ANNUAL REPORT

2011
INDEX

1  PRESIDENT’S FOREWORD.............................................................................................................. 3
2  INTRODUCTION TO THE FFN: ITS MISSION AND VISION ...................................................... 4
   2.1  FFN’S PURPOSE ......................................................................................................................... 4
   2.2  FFN’S AIM IS ............................................................................................................................. 5
   2.3  MISSION STATEMENT .............................................................................................................. 5
3  FFN IN FIGURES ............................................................................................................................. 6
   3.1  FINANCIAL REPORT ................................................................................................................. 7
4  EXPERTS MEETING ........................................................................................................................ 8
   4.1  REPORT ..................................................................................................................................... 8
5  ACTIVITY REPORT .......................................................................................................................... 12
6  INDUSTRY PARTNERS ..................................................................................................................... 13
7  MEMBERSHIP STATISTICS .............................................................................................................. 14
8  THE BOARD AND COMMITTEE CHAIRS IN 2011 ..................................................................... 16
   8.1  EXECUTIVE COMMITTEE ......................................................................................................... 16
   8.2  SCIENTIFIC COMMITTEE ....................................................................................................... 16
   8.3  NOMINATIONS COMMITTEE .................................................................................................. 17
1 President’s foreword

Dear Members, Dear Colleagues,

FFN Fragility Fracture Network has been successfully established on August 18, 2011 after considerable amount of preparatory work.

In July 2011 the first Strategic Roundtable was organized in Berlin, Germany and a first milestone for the partnership with industrial partners and the Corporate Advisory Council was set. FFN greatly appreciates the support of the first industrial partners: Lilly, Medtronic, MSD and OTC. The Strategic Roundtable was followed by the FFN Experts Meeting in September, also organized in Berlin, at which 100 people gathered, from all relevant disciplines and all global regions. The presentations were uniformly excellent, the discussion was lively and nobody was left in any doubt that a multidisciplinary Network like FFN has tremendous power to change things for the better.

The key to making the 1st FFN Global Congress a success has been to promote at as many meetings as possible, to give people time to make plans to come to Berlin. The FFN Board promoted the Network in Beirut, Lebanon with Prof. Ghassan Maalouf. In China FFN was promoted at the Congress of the Chinese Orthopaedic Association, together with Prof. Wolfhart Puhl and Prof. Lars Lidgren.

We are looking forward to further develop the Network together with our members and our partners in order to reach out into the world.

Yours sincerely,

David Marsh
Emeritus Professor of Clinical Orthopaedics, UCL
Chairman, UK Arthritis and Musculoskeletal Alliance
International Ambassador for the Bone and Joint Decade
President of the Fragility Fracture Network
2 Introduction to the FFN: its mission and vision

FFN - A Global Network to Improve Fragility Fracture Management and Prevention

2.1 FFN's Purpose

1) To promote globally the optimal multidisciplinary management of the patients with a fragility fracture, including secondary prevention;

2) To arrange international conferences and exchanges among experts and related parties interested in fragility fracture matters;

3) To promote training activities for health care professionals in the fields of osteoporosis fractures;

4) To create or identify and circulate guidance documents and standards of care in the field of fragility fractures;

5) To promote research aimed at better treatment of osteoporosis, sarcopenia and fracture

6) To promote education and information for the public in the fields of osteoporosis, risk of falls and fragility fractures;

7) To promote policy change to enhance the prevention and treatment of fragility fractures at national and international levels;

8) To collaborate with other organisations as necessary to achieve the goals of the FFN;

9) To undertake or support any other activity which may accelerate medical progress in areas relevant to fragility fractures;
2.2 FFN's aim is

- To disseminate globally the best multidisciplinary practice in preventing and managing fragility fractures
- To promote research aimed at better treatments of osteoporosis, sarcopenia and fracture
- To drive policy change that will raise fragility fracture higher up the healthcare agenda in all countries

2.3 Mission Statement

- We make sure that fragility fracture patients get appropriate surgical and nonsurgical treatment, follow-up management and prevention.
- We encourage the development and implementation of clinical pathways from evidence-based guidelines.
- We encourage education and support for people who have sustained fragility fractures.
- We encourage educational opportunities for all professionals involved in the care of the patient with fragility fractures.
- We encourage research to improve the management of the patient with fragility fractures form basic biology and technology to rehabilitation.
- We will undertake global educational activities and scientific exchange to achieve these goals.
3 FFN in figures

Establishment on August 18, 2011

75 Members from 7 Disciplines

1 Experts Meeting

102 Participants in the Experts Meeting

15 Board Members

1 Strategic Roundtable
3.1 Financial report

In 2011 the network noted incomes of membership fees of EUR 450.00 and a donation of OTC Foundation of EUR 7’560.00. For the FFN Experts Meeting a sponsorship of Lilly of EUR 38’291.22, of MSD of 9’729.27 and of Medtronic of EUR 7’658.24 was received.

The expenses for the network compose of EUR 17’155.90 for the central office fees and of EUR 2’738.25 for legal expenses and banking expenses. The expenses for the FFN Experts Meeting compose of EUR 24’086.36 for travel support of the faculty, of EUR 6’159.75 for the venue, of EUR 9’350.78 for the social evening and of EUR 2’740.00 for hotel expenses.

Overall, the total income was EUR 69’153.76 and the total expense was EUR 65’197.96, thus producing a profit of EUR 3’955.80.
4 Experts Meeting

September 8 - 9, 2011

Berlin, Germany

100 people from all relevant disciplines and all global regions attended the first FFN Experts Meeting 2011 in Berlin. The presentations were uniformly excellent, the discussion was lively and nobody was left in any doubt that a multidisciplinary network like the FFN has tremendous power to change things for the better!

(David Marsh, President FFN)

4.1 Report

Introductory session

Karsten Dreinhöfer (Germany) welcomed participants; and David Marsh (UK) explained the background to the FFN initiative.

Following on from the work of the Bone and Joint Decade, FFN would bring together the many interest groups and initiatives seeking to meet the growing challenge of fragility fractures; and would seek to:

- disseminate globally the best multidisciplinary practice in preventing and managing fragility fractures
- promote research aimed at better treatments of osteoporosis, sarcopenia and fracture
- raise fragility fractures higher up the healthcare agenda in all countries

Like the BJD, FFN would catalyse change and target policy as well as education and research; would not duplicate existing national and international organisations; and would emphasise partnership. Target membership would include orthopaedic surgeons, geriatricians, osteoporosis experts, nurses, scientists and industrial partners.

Themes would include perioperative management (stressing co-management by surgeons and geriatricians), surgery in osteoporotic bone, rehabilitation, secondary prevention, and policy change at national level in service provision for treatment and prevention.

Anthony Woolf (UK) outlined the global challenge of fragility fractures, the associated burden of disease – in terms of its costs to society and its impact on individual patients – and the vast predicted increases in incidence especially in developing countries. The need to optimise care and prevention was clear. Barriers to be overcome included resource constraints, limits of current knowledge, varying access to services, and resistance at national level to appropriate policy prioritisation.

Session 1: Burning research questions in fragility fractures

How can we improve the feeling of fractures in elderly, osteoporotic patients? Franz Jakob (Germany) described current understanding of osteoporosis as a polygenic condition with over 150 candidate genes, and one which also reflected systemic ageing changes in tissue maintenance and regeneration. The interaction of recently elucidated regulators and inhibitors of bone formation and healing now raised the possibility of therapeutic interventions to preserve or restore effective bone mass. These included active antagonists and anti-sclerostin agents currently under evaluation in clinical trials. In discussion, bisphosphonate-related problems – including the inhibition of fracture healing by high-dose therapy; and the increasingly clear association with atypical fractures – were noted; along with cautious optimism about new products currently under development or evaluation.
How can we treat sarcopenia and prevent falls?
Finbarr Martin (UK) addressed the changing view of sarcopenia: its nature, importance and relevance to falls. The concept was recent (1989) and included neuronal loss, loss of muscle mass, and greater loss of fast than of slow fibres. Fat content increased, loss of strength was disproportionate to loss of mass, tendon contractility was reduced, and muscle action poorer. Loss of power affected grip and stands, and falls risk rose — though the transition to falls and disability was multifactorial. A recent EUGMS consensus on definition identified reduced muscle mass and either reduced strength or function. In discussion, it was recognised that the science of sarcopenia remained emergent; that underlying age-related factors and specific syndromes (e.g. metabolic syndrome) might contribute; that further work was required on definition and staging; that research on animal models was in progress; and that further research would elicit greater understanding of the specifics of the condition and pave the way for interventions.

How can we treat osteoporosis and improve bone strength?
Adolfo Diez-Perez (Spain) reviewed current treatment options, recognising the central role of the bisphosphonates in improving bone strength and reducing fracture risk. The problem of bisphosphonate-associated atypical fractures was acknowledged – though these remained rare, and “many more fractures were averted than were created”. In discussion, the problem of poor compliance was recognised as the main limitation on the effectiveness of bisphosphonate therapy; that atypical fracture risk rose with dose and duration of treatment and occurred disproportionately in Orientals; and that arguably all fragility fractures might receive vitamin D for its many effects and its probable synergy with bisphosphonate therapy.

Session 2: Rehabilitation after fragility fracture
Sarcopenia – the basis for frailty, and the timing of strength and balance training
Klaus Hauer (Germany) addressed the concept of frailty; falls and motor performance; falls and frailty; and specifically the role of exercise in treatment. The concept of frailty included overlap between disability, comorbidity, reduced metabolic rate, and declining muscle mass. With ageing, loss of strength proceeded at around 10 to 15% per decade, with a higher proportion of maximum effort required to do less. The effect of strength training could be dramatic – gains of up to 70% – but was critically dependent on sustained compliance. With appropriate encouragement and support, even cognitively impaired patients could benefit. Successful interventions required specific endpoints; identified target populations; specific training methods; and an acceptance of the risks of training along with its benefits. In a wide-ranging discussion, nutritional issues were raised; the need for a simple falls assessment for use in Fracture Liaison Services was noted; and – given the range and complexity of the various factors contributing to falls – the role of FFN in bringing the relevant expertise together was recognised.

Models of rehabilitation after fracture surgery
Jes Lauritzen (Denmark) noted the variability in provision and quality of rehabilitation after fracture surgery, and the extensive but not particularly conclusive relevant published literature. A limited number of randomised controlled trials included problems concerning the nature and treatment of the control groups. Such trials were also context-specific, with consequent limitations on their generalisability. However, there was general support for geriatrician/orthopaedic involvement, and anecdotal support for system reform leading to comprehensive multidisciplinary and collaborative care (“The new program didn’t save people; the old program killed them”). The recognition of depression and its treatment in fracture rehabilitation was noted, though it was pointed out that “progress is the best treatment for depression”.

The handover from secondary care into the community
Kwok Sui Leung (Hong Kong) reported on substantial achievements in Hong Kong in the improvement of community provision following fragility fracture. A post-operative assessment determined whether post-acute inpatient rehabilitation was required or whether the patient could proceed home straight away. For patients going straight home, the service provided included a seamless handover from hospital to community care; active continuing rehabilitation and education; support and education for family carers; and attention to secondary prevention – for falls prevention and assessment and treatment of osteoporosis. Such care was delivered by dedicated teams including orthopaedic surgeons, family physicians, and AHPs. This teamwork, delivered on the basis of strong evidence-based protocols, had produced substantial improvements in terms of reduced length of hospital stay, reduction of falls, and measurable increases in muscular power. Discussion reflected broad admiration for such a service.

Session 3: Peri-operative care of fragility fracture patients
Peri-operative management priorities and models of the geriatric care
Robert McCann (USA) described developments in fragility fracture care in Rochester, NY. Previous care reflected a ‘craft model’ of non-standardised and fragmented care, with poor communication, reluctant collaboration and mediocre patient optimism for surgery. Service re-provision focused on early surgery, co-management by surgeon and geriatrician, protocols to reduce variance in care, and early planning of rehabilitation and discharge. Assessment included a comprehensive geriatric assessment, and preoperative care by protocol facilitated early surgery, with 90% of patients now waiting less than 24 hours. Protocols, however, were not rigid: ‘they work 80% of the time for most patients’; and discussion of goals of care with patients and families was routine. Length of stay and readmission rates had been reduced, as had the incidence of delirium. In discussion, the importance of the change of culture involved – from previous fragmentation to collaboration, standardisation and patient-focus was emphasised.

Peri-operative nursing management priorities
Karen Hertz (UK) reported on the organisation of the nursing contribution to fragility fracture care in a trauma unit admitting more than 200 cases of hip fracture a year. Orthopaedic staffing was adequate, but only minimal ortho-geriatric input was available. Two senior nurses working 12-hour shifts provided coordination of patient-focused care for trauma patients in both the pre-operative and the later stages of care, making use of care pathways to prompt standardised care, and advance discharge planning to facilitate early return home. National Hip Fracture Database participation had proved useful in monitoring performance indicators in a hard-pressed service. Discussion covered key nursing issues such as pain control, communication with patients and families, and palliative care.
Prevention of acute delirium
Manuela Pretto (Switzerland) described a nurse-led program for the identification and management of delirium, which occurs in around one third of older fracture fracture patients; prolongs length of stay; makes complications more likely; and increases the risk of nursing home admission. Characteristic features include acute change of mental status, fluctuating course, inattention, and disorganised thinking with altered consciousness. While admitted states are well-recognised, the hypoaemic form of delirium, though equally serious, is often missed. A nurse training initiative had improved the early recognition of delirium and also its appropriate management, which was supportive, and included the identification and management of precipitating medical factors. In discussion, it was agreed that physical restraint was almost never necessary.

Could hip fracture databases raise standards globally?
Colin Currie (UK) outlined the rise of hip fracture audit from ‘Rikshoft’ in Sweden in the 1980s. More recently, the UK National Hip Fracture Database, launched in 2007, had used the synergy of audit, standards and feedback to improve hip fracture care in the UK. With all eligible hospitals participating and around 80% of cases occurring now being documented, continuous improvement in fracture care standards – prompted admission to orthopaedic care; early surgery; prevention of pressure ulceration; geriatrician involvement in care; and secondary prevention addressing osteoporosis care and falls prevention – had improved nationally over 2008-2011. Three-year trends in the care of more than 30,000 patients in 28 hospitals with good case ascertainment had shown a fall in 30-day mortality from 9.4% to 8%. International interest had grown, with developments in both New Zealand and Australia. International hip fracture audit now offered a common language to describe case mix, care and outcomes; the possibility of international comparisons; and a platform for international research. Discussion covered the practicalities of setting up national audits, and the need for locally adopted standards.

Session 4: Reliable systems for secondary prevention
Health economics of secondary prevention, and effective advocacy to create systems
Alastair McLellan (UK) reported on the development of a highly successful Fracture Liaison Service in Glasgow. Prior to its development few fracture patients had access to secondary prevention; responsibilities were divided; and services were slow. A new strategy, based on the ‘Three I’s’ – Identify, Investigate, Intervene – had resulted in a comprehensive Fracture Liaison Service staffed by nurses (8.5 FTEs) and covering a population of 1.4 million with around 10,000 new fractures/year. Evaluation showed that, for every thousand fracture patients assessed, 18 fewer fractures occurred, with 266 bed days saved, and a £21k reduction in fracture care costs. However, currently only c. 30% all UK fracture units have access to FLS services; and the challenge now is to generalise the implementation of a model of secondary prevention with demonstrable efficacy and cost-effectiveness.

In discussion, a comparable Kaiser initiative, Healthy Bones, was noted; and the importance of promoting compliance with medication emphasized. It was recognised that comparable efficacy and cost effectiveness in falls prevention had so far proved difficult to demonstrate.

The work of the IOF, ASBMR, EULAR/EFORT in secondary prevention
Kristina Åkesson (Sweden) described the development of international interest in osteoporosis – covering the 1994 WHO definition of osteoporosis, the advent of effective treatment with the bisphosphonates, and the levelling-off of the increase in hip fracture in the developed countries. These developments had prompted the rise of a range of relevant organisations, including the IOF, ASBMR, EULAR/EFORT, ISFR and others; all with a substantial common interest in fragility fracture; varying in their professional composition and geographical spread; and in their relative emphasis on prevention, surgical treatment, collaborative management, relevant basic science, educational activities and policy activism. All had proved to be viable and, in their contexts, relatively effective. In discussion, it was noted that industry funding was a feature common to all; that competition for industry funding was inevitable; and that propriety in relations between industry and the organisation was essential, and largely respected. In that broad and possibly complex context, the FFN might best go forward in co-operation with other organisations, recognising that their roles were largely complementary, and that the FFN’s unique features – its emphasis on broad multi-disciplinarity and on the development, promotion and implementation of policy at national level – would be seen as unique and lead to productive collaboration with other organisations.

Nutrition and exercise in rehabilitation and prevention after fracture
Heike Bischoff-Ferrari (Switzerland) described the three non-pharmaceutical ‘pillars’ of rehabilitation and prevention, namely vitamin D, protein supplementation, and exercise. While high vitamin D deficiency in the form of osteomalacia led to obvious symptoms – such as bone pain, fractures, muscle pain, waddling gait and falls – these was now no longer commonly seen. However, given the wide range of vitamin D effects on bone, muscle and elsewhere, supplementation was increasingly seen as useful, with even lower-dose vitamin D in some studies producing useful (20%) reductions in fracture risk; and higher doses even more substantial (39%) risk reduction. Since fast-fibre muscle activity is reduced by vitamin D deficiency, and numbers of vitamin D receptors fall with age, the case was made for a routine use of higher dose vitamin D in the pre-frail elderly population with declining function. A study of this had now been commissioned. In terms of the other two ‘pillars’, even modest (20g/day) protein supplementation was useful; and the role of exercise in reducing falls was noted.

Session 5: Surgery of fragility fractures
The work of the Osteosynthetic and Trauma Care Foundation
Jean Marc Feron (France) outlined the mission of Osteosynthetic and Trauma Care Foundation (OTCF) as research, education and humanitarianism and identified fragility fractures as a key focus. Originally established as a Foundation by Stryker there are now 21 country chapters offering an extensive international network of surgeons, a range of educational experiences including cadaveric courses, leadership fora, regional meetings and educational fellowships.

The work of AO Trauma
Stephen Kates (USA) explained that AO Trauma also focused on research and education but had invested in providing high quality learning experiences to surgeons across the world. To further a team approach from admission to completion of rehabilitation AOT has developed an innovative multidisciplinary course on frailty
females which geriatricians and orthopaedic surgeons from across the world attend. They have recently established a journal Geriatric Orthopedic Surgery and Rehabilitation which allows dissemination of new innovations.

Session 6: Achieving policy change

Getting Policies changed

Lyn March (Australia) described her work in implementing a Fracture Liaison service in NSW, Australia, in 2008. After recognising that only 20% of people who require treatment for a fracture receive it, and 80% receive suboptimal care, her team embarked on a campaign to improve the system. After making approaches to national and local bodies she has found that successful approach had been to develop a "refracture prevention model of care" and promote it as a solution for achieving better health outcomes and improved bed utilisation. Using administrative hospital data her team was able to demonstrate that from a sample of people over 50 who presented with any initial fracture it could be shown that 35% refractured and that these refractures resulted in the use of 16,225 beds days per year. Getting health services to recognise a fracture as a sentinel event and an indicator of a poor health service was a key to achieving change. Similarly, ensuring that health service managers view fragility fractures as a chronic disease rather than a single accident is difficult but essential.

In discussion it was noted that changing policy required hard data and a multidimensional approach, and was helped by a "journalism approach" with a mix of key messages and dire warnings. The key messages emerging were 1) when we engage with policy makers we need to not just share the problem but provide the solution and possibly multiple solutions; 2) the message may have to be tailored to the priorities of the health service e.g. in some cases reducing hospital admissions and bed days, in some cases implementing evidence-based practice and optimal patient quality of life; 3) the use of local data with clear information tailored to the local needs was essential.

Health economics of treatment of vertebral compression fractures

Oskar Ström (Sweden), taking work on the health economic evaluation of vertebral compression fractures as an example, outlined why including health economic arguments were critical to achieving changes in services and clinical models. Health economics – a mix of medical sciences and social science – provides tools to improve resource allocation, and recognises that economic incentives can be used to change behaviours and improve the quality of care. Examples of questions where this approach is useful are: Can we quantify health in an area, and what is its value? What type of payment models achieve high quality of care? And what are the budget impacts of varying organisations of health care institutions? Health economics addresses not only cost reduction but the maximisation of health gain within budget by informing choices; and health gains have economic value that may offset increased costs – an understanding that can support strategies achieving that added value.

In discussion difficulties were described in introducing best practice when – as currently in Ireland – massive cuts in health budgets had occurred and short-term savings took priority over investments for future improvements. More positively, the concept of “sharing the risk” might encourage health systems to incentivise cost-effective fracture prevention rather than simply provide additional payments for new events. Such “closed systems”, where the budget covers total care rather than just acute care – and therefore discourages rapid admissions and discharges and high readmission rates – might transform both care and cost effectiveness. Cross-national analyses of outcomes in varying health systems may offer clues to best practice.
## 5 Activity report

<table>
<thead>
<tr>
<th>Month</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>July</td>
<td>Strategic Roundtable Berlin, Germany</td>
</tr>
<tr>
<td>August</td>
<td>Establishment of FFN</td>
</tr>
<tr>
<td>September</td>
<td>FFN Experts Meeting</td>
</tr>
<tr>
<td>September</td>
<td>1st General Assembly</td>
</tr>
<tr>
<td>September</td>
<td>1st Board Meeting</td>
</tr>
<tr>
<td>October</td>
<td>1st Executive Committee Conference Call</td>
</tr>
<tr>
<td>October</td>
<td>Annual Networking Meeting, BJD Beirut, Lebanon</td>
</tr>
<tr>
<td>October</td>
<td>2nd Executive Committee Conference Call</td>
</tr>
<tr>
<td>November</td>
<td>Planning of growth in members – Board members promote FFN in China, Australia and in South Korea,</td>
</tr>
<tr>
<td>November</td>
<td>2nd Board Conference Call</td>
</tr>
<tr>
<td>December</td>
<td>Congress program 2012 is in planning phase</td>
</tr>
<tr>
<td>December</td>
<td>Annual Orthopaedic Congress: EFORT – FFN Joint Session Beijing, China</td>
</tr>
<tr>
<td>December</td>
<td>3rd Board Conference Call</td>
</tr>
<tr>
<td>December</td>
<td>3rd Executive Committee Conference Call</td>
</tr>
<tr>
<td>December</td>
<td>Planning of 1st FFN Newsletter</td>
</tr>
</tbody>
</table>
6 Industry Partners

FFN appreciates greatly the support of the industry partners.

Main Sponsor

Regular Sponsors

Lilly

Medtronic

MSD

CTC

Osteosynthesis & Trauma Care Foundation
7 Membership statistics

FFN counts 75 members in 2011.

Nationalities of members (total of 75 members)

- United Kingdom, 10
- Germany, 12
- Italy, 9
- USA, 4
- Japan, 4
- Australia, 4
- Switzerland, 3
- Sweden, 3
- Spain, 3
- Norway, 3
- Netherlands, 3
- Hong Kong, 3
- Brazil, 2
- Turkey, 1
- Thailand, 1
- Slovenia, 1
- New Zealand, 1
- Lebanon, 1
- Ireland, 1
- France, 1
- Denmark, 1
- China, 1
- Austria, 1
- Finland, 1
- Canada, 1

FFN Central Office, c/o MCI Schweiz AG
Flughofstr. 54, 8152 Glattbrugg, Switzerland
T: +41 44 809 42 80; F: +41 44 809 42 01
www.ff-network.org; ff-network@mci-group.com
Disciplines of members (total of 75 members)

- Orthopaedic Surgeon, 41
- Geriatrician, 18
- Scientist, 5
- Osteoporosis doctor, 4
- Industry, 4
- Nurse, 2
- Radiologist, 1

0 5 10 15 20 25 30 35 40 45
8 The board and committee chairs in 2011

The FFN Board is built by the Executive Committee, the Scientific Committee and the Nominations Committee.

8.1 Executive Committee

David Marsh, United Kingdom, Orthopaedic Surgeon  President
Adriana Braga de Castro Machado, Brazil, Geriatrician  Vice-President
Karsten Dreinhoefer, Germany, Orthopaedic Surgeon  Congress Chair
Denise Greene, USA, Nurse  General Secretary
Lyn March, Australia, Osteoporosis Doctor  Treasurer
Maria Crotty, Australia, Geriatrician  Scientific Committee Chair
Earl Bogoched, Canada, Orthopaedic Surgeon  Nominations Committee Chair

8.2 Scientific Committee

Maria Crotty, Australia, Geriatrician  Scientific Committee Chair
Ghassan Maalouf, Lebanon, Orthopaedic Surgeon  Scientific Committee Vice Chair
Peter Augat, Germany, Scientist  Scientific Committee Member
Ami Hommel, Sweden, Nurse  Scientific Committee Member
Hiroshi Hagino, Japan, Orthopaedic Surgeon  Scientific Committee Member
8.3 Nominations Committee

Earl Bogoch, Canada, Orthopaedic Surgeon  
Nominations Committee Chair

Finbarr Martin, United Kingdom, Geriatrician  
Nominations Committee Member

Alistair McLellan, United Kingdom, Osteoporosis Doctor  
Nominations Committee Member

Umberto Tarantino, Italy, Orthopaedic Surgeon  
Nominations Committee Member

Suthorn Bavonratanavech, Thailand, Orthopaedic Surgeon  
Nominations Committee Member
Thanks to the Founding Members for their support and the constitution of FFN (Fragility Fracture Network):

Prof. Kristina Akesson
Prof. Karsten Dreinhöfer
Prof. Lars Lidgren
Prof. Ghassan Maalouf
Prof. Wolfhart Puhl
Prof. Anthony Woolf

Annual Report 2011

FFN Central Office, c/o MCI Schweiz AG
Flughofstr. 54, 8152 Glattbrugg, Switzerland
T: +41 44 809 42 80; F: +41 44 809 42 01
www.ff-network.org; ff-network@mci-group.com