers connected to Internet will be available at the Ramada Congress Centre. Contact the Hotel desk for information.

### **Liability and Insurance**

The organisers do not assume any responsibility for damage or injury to persons or properties during the Meeting. Delegates are advised to arrange personal travel and health insurance.

### *Dates to Remember: deadlines*

		Deadline
Travel fellowships from East Europe		Friday 27 <sup>th</sup> February, 2004
Abstract submission		Monday 15 <sup>th</sup> March, 2004
Early registration		Monday 15 <sup>th</sup> March, 2004
Cancellation of registration with refund (except 40 €) after the Conference		Wednesday 30 <sup>th</sup> June, 2004
Cancellation of registration with no refund		After Wednesday 30 <sup>th</sup> June, 2004
<b>Cancellation of accommodation</b>		
Hotel Ramada Holyday Club Hotel	with one night penalty	From 90 to 60 days before arrival
	with two nights penalty	From 59 to 35 days before arrival
	with three nights penalty	From 34 days before arrival and without showing up
Naxos Beach Hotel	with one night penalty	From 30 to 4 days before arrival
	80% of the total amount of the whole stay	From 3 to 1 day before arrival
	100% of the total amount of the whole stay	From the day of arrival and without showing up
Sant'Alphio Hotel	with 30% penalty on the amount of the whole stay	From Friday 6 <sup>th</sup> February , 2004
Other Hotels	with 30% penalty on the amount of the whole stay	From Tuesday 6 <sup>th</sup> April , 2004

### **Cancellation of Registration**

Notification of cancellation must be received in writing or by e-mail before the Meeting, addressed to the Professional FECTS Secretariat LISCIOTTO VIAGGI s.n.c. - Ufficio Congressi, Via Camiciotti, 8 - I-98123 Messina, Italy - Tel. 090-2982262/3 – fax +39.090.2929890 - e-mail: [meetings@lisciotto.it](mailto:meetings@lisciotto.it). All refunds will be processed after the Conference, less an administration charge of 40 €. No refund will be given to cancellations received after Wednesday 30<sup>th</sup> June, 2004.

### **Cancellation of Accommodation.**

Notification of cancellation must be received by the Professional FECTS Secretariat in writing or by e-mail before the deadlines shown in the above printed Table; otherwise the hotel deposit will not be refunded. Request for refunds has to be sent to the Professional FECTS Secretariat LISCIOTTO VIAGGI s.n.c. - Ufficio Congressi, Via Camiciotti, 8 - I-98123 Messina, Italy - Tel. 090-2982262/3 – fax +39.090.2929890 – e-mail: [meetings@lisciotto.it](mailto:meetings@lisciotto.it).

## Section 4

## MEETING SCHEDULE

Time	9	10	11	12	13	14	15	16	17	18	19	20
<b>Friday 9<sup>th</sup> July</b>				registration		registration		Opening cer. Lectures, n.1 -2	Welcome Reception	Lectures n.3-4		
<b>Sat 10<sup>th</sup> July</b>	Plenary Lectures n. 5, 6 and 7	cof fee	Plenary Lectures n. 8, 9 and 10	lunch time		Poster session	cof fee	Workshops Area 1, 2, 3				
<b>Sunday 11<sup>th</sup> July</b>	Plenary Lectures n. 11, 12 and 13	cof fee	3 Workshops Areas 4, 1, 2	lunch time		Poster session	Free time					
<b>Mon 12<sup>th</sup> July</b>	Plenary Lectures n. 14 -15 - 16	cof fee	Plen.Lect. n. 17 - 18 - 19	FECTS Assemb	lunch time	Poster session	cof fee	4 Workshops Areas 1,2,3,4		Bus to dinner		
<b>Tues 13<sup>th</sup> July</b>	3 Workshops Areas 1, 3,4	cof fee	3 Workshops Areas 2,3,4									

<b>Friday 9<sup>th</sup> July 2004</b>		
11.00-12.30/14.00-16.00	Registration	Foyer of the Naxos Beach Congress Centre
16.00 - 16.15	Opening Ceremony	Naxos Beach Auditorium
16.15-17.30	Opening Lectures	Naxos Beach Auditorium
17.30 - 19.00	Welcome Reception	
19.00-20.15	Plenary Lectures	Naxos Beach Auditorium
<b>Saturday 10<sup>th</sup> July 2004</b>		
8.30-10.30 and 11.00-13.00	Plenary Lectures	Naxos Beach Auditorium
15.30-17.15	Poster Session	Hibiscus Hall - Ramada Hotel
17.30-19.30	Workshops	Tyndaris A/B Halls - Ramada Hotel Naxos Beach Auditorium
21.00	Concert	Tyndaris A Hall
<b>Sunday 11<sup>th</sup> July 2004</b>		
8.30-10.30	Plenary Lectures	Tyndaris A Hall - Ramada Hotel
11.00-13.00	Workshops	Tyndaris A/B and Dionysus Halls - Ramada Hotel
15.00-16.30	Poster Session	Hibiscus Hall - Ramada Hotel
16.30-20.00	Free Time	
<b>Monday 12<sup>th</sup> July 2004</b>		
8.30-10.30	Plenary Lectures	Tyndaris A Hall - Ramada Hotel
11.00-12.45	Plenary Lectures	Tyndaris A Hall - Ramada Hotel
12.45-13.15	FECTS General Assembly	Tyndaris A Hall - Ramada Hotel
15.00-16.15	Poster Session	Hibiscus Hall - Ramada Hotel
16.45-18.45	Workshops	Tyndaris A/B, Dionysus and Pitagora Halls- Ramada Hotel
19.30-24.00	FECTS Dinner in Taormina	
<b>Tuesday 13<sup>th</sup> July 2004</b>		
8.30-10.30	Workshops	Tyndaris A/B and Dionysus Halls - Ramada Hotel
11.00-13.00	Workshops	Tyndaris A/B and Dionysus Halls - Ramada Hotel
13.00-13.15	Closing Ceremony	Tyndaris A Hall - Ramada Hotel

## PRELIMINARY SCIENTIFIC PROGRAMME

The following Speakers have agreed to present contributions with the preliminary Title indicated below:

**Adriana Albini** (Genova, Italy)

“Mechanisms of angiogenesis and anti-angiogenesis”

**Anders Aspberg** (Lund, Sweden)

“Proteoglycan lectins – 3D structure and implications for functions”

**Anthony P. Hollander** (Bristol, UK)

“Cartilage regeneration” (Provisional)

**David Hulmes** (Lyon, France)

“Molecular machinery of matrix assembly – from molecules to tissues”

**Martin J. Humphries** (Manchester, UK)

“Cooperation between integrin and syndecan signalling during cell migration”

**Renato Iozzo** (Philadelphia, USA)

“Endorepellin (a C-terminal portion of perlecan protein core) and angiogenesis”

**Nikos Karamanos** (Patras, Greece)

“Structural analysis of glycosaminoglycans/proteoglycans and biological relevance”

**Henning Langberg** (Copenhagen, Denmark)

“Adaptation of the connective tissue to exercise”

**Joan Marini** (Bethesda, USA)

“Effect of bisphosphonates on bones of children and mice with OI”

**Alain Mauviel** (Paris, France)

“Transcriptional control of fibrillar collagen genes by TGF-beta and inflammatory cytokines”

**Yoshifumi Ninomiya** (Okayama, Japan)

“Distribution and function of basement membranes” (provisional)

**Taina Pihlajaniemi** (Oulu, Finland)

“Roles of type XVIII collagen and its endostatin domain in normal and pathological situations”

**Daniela Quaglino** (Modena, Italy) SISC “Castellani Lecture”

“Pseudoxanthoma elasticum: how a metabolic defect affects the extracellular matrix”

**Sarah Rees** (Swansea, UK)

“The importance of aggregan turnover in tendon metabolism”

**Dieter P. Reinhardt** (Luebeck, Germany)

“Fibrillins: structure and functions in health and disease”

Antonio M. Tamburro (**Potenza, Italy**) SISC “Gotte Lecture”

“The dissection of human tropoelastin: from the molecular structure to the self-assembly to the elasticity mechanism”

**Israel Vlodavsky** (Haifa, Israel)

“Heparanase in cancer progression and normal development”

**Anthony S. Weiss** (Sydney, Australia)

“Building synthetic elastin: molecular and cellular interactions”

**Pascale Zimmermann** (Leuven, Belgium)

“Cytosolic and membrane components involved in syndecan trafficking and signaling”

## WORKSHOP TOPICS

Workshop topics are grouped in four major areas, numbered 1, 2, 3 and 4. Only workshops with a topic of different areas will be simultaneously carried out. Each area consists of four workshops, identified by a progressive capital alphabetical letter (except P, used to classify Poster).

### 1. STRUCTURE, FUNCTION AND METABOLISM OF MATRIX MACROMOLECULES

- A Collagens
- B Glycoproteins and Proteoglycans
- C Elastic tissues
- D Supramolecular assembly

### 2. DEVELOPMENT AND CANCER

- E Cell-cell and cell-matrix interactions in development and cancer
- F Matrix proteases and their inhibitors
- G Molecular embryology of connective tissues and morphogenesis
- H Cell differentiation and cell fate

### 3. MOLECULAR AND CELLULAR BIOLOGY

- I Stem and progenitor cells of connective tissues
- J Growth factors, receptors and cell signalling
- K Tissue specific gene expression
- L Gene transfer and transgenic animals

### 4. DISEASES OF CONNECTIVE TISSUES AND APPLICATION

- M Diseases of connective tissues
- N Regenerative medicine and tissue engineering of connective tissues
- O Angiogenesis and neovascularisation
- Q Natural and synthetic biomaterials – Biomechanics

## Section 6

# Online Registration – Accommodation Booking – Abstract Submission

All participants are required to register with the Congress Secretariat.

Delegates should visit the FECTS website at <http://www.facts2004.it>, under Registration section in order to insert personal data in the Personal Information schedule. A registration guideline is provided. By sending personal data, the delegate will automatically receive by e-mail a personal login and password for the access to the registration site. The registration site contains Accommodation booking, choice of Social events and choice of Tours and Abstract schedules. The accommodation booking, the selected social events and tours and properly arranged Abstract form(s) must be submitted on line, with indication of the selected way of payment. Registration and abstract submission will be effective after receiving payment. The Registration and Accommodation Form provided at the end of Final Announcement should be used only when submission on line is absolutely impossible.

Receipt of the payment and confirmation of registration, hotel booking and abstract(s) processing will be sent by e-mail.

### REGISTRATION CATEGORY & FEES:

Early registration before 15th March, 2004	290 €
Late registration after 15th March, 2004	350 €
Student early registration before 15th March, 2004	180 €
Student late registration after 15th March, 2004	230 €
Accompanying Person	60 €

For student registration, a declaration by Head of Department/Supervisor is required, by e-mail, to confirm that the registering person is eligible for student registration. Proof of student status may be required at the meeting.

Payment must be RECEIVED by 27<sup>th</sup> March 2004 to assure early registration.

The participant's registration fee includes:

- Admittance to all sessions
- Meeting documentation and Abstract Book
- Certificate of Attendance
- Coffee refreshments during official breaks
- Welcome Reception
- Concert

Accompanying persons registration fee includes:

- Coffee refreshments during official breaks
- Welcome Reception
- Concert
- Guided half day tour to Taormina

Cancellation & Refunds. Notification of cancellation must be received in writing or by e-mail addressed to the FECTS Secretariat before the Meeting. All refunds will be processed after the Conference, less an administration charge of 40 €. No refunds will be made for cancellations received after Wednesday 30th June, 2004.

### METHODS OF PAYMENT

#### 1. by Bank Transfer.

Note: please add to the total amount due bank expenses both ends (covering originating and receiving bank charges).

Account Details:

Bank: Banca Intesa BCI Rete Comit – Messina Branch – Viale San Martino, 98122 Messina, Italy

Account number 8506654/10/88; Account name: Lisciotto Viaggi

Bank transfer from Italy: CIN P, ABI 3069, CAB 16520

Bank transfer from other Countries : IBANIT56P0306916520085066541088. Swift code BCITITMM280

#### 2. by Credit Card (American Express, Visa, Eurocard, Mastercard)

Note. Please add a surcharge of 5% of total amount to payment by credit card

## Section 7

### - INSTRUCTIONS FOR ABSTRACT PREPARATION

Abstracts must be received by Monday 15<sup>th</sup> March 2004.

Abstracts must be submitted in English and should only contain standard abbreviations. The abstract should not exceed the length of two thousand characters and must fit in a frame 13.5 cm in width by 19.5 cm in length. It will be reduced to 65% by the publisher during reproduction.

Arial font, size 12 point, bold capital letters must be used for title.

Arial font, size 12 point, with single spacing, must be used for the text and Author's name and family name, and institution where the research work has been carried out. The name of the presenting author (the presenting author must be fully registered for the meeting) should be underlined.

The abstract must be structured under the following headings (bold small letters):

#### **Introduction – Methods - Results and Discussion - References**

Any references should have the following format:

Author A., Author B., Author C. (Year) Journal Name, Volume number: page numbers.

Authors are kindly requested:

1. to classify their abstracts indicating two workshop topics that reflect the content of the abstract.
2. to indicate 2 or 3 key words

Authors must specifically express their wish to have their scientific contribution considered for a poster award. Competition is open to all presenting Authors under thirty years of age. The French Connective Tissue Society has contributed to additional poster awards.

Authors must specifically indicate if they do not wish to be considered for an oral presentation.

Online registration is required prior to abstract submission. Only when online submission is impossible, registration may be performed by Registration Form provided at the end of Final Announcement that should be submitted by priority mail (addressed to: Prof. Alberto Calatroni – Dipartimento di Scienze Biochimiche, Fisiologiche e della Nutrizione - Torre biologica, piano 5<sup>^</sup> - Policlinico Universitario – I-98125 Messina, Italy).

Abstracts must be submitted electronically, online. Only when online submission is impossible, abstract(s) may be submitted by e-mail attachment as an MS Word file (addressed to: alberto.calatroni@unime.it), or on a PC floppy disk, by priority mail (address to: Prof. Alberto Calatroni – Dipartimento di Scienze Biochimiche, Fisiologiche e della Nutrizione - Torre biologica, piano 5<sup>^</sup> - Policlinico Universitario – I-98125 Messina, Italy).

Abstracts submitted by fax or prepared with different instructions will not be processed.

Authors will be notified of the acceptance of their abstract(s) by e-mail.

Abstracts will be published exactly as submitted.

Size of Poster Board: height: 100 cm; width: 70 cm. Text should be large enough to be read at a distance of 1.5 metres.

## Section 8

### Accommodation

Telephone and fax numbers of the listed Hotels are available on FECTS website at <http://www.facts2004.it>, under Accommodation. It is advisable to book as soon as possible to assure first choice. The website will provide indication of the real room availability at different times.

**Rates:** Rates, in Euro, are per room (or apartment)/per night and include taxes

**Pre-payment:** Payment of 30% of the total amount of the whole stay is required to book accommodation, with the exception of the **Ramada and Holiday Club Hotels**, having a special offer and 3 night pre-payment request. The **Naxos Beach Hotel**, with special offer, requests the pre-payment of total amount.

**Cancellation penalty:** for most Hotels, after 5<sup>th</sup> April, 2004, 30% of the total amount of the whole stay. The exceptions are the **Sant'Alphio Hotel**, 30% of the total amount of the whole stay after 5<sup>th</sup> February, 2004, the **Ramada and Holiday Club Hotels**: one night, for cancellation between 90 and 60 days before arrival; two nights, for cancellation between 59 and 35 days before arrival; three nights, for cancellation from 34 days before arrival and without showing up; and the **Naxos Beach Hotel**: one night, for cancellation between 30 and 4 days before arrival; 80% of the total amount of the whole stay, for cancellation between 3 and 1 days before arrival; 100% of the total amount of the whole stay for cancellation the same day of arrival or without showing up.

**Ramada Hotel**, 4 star hotel, Conference venue, Viale Jannuzzo, 47, Giardini Naxos, Italy  
Situated in a historical and picturesque area of Giardini Naxos the hotel offers a wide variety of services and recreation facilities: outdoor swimming pool, water sports, private beach with free deckchairs and umbrellas, 2 tennis courts.

special offer (3 nights pre-payment needed): Half board (Bed, breakfast, one meal)

Double Room Single Use:	125,00 € (minimum stay 3 nights)
Double Room:	191,00 € (minimum stay 3 nights)
Suit/mansard: Double Room Single Use:	223,00 € (minimum stay 3 nights)
Suit/mansard: Double Room:	250,00 € (minimum stay 3 nights)

**Naxos Beach Hotel**, 4 star hotel, conference venue, 300 m from the Ramada Hotel, Via Recanati, 26, Giardini Naxos, Italy - It is surrounded by a magnificent natural park of citrus fruits and olives making it truly unique. 642 rooms in bungalows and in central hotel, private beach, offers peaceful stay in touch with nature

special offer (total amount pre-payment needed): Bed & Breakfast

Double Room Single Use:	130,00 €
Double Room:	185,00 €

**Hellenia Yachting**, 4 star hotel, 100 m from conference venue, Viale Jannuzzo, 41, Giardini Naxos, Italy

Luxury refined, exclusively furnished, offers grand hotel services and a unique comfortable privacy. Restaurant on the seaside, private beach, gardens, swimming pool with terrace and solarium

Bed & Breakfast:	Double Room Single Use:	190,00 €	Double Room:	211,00 €
------------------	-------------------------	----------	--------------	----------

**Sant'Alphio**, 4 star hotel, 300 m from conference venue, Via Recanati, Giardini Naxos, Italy  
Hotel services: restaurant with local and international dishes, buffet breakfast, 2 bars (with 24 hours service), private beach (full equipment), outdoor pool, solarium, safe, internet point.

Bed & Breakfast:	Double Room Single Use:	165,00 €	Double Room:	220,00 €
------------------	-------------------------	----------	--------------	----------

Caesar Palace, 4 star hotel, 2 km from conference venue, Via Cuba Porticato, Giardini Naxos, Italy

Located at 1 km from the seaside and from the centre of Giardini Naxos. 220 modern rooms, with air conditioning, telephone, TV-SAT, safe box.

Bed & Breakfast:	Double Room Single Use: 70,00 €	Double Room: 100,00 €
Half Board (bed, breakfast and one meal):	Double Room Single Use: 75,00 €	Double Room: 110,00 €

Holiday Club, 3 star hotel, in front of the conference venue, Viale Jannuzzo, 47 Giardini Naxos, Italy. The Holiday Club Naxos offers flatlets (for 3, 4, 5 persons) well furnished and equipped with bath, shower, telephone, kitchenette, refrigerator, air conditioning. Swimming pool is available special offer (3 nights pre-payment needed): Half board (Bed, breakfast, one meal)

Double Room Single Use:	115,00 € (minimum stay 3 nights)		
Double Room:	171,00 € (minimum stay 3 nights)		
Flatlet, minimum stay 3 nights (on request, the flatlet can be shared with other people)			
3 persons :	248,00 €	4 persons: 316,00 €	5 persons: 385,00 €

Baia degli Dei, 3 star hotel, 300 m from conference venue, Via Recanati, Giardini Naxos, Italy. The hotel offers: restaurant, TV room, safe, laundry. Rooms with: telephone, air conditioning, bar, TV.

Bed & Breakfast:	Double Room Single Use: 80,00 €	Double Room: 100,00 €
------------------	---------------------------------	-----------------------

Nike, 3 star hotel, 800 m from the conference venue, Via Calcide Eubea, 27, Giardini Naxos, Italy. The Hotel has gardens and terraces down to the seaside, with private beach and facilities. Most of the 55 rooms have a balcony with sea views or views of Etna.

Bed & Breakfast:	Double Room Single Use: 79,00 €	Double Room: 99,00 €
------------------	---------------------------------	----------------------

Sabbie d'Oro, 3 star hotel, 1 km from the conference venue, Via Lungomare, 12, Giardini Naxos, Italy. In the centre of Naxos bay. The hotel has 39 rooms with: TV, tel., hair dryer, safe, shower, WC

Bed & Breakfast:	Single Room: 85,00	Double Room Single Use: 98,00
Double Room:	110,00	

Sporting Baia, 3 star hotel, 1 km from the conference venue, Via Naxos, 6, Giardini Naxos, Italy. Situated on the bay of Giardini Naxos. Rooms have bath or shower, telephone, air conditioning, balcony. Restaurant and bar available in the hotel

Bed & Breakfast:	Double Room Single Use: 73,00 €	Double Room: 80,00 €
------------------	---------------------------------	----------------------

Villaggio (and Camping) Alkantara, 3 star hotel, 1 km from the conference venue, Contrada Pietre Nere, Giardini Naxos, Italy. Village Alkantara was built in April 2000 in an oasis of lemon and orange trees. Two swimming-pools, pizzeria bar, air conditioned apartments. A municipal bus service connects the Residence with town of Giardini Naxos.

Rooms for 2, 3, 4 persons:	Bed & Breakfast, 30,00 € per person
	Half board (Bed, breakfast, one meal) 35,00 € per person

Isabella, 3 star hotel, 5 km from the conference venue, Corso Umberto, 58, Taormina, Italy. The Hotel is located in the historic centre - traffic free - on the characteristic and charming main street of Taormina. Private beach with transport.

Bed & Breakfast: Double Room Single Use: 95,00 € Double Room: 140,00 €

Villa Linda, 2 star hotel, 200 m from conference venue, Via Recanati, 2, Giardini Naxos, Italy.  
Renewed in 2000. The hotel offers bar, restaurant, and rooms with: balcony or terrace, bath/shower,  
TV sat, telephone, air conditioning.

Bed & Breakfast: Double Room Single Use: 61,00 € Double Room: 82,00 €

Half board (Bed, breakfast, one meal) Double Room Single Use: 75,00 € Double Room: 110,00 €

.

## Section 9

### **SOCIAL EVENTS AND TOURS**

#### **Opening of the Meeting**

At Naxos Beach Congress Centre Auditorium, Friday 9th July, 2004, 16.00 hrs.

#### **Welcome reception** (Ticket included in registration fee)

At Naxos Beach Congress Centre, Friday 9th July, 2004, 17.30 – 19.00 hrs.

Refreshments and light snacks will be served during an informal welcome reception on Friday 9<sup>th</sup>, outside the Naxos Beach Auditorium, during the break between the opening Plenary Lecture Sessions of the Conference.

#### **Concert**

At Ramada Hotel Auditorium, Saturday 10th July, 2004, at 21.00 hrs.

#### **Conference Dinner**

At Hotel Villa Diodoro of Taormina, Monday 12th July 2004, 21.00 to 24.00 hrs. Coaches will leave the Congress Centre at 19.30 hrs. to reach Taormina and to allow participants to take a walk in the delightful town. At the end of dinner, coaches will transfer everybody to the Congress Centre. Tickets purchased in advance are available at a cost of 58 €. Tickets available at the meeting will be sold at 65 €.

Hotel Villa Diodoro is located in Taormina, Via Bagnoli Croce 75, near the beautiful Taormina public gardens, with a magnificent view of Giardini Naxos Bay, Taormina and Mount Etna.

#### **Tours for Accompanying Persons**

Guided half-day tour to Taormina (Ticket included in registration fee)

Saturday 10th July, 2004

Half-day excursion to Alcantara Gorges, 31,00 € per person. Minimum participation 30 people.

Sunday 11th July, 2004, afternoon.

Half-day excursion to Etna, 56,00 € per person. Minimum participation 30 people. Monday 12th July 2004.

### **TOURS**

The excellent geographical position of Giardini Naxos is considered as a useful base for easy excursions to practically the whole territory of Sicily and to the smaller islands.

#### **A list of possible tours is shown below.**

Meeting Tours. Two tours, a guided visit to the town of Taormina and a half day excursion to Alcantara gorges, may be organised in the half free day of the Meeting, with a minimum participation of 30 Meeting delegates; and a half day tour to the volcano Etna may be organised at the end of the Meeting, again with a minimum participation of 30 Meeting delegates. The approximate cost is calculated on a minimum participation of 30 persons.

Other tours. Many travel agencies are operating in Taormina organising Tours in the whole of Sicily, usually one day tours. Even a single participation is then possible. A list of web sites where to find timetables and costs is reported : [www.compagniasicilianaturismo.it](http://www.compagniasicilianaturismo.it); [www.sat-group.it](http://www.sat-group.it); [www.saistours.com](http://www.saistours.com); [www.TaorminaTours.com](http://www.TaorminaTours.com); (some tours have a coach stop at the Meeting Centre).

### Meeting Tours.

#### **1. TAORMINA (half-day excursion – 4 km from Giardini Naxos) – 11th July 2004, afternoon**

(The approximate cost of 23,00 € per person is calculated on a minimum participation of 30 Meeting delegates.)

**This authentic pearl of Sicily is unique in location and its urban form. Situated on the side of a hill overlooking the Ionian Sea, the luminosity of the town is reflected in the sea and echoed by Mount Etna, which makes its scenery so attractive. Dominated by numerous populations, Taormina has kept all the charm of its rich past, and Norman, Arab-Catalan and Gothic influences merge in buildings of a harmonious and homogeneous style, close to the remains of the Greek and Roman architecture and the baroque style of some churches. Your guide will lead you through this rich past, showing you the beauty of important monuments, as the Greek-Roman theatre, the second largest in Sicily after the Syracuse theatre, built during the Hellenistic era, with a magnificent view of Naxos' bay and of the conic shape of Mount Etna; and the famous Palazzo Corvaja, dating back to the 15<sup>th</sup> century. The façades are adorned by splendid twin-light mullioned windows with crowning frieze with geometric motifs of clearly Muslim inspiration. Strolling through the main street, Corso Umberto I, is ideal for shopping.**

#### **2. ALCANTARA GORGES/CASTIGLIONE DI SICILIA (half-day excursion – 34 km from Giardini Naxos) 11th July, 2004, afternoon** (The approximate cost of 31,00 € per person is calculated on a minimum participation of 30 Meeting delegates.)

**In times prior to the Greek colonisation, the eruption of the Moio Crater, situated on the northern slope of Mount Etna, formed Cape Schisò, where Naxos was later founded; in time, the river Alcantara, 15 km from Giardini-Naxos, dug into the basalt a deep and lovely canyon. This is one of the most extraordinary natural phenomena in Sicily: the gorge, which is only a few metres wide, and over twenty metres deep, is jagged and wild, and through it runs the river, between two magnificent walls of basalt prisms in various shapes. This canyon or “gola”(gorge) can be reached on foot or by elevator, and it is possible to walk along the river bed, wearing rubber boots that can be rented on the site, for a distance of roughly 150 m. Then you will continue towards Castiglione di Sicilia, a little town with medieval urban settings.**

#### **3. ETNA (half-day excursion – 57 km from Giardini Naxos) – 13th July, 2004, afternoon**

*(Equipment/Suggestions:– warm clothing suggested – not advisable for people with cardiac problems and high blood pressure)* –The approximate cost of 56,00 € per person is calculated on a minimum participation of 30 Meeting delegates.

*Rising 3,326 metres into the air, this volcano dominates the entire Ionian coast of Sicily and its mass is so vast that it overshadows all other mountains. The variety of landscapes and vegetation is vast on the side of the volcano. Mt. Etna is the highest active volcano in Europe and we can find, along its slopes, more than 200 craters, formed during the numerous and terrible eruptions of its history.*

Arriving at 1,900 m., you will visit the Silvestri Craters, three extinct craters formed in the XIX<sup>th</sup> century. Then, you can decide either to continue the excursion (weather conditions permitting) by four wheel drive minivan taking you up to 2,700 m or to have some leisure time to take something to drink at a “Caffè” or for shopping.

**Other Places to visit in Sicily** – More detailed information is available on web.site [www.fects2004.it](http://www.fects2004.it)

**Mouth of the River Alcantara** (2 km from Giardini Naxos). The estuary is interesting both for ornithological observations and for vegetation and landscape.

**Acireale** (about 28 km from Giardini Naxos). A very fine place for tourism and thermae, placed on a lava terrace, and rich in works of art and monuments (Cathedral, San Sebastiano church).

**Catania.** (about 36 km from Giardini Naxos). Dominated by Etna, which, with its eruptions and earthquakes has conditioned its history, Catania, now the second city of Sicily, with 500,000 inhabitants, has developed around the urban layout created in the eighteenth century. It is possible to visit the Forum and the Roman

theatre, the Swabian Ursino Castle, the Cathedral, many churches and patrician mansions, and main street Via Etnea.

**Syracuse** (about 110 km from Giardini Naxos) A great and powerful capital of the ancient world, it has an extraordinary architectural and monumental complex: the archaeological area with the splendid Greek theatre, the cathedral, which engulfed the Doric temple of Athena, with Greek columns still visible, the baroque mansions and churches. Among the most modern and best equipped is the archaeological museum.

**Piazza Armerina** (140 km from Giardini Naxos). The great attraction is the Roman farmstead Villa del Casale, one of the most outstanding testimonies of Roman Sicily in the imperial age. Most interesting of all are the various series of beautiful ornamental and figured mosaics which embellish the 40 rooms of the building. One of the floors presents the famous mosaic of ten girls "in bikini". The villa is a Unesco World Heritage Site.

**The baroque of Noto, Ragusa and Modica** (from 150 to 200 km from Giardini Naxos). Sicily is a baroque island. The baroque masterpieces are in Palermo, Catania, Syracuse, Acireale, and everywhere. However, beautiful baroque scenography involving the whole town may be found in Noto, Ragusa Ibla and Modica. Situated 36 km south-west of Syracuse, Noto is the capital of the Baroque in Sicily and Unesco World Heritage Site.

**Messina** (about 47 km from Giardini Naxos). Founded in 730 B.C., the town suffered terrible earthquakes in 1783 and in 1908. The remaining artistic monuments, like the cathedral and Catalani church and the Museum, may suggest the excellence of the town.

**Aeolian Islands** (a full day excursion is needed – 100 km from Giardini Naxos) The "seven sisters" - Lipari, Alicudi, Filicudi, Panarea, Salina, Stromboli and Vulcano – emerge from a crystalline blue cobalt sea. Their natural beauties and their colours are amazing: the luxuriant green of the brushwood, the white of the pumice stone, the black, red and grey of the volcanoes; the beauty of their coasts, the richness of the archaeological sites, covering a period of five thousand years; the unique volcanic phenomena.

**Caltagirone** (about 110 km from Giardini Naxos). Nearly everything in this town speaks the language of majolica. With the Museum of ceramics and many monuments, Caltagirone offers the Scala di Santa Maria del Monte: the stairs (142 steps, all decorated with coloured majolica) were built in 1608.

**Agrigento** (about 212 km from Giardini Naxos) Agrigento is among the most interesting Sicilian cities. In the archaeological zone the remains of 7 temples out of the original ten are standing. Among them, the famous doric temple of Concord.

**Selinunte** (about 325 km from Giardini Naxos). The Greek colony was founded in 650 B.C., destroyed by Carthaginians in 409 B.C., and never rebuilt. The ruins cover a large area, with several temples. Metopes from temples C and E are in the Regional Archaeological Museum of Palermo, and represent stupendous examples of Greek sculpture.

**Palermo** (about 260 km from Giardini Naxos). Palermo, 800,000 inhabitants, the capital city of Sicily, was founded by the Phenicians. Following Roman and Byzantine ages, the Arabs arrived in 831 to make Palermo one of the most important and cultural centres in the Mediterranean basin. After the Norman and Spanish ages, Palermo went through a period of extraordinary splendour in 17<sup>th</sup> c., baroque age. Palermo is full of beautiful monuments. The splendid jewel of the Palace Chapel in the Norman Palace, the superb Norman Cathedral, on pre-existing Byzantine and Arab buildings, the delicious Arab-Norman building of San Giovanni degli Eremiti, the delicate child and female figures of stucco in the baroque "Oratori" of Palermo; the rich 18<sup>th</sup> c. noble palaces, the Archeological Museum: artistic sites the visit to which is highly recommended.

**Monreale**, 7 km from Palermo, the Cathedral of Monreale. This masterpiece was built between 1172 and 1176. The apsidal area is beautiful; inside, the walls are entirely decorated by a splendid series of mosaics which constitutes the most complete cycle of mosaics in the Byzantine tradition. On the right side of the beautiful Monreale Cathedral, an admirably old Cloister is located, intact construction of high artistic level.

**Segesta and Erice** (about 330 km from Giardini Naxos). Segesta and Erice were centres of Elymian civilisation. The main monuments of Segesta are the temple and the theatre, both celebrated as unique masterpieces. Erice, on the summit of a 750 m high mountain, is a town of historical and artistic interest and offers fascinating views.

**Cefalù** (about 230 km from Giardini Naxos). The city, on the Tyrrhenian sea, is located on the slopes of the "Rocca", a giant stone with Byzantine defence structures and megalithic remains. When the Normans took the city in 1063, a period of great splendour began, which culminated in the building of the magnificent Cathedral.

**Travel Information**

**a) Arrival by air**

To reach Giardini Naxos, the Catania International Airport is normally utilised. Catania can be easily reached from most European cities, and by non-stop flights (at present Brussels and Munich, while during last summer London, daily, Dusseldorf and Munich, three times a week) and via Rome or Milan, each one in connection with Catania with twenty daily flights. Airlines operating at the Airport of Catania: Alitalia, Meridiana, Number One, Alpi Eagle, British Airlines, Lufthansa.

Coach services from Catania airport . A special coach service will be organised for delegate transport from Catania Airport to the Congress Centre on Friday 9<sup>th</sup> July, 2004 and for transferring from the Congress Centre to Catania Airport on Tuesday 13<sup>th</sup> July, 2004 (Three departures will be organised. Please visit the web site in order to know the time of departure). However, public coach services regularly connect the airport and the city of Taormina, with a stop at Recanati, 200 m from the Congress Centre (about 50 km, journey of about 1 hour: departure time from the airport during last summer : from 7 to 9.45, every 30 minutes; from 9.45 to 19.45 every 60 minutes. Fares: 4.70 €. Departure time from Recanati: at 6.50, and every 60 minutes from 8.20 to 21.20 Fares: 4.70 €.).

For detailed information go to <http://www.etnatrasporti.it>;

Other possible airports are Palermo airport in Sicily (260 km distant: see connections by train, by coach and by car) and Reggio Calabria airport (with coach or hydrofoil connection with Messina, 50 km from Giardini Naxos: see connections by train, by coach and by car)

**b) Arrival by train**

Giardini-Naxos may be reached by train from Rome (journey about nine hours). Trains connect Messina ( 47 km) and Catania ( 45 km) to Taormina-Giardini Naxos railway station. The Taormina-Giardini Naxos railway station is a long way from the Congress Centre: coach services may be used connecting Taormina and Giardini Recanati (Congress Centre) every 20 minutes. Furthermore, from Taormina-Giardini Naxos Railway Station, as well as from Catania Railway Station, the Congress Centre may be reached by using the same coach service mentioned before from Catania airport to Taormina: departure time from Taormina-Giardini Naxos railway station: 10 minutes before the departure time from Recanati; departure time from Catania (Coach station in front of Railway Station) 15 minutes after departure time from the airport.

**c) Arrival by coach**

Coach services connect via motorway Rome and Taormina, Messina and Taormina, Catania and Taormina (see “Coach services from Catania Airport”) and Palermo and Taormina (via Catania).

Go to <http://www.etnatrasporti.it>; <http://www.saisautolinee.it>;

**d) Arrival by car**

Giardini-Naxos is connected by A18 motorway from Messina (50 km) to Catania (40 km).

Messina (ferry-boat to Villa San Giovanni) is connected by A3 motorway with Naples (500 km), and by motorway A1 with Rome (700 km) and Milan (1200 km). Catania is connected by A19 motorway with Palermo (200 km). Ferry-boat lines exist between Palermo and Genoa and Palermo and Naples.

**XIXth FECTS MEETING – Taormina-Giardini Naxos, 9-13 July 2004**  
**REGISTRATION & ACCOMMODATION FORM**

To be used only when submission on line is absolutely impossible  
 Make a copy to submit – Please type or use capital letters

**REGISTRATION**

First name..... Family name..... Title.....  
 Affiliation .....  
 Address.....  
 City..... Postal code..... Country.....  
 Tel. .... fax..... e-mail.....  
 Accompanying person(s): number.....  
 Invoice to .....

**REGISTRATION FEES AND SOCIAL EVENTS**

		N. persons	Euro
Early registration before 15th March, 2004	290 €	.....	.....
Late registration after 15th March, 2004	350 €	.....	.....
Student early registration before 15th March, 2004	180 €	.....	.....
Student late registration after 15th March, 2004	230 €	.....	.....
Accompanying Person	60 €	.....	.....
<u>Social events</u> : Conference Dinner: 58,00 €		.....	
<u>Accompanying persons tours</u> : Mount Etna, 56,00 €		.....	
.....			
	Alcantara gorges, 31,00 €	.....	

**ACCOMMODATION**

Date of arrival .....date of departure..... Number of nights.....  
 Hotel 1<sup>st</sup> choice: name..... Hotel 2<sup>nd</sup> choice: name.....  
 Type of room required:  
 single: n..... Double single use: n..... Double: n.....other: type.....n. ....

- Hotel deposit (see pages 10 and 11 for the required payment to book accommodation) ..... €

TOTAL AMOUNT DUE (Registration, Social events and Accommodation booking) .....€

**METHODS OF PAYMENT**

- by Bank Transfer. See account details at page 8. Please enclose bank transfer copy  
 Note: please add to the total amount due bank expenses both ends (covering originating and receiving bank charges).
- by Credit Card (American Express, Visa, Eurocard, Mastercard)  
 Note. Please add a surcharge of 5% to payment by credit card

Please charge my American Express , Visa , Eurocard , Mastercard  
 card n.....exp date..... Card Holder.....  
 For the total amount (comprehensive of 5% surcharge) .....€

----- (signature)