

# DO-HEALTH:

## A European study to support healthy ageing

Vitamin D3-Omega3-Home Exercise - HeALTHy Ageing and Longevity Trial



### DO-HEALTH Recruitment Centers:

University of Basel (Prof. R.W. Kressig/ PD N. Suhm), University of Geneva (Prof. R. Rizzoli),  
Toulouse University (Prof. B. Vellas), Charité Berlin (Prof. D. Felsenberg),  
University of Erlangen-Nuremberg (Prof. C. Sieber), Innsbruck University (Prof. M. Blauth),  
University of Coimbra (Prof. J. da Silva), University of Zurich (Prof. H.A. Bischoff-Ferrari)

### Principal Investigator and Coordinator:

Prof. Heike A. Bischoff-Ferrari  
Zurich University Hospital and City Hospital Waid, Zurich, Switzerland

## New study to assess three simple, cost-effective strategies to promote healthy ageing

### *Multinational study to assess benefits of vitaminD3, omega3 and home exercise on prevention of chronic diseases in the elderly*

February 3, 2012  
Zurich, Switzerland

In Europe, the number of seniors aged 70 and over will increase by 40% in the next 20 years, while those aged 80 and over will more than double<sup>1</sup>. Health authorities and the medical community expect a corresponding increase in the number of people suffering costly and debilitating age-related chronic diseases such as osteoporosis, arthritis, heart and lung diseases and dementia.

The significant increase in the numbers of people suffering age-related chronic diseases is expected to have serious social and health-economic repercussions across Europe – unless effective prevention strategies are put in place.

A new international study announced **today** by the University of Zurich hopes to provide definitive evidence that three effective, affordable and safe measures can be taken to significantly reduce the burden of chronic diseases in the elderly. The DO-HEALTH study (VitaminD3-Omega3-Home Exercise-Healthy Ageing and Longevity Trial) will be Europe's largest healthy ageing study. It expects to provide solid evidence for the efficacy and safety of three simple preventive interventions: vitamin D, omega-3 fatty acids and a simple home exercise program.

Prof. Bischoff-Ferrari, Director of the Centre on Aging and Mobility of Zurich University and DO-HEALTH Principal Investigator said "Various studies have shown that vitamin D and simple targeted exercise programs can significantly improve functional mobility and reduce falls and fractures in seniors, even by up to 30%. As well Omega 3 provides significant health benefits to seniors. DO-HEALTH hopes to provide definitive evidence that the three interventions, alone or combined, are able to reduce the number of fractures, the functional and cognitive decline, the risk of hypertension and the risk of infections in the senior population".

Additionally, the study will measure several other important parameters, such as the severity of knee pain in patients with osteoarthritis, the ability to carry out daily life activities and the participants' general quality of life.

DO-HEALTH will start recruiting seniors in five European countries as of May 2012 and will observe more than 2,000 healthy-at-start community-dwelling seniors, aged 70 and older, for three years. Participants' follow-up will be in-person and in quarterly intervals, including yearly clinical visits. Participants will be recruited at the University of Zurich, Basel, Geneva, Toulouse, Innsbruck, Nuremberg, Coimbra and the Charité in Berlin.

Professor René Rizzoli, Board Member of the International Osteoporosis Foundation and Head of the Division of Bone Diseases, Department of Medical Specialties, Geneva University Hospitals and Faculty of Medicine, stated, “The findings of this important new study may provide the critical evidence that will result in the implementation of simple, cost-effective strategies and medical recommendations to help tackle the growing burden of chronic diseases in Europe’s senior population. Health authorities must do all they can to ensure that senior citizens remain physically independent and active members of the community”.

1.ref.

<http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/05/96&format=HTML&aged=0&language=EN&guiLanguage=en>

ENDS

*The launch of DO-HEALTH will take place on Friday February 3 at the University of Zurich at the occasion of a Symposium for the public and health professionals, 13:30 to 17:00.*

Contact: DO-HEALTH coordinator at [claudia-vittori@do-health.eu](mailto:claudia-vittori@do-health.eu)

#### **About DO-HEALTH**

DO-HEALTH (VitaminD3-Omega3-Home Exercise-Healthy Aging and Longevity Trial) is a randomized double-blind placebo-controlled multicenter trial which will study 2000 healthy-at-start community dwelling seniors aged 70 and older. DO-HEALTH will test the efficacy and safety of three preventive interventions: vitamin D, omega-3 fatty acids and a simple home exercise program. The study is funded by the European Commission, within the European 7th Framework Program for Research and Technological Development, as well as through private sponsors that are co-funding the trial. For further information contact Claudia Vittori, DO-HEALTH coordinator at [claudia-vittori@do-health.eu](mailto:claudia-vittori@do-health.eu)

#### **About IOF**

The International Osteoporosis Foundation (IOF) is a non-profit, nongovernmental umbrella organization dedicated to the worldwide fight against osteoporosis, the disease known as “the silent epidemic”. IOF’s members – committees of scientific researchers, patient, medical and research societies and industry representatives from around the world – share a common vision of a world without osteoporotic fractures. IOF now represents 199 societies in 93 locations. <http://www.iofbonehealth.org>

## Neue Studie zur Beurteilung dreier einfacher, kosteneffektiver Strategien um gesundes Altern zu fördern

### *Multinationale Studie zur Beurteilung der Benefits von Vitamin D3, Omega3 und Trainingsübung zu Hause auf chronische Erkrankungen bei Senioren*

03. Februar 3, 2012  
Zürich, Schweiz

In Europa wird sich die Anzahl an Senioren im Alter über 70 Jahren und darüber in den nächsten 20 Jahren um 40% erhöhen, während die Anzahl der Personen mit einem Alter über 80 Jahren und älter sich mehr als verdoppeln wird.<sup>2</sup> Gesundheitsbehörden und die Ärzteschaft erwarten eine entsprechende Zunahme der Anzahl von Menschen, die an kostenintensiven und schwächenden alters-assozierten chronischen Erkrankungen wie Osteoporose, Arthritis, Herz- und Lungenerkrankungen und Demenz leiden.

Durch die signifikante Zunahme der Anzahl an Menschen, die an einer alter-assozierten chronischen Krankheit leiden, wird vermutet, dass dies ernsthafte soziale und gesundheits-ökonomische Auswirkungen durch ganz Europa haben wird – sofern nicht effektive Präventionsstrategien eingeführt werden.

Eine neue internationale Studie, welche **heute** vom Universitäts-Spital Zürich bekannt gegeben wurde, hofft die eindeutige Evidenz aufzeigen zu können, dass drei effektive, erschwingliche und sichere Massnahmen unternommen werden können, um die kostenmässige Belastung durch chronischen Erkrankungen bei Senioren signifikant zu reduzieren. Die **DO-HEALTH** – Studie (VitaminD3-Omega3-Home Exercise - Healthy Ageing and Longevity Trial) wird Europa's grösste Studie über gesundes Altern sein. Sie erwartet, zuverlässige Evidenz über die Effektivität und Sicherheit von drei simplen Präventions-Interventionen liefern zu können: Vitamin D, Omega-3-Fettsäuren und einem einfachen Trainingsprogramm, welches zu Hause durchgeführt wird.

Prof. Bischoff-Ferrari, Direktorin des Zentrums für Alter und Mobilität der Universität Zürich und Principal Investigator von **DO-HEALTH** sagte: "Mehrere Studien haben gezeigt, dass Vitamin D und einfache gezielte Trainingsprogramme die funktionale Beweglichkeit verbessern können und Stürze als auch Knochenbrüche bei Senioren signifikant verringern, sogar um bis zu 30%. Auch Omega-3 bringt signifikante gesundheitliche Vorteile für Senioren. **DO-HEALTH** hofft die zuverlässige Evidenz liefern zu können, dass diese drei Interventionen, alleine oder kombiniert, in der Lage sind, die Anzahl an Frakturen, den funktionellen und kognitiven Rückgang und das Risiko von Bluthochdruck sowie das Risiko für Infektionen in der älteren Bevölkerung zu reduzieren."

Des Weiteren wird die Studie verschiedene andere wichtige Parameter messen, wie die Intensität von Knieschmerzen bei Patienten mit Osteoarthritis, die Fähigkeit, Aktivitäten des täglichen Lebens ausführen zu können, und die allgemeine Lebensqualität der Teilnehmer.

**DO-HEALTH** wird die Rekrutierung von Senioren in fünf europäischen Ländern ab Mai 2012 beginnen und wird mehr als 2.000 gesund-beim-Start, selbständig im eigenen Haushalt lebende Senioren, 70 Jahre oder älter, über drei Jahre beobachten. Das Teilnehmer-Follow-Up wird persönlich und in quartalsmässig stattfindenden Intervallen sein, einschliesslich einer jährlichen medizinischen Untersuchung. Teilnehmer werden an den Universitäten Zürich, Basel, Genf, Toulouse, Innsbruck, Nürnberg, Coimbra und an der Charité in Berlin rekrutiert werden.

Professor René Rizzoli, Gremiumsmitglied der International Osteoporosis Foundation und Leiter der Abteilung für Knochenerkrankungen an der Klinik für Rehabilitation und Geriatrie des Universitätsspitals Genf legt dar: "Die Ergebnisse von dieser wichtigen neuen Studie könnten die entscheidende Evidenz liefern, welche in der Umsetzung von einfachen, kosten-effektiven Strategien und medizinischen Empfehlungen resultiert, um gegen die anwachsende kostenmässige Belastung durch chronische Erkrankungen bei Europas älterer Bevölkerung anzugehen. Gesundheitsbehörden müssen alles tun was sie können, um sicherzustellen, dass Einwohner im Seniorenalter körperlich unabhängig und aktive Mitglieder der Gemeinschaft bleiben."

1.ref.

<http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/05/96&format=HTML&aged=0&language=EN&guiLanguage=en>

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*Der Start von **DO-HEALTH** wird am Freitag, den 3. Februar, an der Universität Zürich anlässlich eines Symposiums für die Öffentlichkeit und Gesundheitsexperten von 13.30 – 17.00 Uhr stattfinden.*

**Für weitere Informationen kontaktieren Sie bitte Frau Claudia Vittori, DO-HEALTH Koordinatorin: [claudia-vittori@do-health.eu](mailto:claudia-vittori@do-health.eu)**

### Über DO-HEALTH

**DO-HEALTH** (VitaminD3-Omega3-Home Exercise-Healthy Aging and Longevity Trial) ist eine randomisierte doppel-blind Placebo-kontrollierte Multicenter Studie, welche 2000 gesund-beim-Start, selbständig im eigenen Haushalt lebende Senioren ab 70jährig untersuchen wird.

**DO-HEALTH** wird die Effektivität und Sicherheit von drei Präventionsmassnahmen testen: Vitamin D, Omega-3 Fettsäuren und einem einfachen Trainingsprogramm, welches zu Hause durchgeführt wird.

Die Studie wird finanziell von der Europäischen Union durch das 7. Rahmenprogramm (RP7) für Forschung und Technologische Entwicklungen unterstützt , als auch durch private Sponsoren, welche die Studie finanziell mit unterstützen.

### Über IOF

Die International Osteoporosis Foundation (IOF) ist eine Non-Profit, nichtstaatliche Dachorganisation gewidmet dem weltweiten Kampf gegen Osteoprose, die Krankheit, welche als "die stille Epidemie" bekannt ist.

IOF's Mitglieder – Komitees von wissenschaftlichen Forschern, Patienten, medizinische und wissenschaftliche Gesellschaften und Repräsentanten der Industrie aus der ganzen Welt – teilen eine gemeinsame Vision: eine Welt ohne osteoporotische Frakturen. Die IOF repräsentiert derzeit 199 Gesellschaften an 93 Orten. <http://www.iofbonehealth.org>

## Une nouvelle étude pour évaluer l'impact de trois stratégies simples et rentables favorisant un vieillissement sain.

*Une étude plurinationale dans le but d'évaluer les bénéfices de la vitamine D, des oméga 3 et de l'exercice physique dans la prévention des maladies chroniques chez la personne âgée.*

Le 3 février 2012  
Zürich, Suisse

En Europe, le nombre de personnes âgées de 70 ans et plus augmentera de 40% durant les 20 prochaines années et pendant ce temps, la proportion de personnes âgées de 80 ans et plus va plus que doubler<sup>1</sup>. Les autorités sanitaires et la communauté médicale s'attendent à une augmentation correspondante du nombre de personnes souffrant de maladies chroniques liées à l'âge, maladies qui sont onéreuses et invalidantes, telles que l'ostéoporose, l'arthrite, les maladies cardiaques et pulmonaires et la démence.

L'augmentation significative du nombre de personnes souffrant de maladies chroniques liées à l'âge aura des répercussions importantes au niveau social, économique et des systèmes de santé à travers l'Europe, à moins que des stratégies efficaces de prévention ne soient mises en place.

Une nouvelle étude internationale, dont le lancement est annoncé **aujourd'hui** par l'université de Zürich, espère apporter les preuves définitives que trois mesures efficaces, abordables et sûres peuvent être prises afin de réduire significativement le poids des maladies chroniques chez la personne âgée. L'étude DO-HEALTH (VitaminD3-Oméga 3-Home Exercise- Healthy Ageing and Longevity Trial) sera la plus grande étude européenne traitant d'un vieillissement en bonne santé. Cette étude apportera des preuves solides dans l'efficacité et la sûreté de ces trois interventions simples et préventives : la vitamine D, les acides gras oméga 3 et un programme d'exercice physique simple pratiqué à la maison.

Le Professeur Bischoff-Ferrari, directeur du centre du vieillissement et de la mobilité à l'université de Zürich et responsable de l'étude DO-HEALTH a indiqué : « Différentes études ont montré que la vitamine D et des programmes exercices physiques simples et ciblés pouvaient améliorer significativement la mobilité fonctionnelle et réduire les chutes et les fractures, et ce jusqu'à 30% chez les seniors. Les oméga3 apportent également un bénéfice significatif pour la santé chez ces personnes. DO-HEALTH espère apporter la preuve définitive que ces trois interventions, seules ou combinées, sont capables de réduire le nombre de fractures, le déclin fonctionnel et cognitif, le risque d'hypertension et les risques d'infection chez la personne âgée. »

De plus, cette étude mesurera également plusieurs autres paramètres importants, tels que la sévérité des douleurs aux genoux chez les patients souffrant d'arthrite, la capacité à mener à bien des activités de la vie courante et la qualité de vie en général des participants.

DO-HEALTH commencera à recruter des seniors dans cinq pays européens à partir de mai 2012 et inclura plus de 2'000 personnes, âgées de 70 ans et plus, en bonne santé au début de l'étude et vivant en institution. L'étude s'étendra sur 3 ans. Le suivi des participants se fera de façon personnalisée, trimestriellement et une visite médicale sera pratiquée annuellement. Les participants seront recrutés par



les équipes des universités de Zürich, Bâle, Genève, Toulouse, Innsbruck, Nuremberg, Coimbra, et La Charité, Berlin

Le Professeur René Rizzoli, membre du conseil de l'IOF (International Osteoporosis Foundation) et chef du service des maladies osseuses au département des spécialités de médecine de l'hôpital cantonal de Genève et de la faculté de médecine a affirmé : « Les découvertes de cette importante et nouvelle étude pourront apporter les preuves tangibles qui mèneront à la mise en place de stratégies simples, rentables et à des recommandations médicales qui aideront à combattre le poids croissant générés par les maladies chroniques dans la population âgée européenne. Les autorités sanitaires doivent entreprendre tout ce qu'elles peuvent pour s'assurer que les citoyens âgés restent indépendants physiquement et des membres actifs de notre population. »

1. <http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/05/96&format=HTML&aged=0&language=EN&guiLanguage=en>

FIN

*Le lancement de l'étude DO-HEALTH aura lieu le vendredi 3 février 2012 à l'université de Zürich à l'occasion d'un symposium destiné au grand public et aux professionnels de la santé, symposium qui se déroulera de 13 heures 30 à 17 heures.*

Contact: coordinatrice de DO-HEALTH: [claudia-vittori@do-health.eu](mailto:claudia-vittori@do-health.eu)

### **Au sujet de DO-HEALTH**

DO-HEALTH (VitaminD3-Oméga 3-Home Exercise- Healthy Ageing and Longevity Trial) est une étude multicentrique, randomisée, en double aveugle, avec des patients contrôles, et inclura 2000 participants, âgées de 70 ans et plus, en bonne santé au début de l'étude et résidant en institution. DO-HEALTH testera l'efficacité et la sûreté de trois interventions préventives : la vitamine D, les acides gras oméga 3 et un programme d'éducation physique à exécuter à la maison. Cette étude est financée par la commission européenne dans le cadre du 7<sup>ème</sup> programme pour la recherche et le développement technologique et par des sponsors privés. Pour plus de renseignements, vous pouvez vous adresser à la coordinatrice de DO-HEALTH ([claudia-vittori@do-health.eu](mailto:claudia-vittori@do-health.eu))

### **Au sujet de l'IOF**

The International Osteoporosis Foundation (IOF) est une organisation non gouvernementale, à but non lucratif, dédiée à la lutte mondiale contre l'ostéoporose, maladie reconnue comme « une épidémie silencieuse ». Les membres de l'IOF – le comité scientifique, les patients, les sociétés médicales et les représentants des industries de monde entier - partagent une vue commune d'un monde sans fractures ostéoporotiques. Actuellement, IOF représente 199 sociétés regroupées dans 93 pays.



## DO-HEALTH in numbers

- 3** DO-HEALTH will test the efficacy and safety of **three promising preventive interventions**: vitamin D, omega-3 fatty acids and a simple home exercise program for seniors. DO-HEALTH objective is to improve healthy ageing in European seniors and to reduce healthcare costs via the implementation of effective and broadly applicable disease prevention interventions.
- 5** DO-HEALTH will be primarily focused on the effect of the study interventions on **five key health indicators**: risk of fractures, blood pressure, lower extremity function, cognitive function, and rate of infections. In addition, other important aspects of senior health, such as falls and osteoarthritis, as well as blood biomarkers, will be investigated.
- 8** DO-HEALTH will actively recruit participants in **eight European cities**: Zurich, Basel and Geneva in Switzerland, Toulouse in France, Berlin and Nuremberg in Germany, Coimbra in Portugal, and Innsbruck in Austria. Such wide and diverse geographical area means that the study population will be representative of the senior European population and the results will be more generalizable across Europe. This will also allow the study to take into account the roles of diverse environmental and dietary factors experienced by the European seniors.
- 21** DO-HEALTH consortium is made by **twenty-one partners**, which include both public and private stakeholders. DO-HEALTH will benefit from the collaboration of clinical researchers, industry partners, consultants, public health organizations, IT and media partners, selected for excellence in their respective fields of expertise.
- 36** Each DO-HEALTH participant will be followed over **thirty-six months**: every year, the participant will be invited to the trial center for a clinical visit including a physical examination, blood exams, physical and cognitive tests and interviews. Furthermore, every three months each participant will be contacted via phone by the study center, in order to get information about the health status, record any adverse event or new living condition, and to motivate the patient to adhere to the assigned study interventions.
- 70** Men and women aged **70 years and over**, who are living in the community and are sufficiently mobile to reach the study center independently and to perform simple motor tasks, will be eligible to participate in the study. Participants with a history of

cancer or other severe diseases (e.g. severe liver, kidney or cardiovascular diseases), or that experience major visual or hearing impairments, will be excluded from the study. All participants will be informed about the details of the study and will sign an informed consent before being recruited.

**2,152**

DO-HEALTH is the largest European healthy ageing study, with **2,152 participants** recruited in five countries. This implies a huge follow-up effort, consisting of more than 8,600 clinical visits and almost 20,000 phone calls over the 5-year study period.

**5Mio**

About **5 million capsules** will be produced for the study purpose. DO-HEALTH is a randomized double-blind study: this means each participant will be *randomly* assigned to one of the 8 treatment groups and will be administered capsules including Vitamin D and/ or omega-3 acids and/ or *placebo*, plus a physical activity program. Neither the patient nor the study staff will know which study group each participant was assigned to, in order to avoid any potential bias or *placebo* effect.

**12.8Mio**

The study is funded by a 6-million Euro grant provided by the European Commission, within the European 7<sup>th</sup> Framework Program for Research and Technological Development. The Universities involved and three industrial sponsors (DSM Nutritional Products, Roche and Nestlé Health Science) are co-funding the study bringing the total DO-HEALTH budget to **12.8 million Euros**.

## **Prof. Heike A. Bischoff-Ferrari, MD DrPH**



Director, Centre on Aging and Mobility, Zurich University Hospital and City Hospital Waid, Zurich, Switzerland

Swiss National Foundations Professor, Dept. of Rheumatology, University Hospital, Zurich

Heike Bischoff-Ferrari is a medical doctor and a clinical researcher with specialty board certifications in General Medicine, Geriatrics and Physical Medicine and Rehabilitation. After her clinical training from 1994 to 2000 at the University of Basel, and a fellowship at the Department of Rheumatology, Immunology and Allergy at the Brigham and Women's Hospital in Boston from 2000 to 2002, she joined Harvard Medical School faculty from 2002 till 2005. In parallel, she was accepted in the doctoral program at Harvard School of Public Health, and received a Master of Public Health Degree in Clinical Effectiveness in 2002 and a Doctor of Public Health Degree in Nutrition, Epidemiology and Biostatistics in 2008. Since 2004, Prof. Bischoff-Ferrari also has an ongoing appointment as Visiting Scientist at the Human Research Centre on Nutrition and Aging, Tufts University, in Boston. In 2005 she took a primary faculty appointment at the Department of Rheumatology at the University Hospital in Zurich, Switzerland and received a Swiss National Foundations Professorship in 2007. In 2008 she became the Director of the Centre on Aging and Mobility at the University Hospital and City Hospital Waid in Zurich.

Prof. Bischoff-Ferrari's research concentrates on improving health among the senior population with a focus on function, falls, fractures, and osteoarthritis. She is the author of the IOF 2011 world osteoporosis day report.

Prof. Bischoff-Ferrari is the DO-HEALTH principal investigator and coordinator, as well as the director of the recruitment center in Zurich.

## *Prof. David Felson, MD MPH*



Head, Framingham Osteoarthritis Study, University of Boston, US  
Professor, Internal Medicine & Public Health, University of Manchester, UK

David Felson is one of the world's leading investigators in osteoarthritis. He is the recipient of both the Osteoarthritis Research Society and American College of Rheumatology's Clinical Research Award and has also received the Howley Prize from the US Arthritis Foundation for major advances in arthritis research. He holds joint professorships at Boston University where he runs an NIH funded clinical research center and at the University of Manchester, UK where he directs an osteoarthritis experimental research program. His research group was the first to focus on the relation of obesity and nutritional factors with osteoarthritis and the first to describe bone marrow lesions on MRI as a critical feature of disease.

Prof. Felson is DO-HEALTH co-principal investigator for the DO-HEALTH osteoarthritis study.

## *Prof. Reto W. Kressig, MD*



Head, Department of Acute Geriatrics, University Hospital of Basel, Switzerland

Reto W. Kressig, born in Zurich, Switzerland, is a professor and chief of Geriatrics at the University of Basel, where he is directing the Acute Geriatrics Department, including the Acute Geriatrics Division, the Memory Clinic, and the Basel Mobility Center. After graduation from and defending a dissertation at the Zurich University Medical School (1987), he specialized in internal medicine and geriatrics (St. Gallen and Geneva), followed by a postdoctoral fellowship at Emory University, Georgia Institute of Technology, and VA Rehab R&D in Atlanta, USA. In 2005 he obtained an academic degree of Privat Dozent at the University of Geneva, Switzerland, and in 2006 he was appointed a professor at the Medical Faculty of Basel University. His scientific work and interests include older adults' gait biomechanics, physical activity, functional autonomy, and cognition in relation to principles of geriatric rehabilitation and fall prevention.

Prof. Kressig is Editorial-Member of several international geriatric journals, Associate Professor of Gerontology at the University of Luxemburg and Secretary of the European Academy for Medicine of Aging.

Prof. Kressig is DO-HEALTH co-principal investigator and, together with Dr. Suhm, the director of the recruiting center in Basel.

## Prof. René Rizzoli, MD



Head, Rehabilitation and Geriatrics, Geneva University Hospitals, Geneva, Switzerland  
Executive Board Member, International Osteoporosis Foundation, Nyon, Switzerland

René Rizzoli is an internist and endocrinologist, with a subspecialty in metabolic bone diseases, osteoporosis and disorders of mineral metabolism. He is presently a professor of medicine at the University Hospital of Geneva and head of the Service of Bone Diseases at the Geneva University Hospitals. He is the Chairman of the Academic Department of Rehabilitation and Geriatrics at the Geneva Faculty of Medicine. He is involved in both basic and clinical research projects investigating hormone action, regulation of bone growth, regulation of mineral homeostasis, pathophysiology of osteoporosis and the role of nutrition, calcium, vitamin D, bisphosphonates, selective estrogen modulators, denosumab and strontium ranelate in the prevention and treatment of osteoporosis.

Prof. Rizzoli is the author of more than 550 scientific articles. He is the Editor of *Bone* and the Associate Editor of *Osteoporosis International*. Prof. Rizzoli is Executive Board Member and Treasurer of International Osteoporosis Foundation, and was formerly the Chairman of the Committee of Scientific Advisors.

Prof. Rizzoli is DO-HEALTH co-principal investigator and the director of DO-HEALTH recruiting center in Geneva.

## *Judy Stenmark, BappSc, MPH*



Chief Operating Officer, International Osteoporosis Foundation (IOF), Nyon, Switzerland

Judy Stenmark is IOF Chief Operating Officer since March 2009. She has previously been the elected Chair of IOF's Committee of National Societies and a member of the IOF Board, and is the former Chief Executive Officer of Osteoporosis Australia.

Ms. Stenmark oversaw the growth of Osteoporosis Australia from a start-up organization to its position today as a leading non-profit osteoporosis patient organization which plays a key role in public education and national advocacy. Ms. Stenmark has a medical background in physiotherapy and a Master's degree in Public Health.

IOF is DO-HEALTH Partner and will support communication and dissemination of findings, with a focus on osteoporosis care.



## Norbert Suhm, PD MD



Center for Musculoskeletal Disease, Basel University Hospital, Basel, Switzerland

Norbert Suhm was born in Gengenbach, Baden (Germany). He is an orthopedic surgeon and trauma surgeon, with a special interest in geriatric fracture management and its implementation to everyday's routine clinical work. He is currently working at the Center for Musculoskeletal Disease at the University Hospital in Basel. He is member of the Core Team for AO's Clinical Priority Program "Fracture Fixation in Osteoporotic Bone". He is the co-chair of AO's annual Specialty Course on Geriatric Fracture

Management.

Dr. Suhm is member of the German Trauma Society, of the Swiss Society of Surgical Research and of the Swiss Orthopedic Society.

Dr. Suhm is DO-HEALTH co-principal investigator and, together with Prof. Kressig, the director of DO-HEALTH recruiting center in Basel.