

# INTERNATIONAL CONFERENCE SAFE FALLING for the ELDERLY through JUDO

University of  
Hertfordshire **UH**

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UNIVERSITY

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IJF ACADEMY

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# Proceedings

**27-28 November 2023**

0830 – 1700

Tokai University  
Kanagawa, Japan

**Conference:** International Consensus Conference on Safe falling for the Elderly through Judo.

**Publisher:** The University of Hertfordshire

**Editor:** Professor Mike Callan

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Tokai University  
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JUDOs

## Welcome

Professor Mike Callan

Professor of Judo Education, University of Hertfordshire

Scientific Committee, International Judo Federation



It is my great pleasure to welcome you to the inaugural International Consensus Conference on Safe falling for the Elderly through Judo.

This initiative has come about due to the number of projects emerging across the world. Eleven such projects are able to present at the conference and delegates are drawn from 14 different countries and 14 universities.

The world-class level of judo expertise gathered, combined with outstanding academic scholarship promises to yield an extraordinary level of discussion and lead to a deeper understanding of the unique way that judo can help to ensure safer falling for older people.

Thank you to our hosts at Tokai University, for making available their first-class facilities and their long history of judo excellence. Thank you to our academic leads in the i-dojo and the Institute of Sport at the University of Hertfordshire along with their partner, the International Judo Federation Academy for their vision and support to make this event possible. Thank you to the JUDOs NPO and their professional organisational team. Thank you to our sponsors the Judospace Educational Institute for their significant commitment and to the Defier Company for their belief and support.

Judo is an education and I look forward to listening and learning with great interest in the spirit of *jita kyoei*.

## Programme Monday 27 November 2023

**08:30 Registration** - Building 6, Rm C-201

**08:50 Welcome and Keynote**

*Prof. Mike Callan, GBR, University of Hertfordshire, Judospace  
Ms Charlotte Bird, GBR, Herts Sports Partnership, Live Longer Better*

**09:15 Project Presentations (12 minutes)**

Judo4Balance

*Mrs Kristiina Pekkola, SWE, Swedish Judo Federation, European Judo Union*

*Ms Karin Strömqvist Bååthe, SWE, Dalarna University, Mälardalen University*

Dynamic Balance for Life

*Dr Agathe Daria Jadczyk, AUS, University of Adelaide, Adelaide University Judo Club*

*Dr Meera Verma, AUS, University of Adelaide, Judo Australia*

Yawara-chan taiso (Judo Health Exercise)

*Dr Akira Ikumi, JPN, University of Tsukuba, All Japan Judo Federation*

Fall Prevention and Control Program

*Mr Benoit Séguin, CAN, Université de Sherbrooke, Donini Univestrie, Judo Québec*

Finding Your Feet GB, and Safe Fall Azerbaijan

*Prof. Mike Callan, GBR, University of Hertfordshire, British Judo, Azerbaijan JF*

**10:30 Coffee break. Networking**

**11:00 Project Presentations (12 minutes)**

Judo Flanders carefree falling for elderly

*Mr Jean-Pierre Dziergwa, BEL, Judo Center Louvain, Judo Flanders*

Judo KENKO Taiso (No throw judo)

*Professor Yasuhiko Moriwaki, Kokushikan University, All Japan Judo Federation*

*Dr Maja Sori Doval, Tsuda University, All Japan Judo Federation*

All Japan Judo Federation Fall Prevention Project

*Dr Akitoshi Sogabe, JPN, Konan University, All Japan Judo Federation*

*Dr Maja Sori Doval GER Tsuda University All Japan Judo Federation*

Educating Judo Coaches for Older Practitioners (EDJCO)

*Dr Slavisa Bradic, CRO, Rijecki Sportski Savez, IJF Academy*

*Mrs Nusa Lampe, SLO, Judo Golovec, Slovenian Judo Federation*

Adapted Utilitarian Judo (JUA)

*Prof María d' Carmen Campos Mesa, ESP, Univ of Seville, Real Fed Española de Judo y DA*

*Prof Oscar del Castillo Andrés, ESP, Univ of Seville, Real Fed Española de Judo y DA*

ZekerBewegen fall prevention

*Prof Vivian Weerdesteyn, NED, Radboud University Medical Centre, Judo Bond Nederland*

**12:30 Plenary Questions**

*Dr Sanda Corak, CRO, International Judo Federation*

**12:45 Lunch** Com Square

**14:00 Practical Demonstrations (10 minutes) - Women's Dojo**

Judo4Balance

*Mrs Kristiina Pekkola, SWE, 6<sup>th</sup> dan and Ms Karin Strömqvist Bååthe, SWE, 4<sup>th</sup> dan*

Dynamic Balance for Life

*Mr Michael Headland, AUS, 6<sup>th</sup> dan and Dr Meera Verma, AUS, 4<sup>th</sup> dan*

Yawara-chan taiso (Judo Health Exercise)

*Dr Takeshi Kamitani, JPN, Tokaigakuen University, 6<sup>th</sup> dan*

Fall Prevention and Control Program

*Mr Benoit Séguin, CAN, 5<sup>th</sup> dan*

Finding Your Feet GB, and Safe Fall Azerbaijan

*Prof. Mike Callan, GBR, 7<sup>th</sup> dan, Mr Jim Feenan, SCO, 6<sup>th</sup> dan*

*Mr Rustam Orujov, AZE, 5<sup>th</sup> dan and Ms Katie Mills, GBR, 1<sup>st</sup> dan*

**15:00 Refreshments and Networking**

**15:30 Practical Demonstrations continue (10 minutes) - Women's Dojo**

Judo Flanders carefree falling for elderly

*Mr Jean-Pierre Dziergwa, BEL, 1<sup>st</sup> dan*

Judo KENKO Taiso (No throw judo)

*Professor Yasuhiko Moriwaki, 8<sup>th</sup> dan and Dr Asako Takekuma Katsumata, USA, 1<sup>st</sup> dan*

All Japan Judo Federation Fall Prevention Project

*Dr Akitoshi Sogabe, JPN, 7<sup>th</sup> dan and Dr Maja Sori Doval, GER, 4<sup>th</sup> dan*

Educating Judo Coaches for Older Practitioners (EDJCO)

*Dr Slavisa Bradic, CRO, 7<sup>th</sup> dan and Mrs Nusa Lampe, SLO, 6<sup>th</sup> dan*

Adapted Utilitarian Judo (JUA)

*Prof Oscar del Castillo Andrés, ESP, 5<sup>th</sup> dan*

ZekerBewegen senior fall prevention program

*Prof Vivian Weerdesteyn, NED, 1<sup>st</sup> dan*

**17:00 Close**

## Programme Tuesday 28 November 2023

**08:30 Registration – Women’s Dojo**

**09:00 Summary and Day 2 Schedule**

**09:30 Group practical sharing round 1 (Groups A, B and C)**

Group A: Judo4Balance (SWE), Dynamic Balance for Life (AUS), Yawara chan taiso (JPN)

Group B: Fall Prevention & Control (CAN), Finding your feet (GBR & AZE), Carefree falling for elderly (BEL), AJJF Fall Prevention Project (JPN & GER)

Group C: EDJCO (CRO & SLO), Adapted Utilitarian Judo (ESP), Judo KENKO Taiso (JPN & USA), ZekerBewegen (NED)

**10:00 Group practical sharing round 2 (Groups D, E and F)**

Group D: Judo4Balance (SWE), Finding your feet (GBR & AZE), Judo KENKO Taiso (JPN & USA), AJJF Fall Prevention Project (JPN & GER)

Group E: Fall Prevention & Control (CAN), Adapted Utilitarian Judo (ESP), Yawara chan taiso (JPN)

Group F: EDJCO (CRO & SLO), Dynamic Balance for Life (AUS), Carefree falling for elderly (BEL), ZekerBewegen (NED)

**10:30 Refreshments and Networking**

**11:00 Group practical sharing round 3 (Groups G, H and I)**

Group G: Judo4Balance (SWE), Adapted Utilitarian Judo (ESP), Carefree falling for elderly (BEL)

Group H: Fall Prevention & Control (CAN), Dynamic Balance for Life (AUS), Judo KENKO Taiso (JPN & USA)

Group I: EDJCO (CRO & SLO), Finding your feet (GBR & AZE), Yawara chan taiso (JPN), AJJF Fall Prevention Project (JPN & GER), ZekerBewegen (NED)

**11:30 Group practical sharing round 4 (Groups J, K and L)**

Group J: Judo4Balance (SWE), Fall Prevention & Control (CAN), EDJCO (CRO & SLO)

Group K: Adapted Utilitarian Judo (ESP), Dynamic Balance for Life (AUS), Finding your feet (GBR & AZE), AJJF Fall Prevention Project (JPN & GER)

Group L: Carefree falling for elderly (BEL), Judo KENKO Taiso (JPN & USA), Yawara chan taiso (JPN), ZekerBewegen (NED)

**12:00 Summary discussion and group photograph**

**13:00 Lunch**

**14:15 Consensus Discussion Rounds - Building 6, Rm C-201**

**15:20 Refreshments and Networking**

**16:00 Presentation of agreed consensus statement.**

**16:30 Closing Remarks**

**17:00 Close of Conference**

## Keynote Address

Professor Mike Callan

Professor of Judo Education, University of Hertfordshire  
Scientific Committee, International Judo Federation

Charlotte Bird

Active Ageing Officer, Herts Sport & Physical Activity Partnership

There is a growing body of work concerning the introduction of judo-based safe falling practices to older people around the world. Research has identified at least 14 projects in; Australia, Azerbaijan, Belgium, Canada, Croatia, Denmark, Italy, Japan, , Netherlands, Spain, Sweden and the United Kingdom. This presentation will initially outline the background to the initiative to organise the first International Consensus Conference of Safe falling for the Elderly through Judo. It will go on to outline the global numbers of falls and the predictions in increases in the older population.

The presentation will connect the accepted 2001 definition of a fall, with the judo expertise in *kuzushi*.

Globally falls are the leading cause of death from injury over 70s. Most deaths from falls happen in those aged 65 and older. Across the world there are almost 24,000 falls per hour, 63 of those cause death. There are other economic, medical and social costs. However, the United Nations predict that the number of older persons is expected to double by 2050. So we can expect the numbers of falls and the deaths from falls to rise dramatically of the coming years.

Falling often triggers a fear of falling again. The fear of falling leads to avoidance of activity, loss of muscle strength, compromised balance & increased likelihood of falling. It can contribute to depression, isolation, loneliness reduced social activities with a negative impact on mental health and wellbeing. There is clear evidence that reducing fear of falling leads to reduced numbers of falls. After fall training, fear of falling was reduced on a visual analogue scale.

Judo teaches participants how to keep balance, fall safely, and get up easily. Evidence shows this is a useful skill for older people to reduce fear of falling. Judo coaches can easily teach people to fall safely. There are four ukemi techniques in judo, identified by the Kodokan: *yoko-ukemi*, *ushiro-ukemi*, *mae-ukemi* and *mae-mawari-ukemi*. The three principles of ukemi will be presented.

“The final aim of judo practice and study is to make ourselves perfect and work for the benefit of society.” Professor Jigoro Kano

## Judo4Balance and

### "Strömqvist Bååthe" Fall Competence Test

Mrs Kristiina Pekkola, SWE, Swedish Judo Federation, European Judo Union

Ms Karin Strömqvist Bååthe, SWE, Dalarna University, Mälardalen University

In 2017 a group of experts within The Swedish Judo Federation in cooperation with the Dalarna University embarked on journey in developing and evaluating a judo inspired wholistic training concept for older persons with the dual aim of both reducing the risk of falls as well as reducing the risk of injury should an involuntary fall occur.

Several studies have been conducted (including a randomized controlled trial) during the last 4 years among older "at work" population as well as healthy and prefrail community dwelling 65 – 85 year olds. The test participants have been tested with standardized measures (such as the Mine-Best test, Fall Efficacy etc) both before and after the 10 – 16 week training period. About 450 persons in total have been trained and tested in different studies. In one study the physical tests have been complemented with semi structured interviews.

Research shows that 10 – 16 weeks with 60 min training once a week with the Judo4Balance Exercise program increase balance, strength and "falling competence" among a large majority of the participating elderly. The group who had been training before the Covid lock down of elderly activities had managed to stay more active at a 7 month follow up than the control group.

Falling competence/technical progress can be measured safely through a simple test protocol named Strömqvist Bååthe Falling Competence Test.

There are some indications that the "falling competence" skill is retained over a longer period. However more long-term research is needed to confirm this hypothesis. One important finding is also that using the judo exercise methodology of working in pairs and introducing playful exercises contributes to the high fidelity and appreciation of the program among the elderly.

## Dynamic Balance for Life

Dr Agathe Daria Jadczyk, AUS, University of Adelaide, Adelaide University Judo Club

Dr Meera Verma, AUS, University of Adelaide, Judo Australia

This judo-based program was developed by Adelaide University Judo Club and assessed in a Pilot Study (2021) by Adelaide Geriatrics Training and Research with Aged Care (G-TRAC) Centre. The Introductory Program of 8 to 10 weeks has three components running concurrently: (i) Improving balance and control while moving (ii) landing safely from a controlled fall and (iii) getting up again from the ground.

Judo practices of *Taisabaki*, *Shizentai*, classical judo *ukemi* landing positions and crawling over the mat with modified *ebi* comprise core learnings. The program has a focus on lowering height and reducing acceleration during a fall, combined with building eccentric muscle capacity and improving posture.

Pilot Study findings suggest that the program can be delivered safely to older adults aged  $\geq 65$  years, including those at-risk of frailty, as long as there is close supervision with individualisation of the program in response to emergent health symptoms and the program is conducted on requisite Judo mats. This Judo-based exercise program is effective in improving physical function with potential to prevent falls and frailty risk.

Participants can move from Introductory, to Intermediate, then Advanced programs where *kata* and simulated *tachiwaza* techniques are used to practise and maintain skills of landing safely!



## Yawara-chan taiso (Judo Health Exercise)

Dr Akira Ikumi, JPN, Institute of Medicine University of Tsukuba, All Japan Judo Federation

Dr Takeshi Kamitani, JPN, Department of Education Tokai Gakuen University

Dr Naoki Sakuyama, JPN, The Institute of Medical Science, The University of Tokyo

We developed fall-related injury prevention exercise among the elderly. We named this exercise “*Yawara-chan taiso (exercise)*” because it is inspired from Judo’s specific movement and theory. “*Yawara-chan*” is the main character of the most famous judo comic in Japan. This exercise consists of three categories *Ukemi*, *Newaza*, and *Tachiwaza*. The novelty of this exercise is to focus on preventing injury after a fall through learning the *Ukemi* techniques, and to be developed by Judo experienced medical doctors.

Although Judo’s movements are usually so vigorous that it may be difficult for elderly to perform, we have modified from Judo’s movements to this exercise so that elderly can continue to enjoy safely. More than 500 Japanese elderly have experienced this exercise without injury. We also have published this exercise through book and YouTube to be easily accessed anywhere.

We present the overview of this exercise, the result of our previous research, and the future perspectives in this presentation.

In the practical demonstration, we will explain typical exercises and precautions for *Yawara-chan taiso (exercises)*.

抄録

我々は、高齢者の転倒による怪我を予防する体操を開発し、柔道特有の動作と理論から着想を得たこの体操を「やわらちゃん体操」と名付けました。この体操は、受け身、寝技、立技の3つのカテゴリーで構成されています。この体操の斬新な点は、転倒後の怪我の予防に焦点を当てていることです。柔道は全体的に激しい動作が多く、高齢者には難しいと思われませんが、その動作を改良し高齢者でも安心して続けてもらえるよう工夫しました。すでに500人以上の日本の高齢者が怪我をすることなくこの体操を経験しています。本発表では、やわらちゃん体操の概要とこれまでの研究結果、今後の展望について紹介します。

## Fall Prevention and Control Program

Mr Benoit Séguin, CAN, Université de Sherbrooke, Donini Univestrie, Judo Québec

THE FIRST GOAL OF THIS PROGRAM IS TO AVOID INJURY AT ALL COST

The last thing we want is for a person to get injured while practicing in the dojo when they come to learn how to avoid a "potential injury" in the event of a fall. On the other hand, if we refrain from teaching these fall prevention and control techniques specific to judo, the general population is more at risk of potential injuries in everyday life.

### First Priority

Teach everyone how to go down and get back up from the ground

### Second Priority

Teach them the preventive gestures and automatisms that will allow them to lower the center of gravity and direct their arms, legs and head inwards.

### Third Priority

Teach them the principles of balance and stability.

The program is composed of twelve sample classes dealing with **fall prevention and control**.

First, we will focus on a specific element in each class.

We repeat certain exercises in each class, especially during the warm-ups and the breakfalls. This is necessary because the basis of success is *repetition*, as you all know!

Priority or focus presented for each class:

Course no. 1: The three KEY exercises and demystifying the ground.

Course no. 2: Backward breakfall (ground) + side breakfall (ground) (the ideal way to approach the ground).

Course no. 3: Getting down and up from the ground. - and so on...

IT CAN'T ONLY BE "PHYSICAL" – IT ALSO AS TO BE "MENTAL"

## Finding Your Feet GB, and Safe Fall Azerbaijan

Professor Mike Callan, GBR, Univ of Hertfordshire, British Judo, Azerbaijan Judo Federation

This presentation outlines the work done on three projects across two nations. The adaptation of Yawara-chan-taiso to a UK cohort, the development of the British Judo Finding your Feet, Coach Education Programme and the delivery of the Safe Falls Azerbaijan Coach Education programme.

A pilot study was conducted in the UK to evaluate the Yawara-chan taiso (YCT) with an elderly cohort to investigate the effect on their fear of falling to see if the programme could be culturally exported.

An intervention group (mean age of 76.43 years), took part in YCT for a maximum of four sessions, these were delivered by experienced judo coaches. A control group (mean age of 72.29 years) attended a talk about fear of falling and were passive throughout. Data was collected using the Fear of Falling Questionnaire Revised (FFQ-R). The intervention group reported a statistically significant reduced fear of falling compared to the control. Thus, demonstrating that UK elderly participants completing YCT intervention reduced their fear of falling significantly.

The British Judo Association commissioned an adapted version of YCT. This was taught to the coach educator team in the Federation. A course handbook and supporting learning materials were developed. The coach education programme is now live – ‘Finding your feet, safer falls for the elderly’.

The Azerbaijan Judo Federation programme ‘Safe Falls for older people’ (Yaşlı insanlar üçün təhlükəsiz şlalələr) was created. The techniques were taught to a group of experienced coaches. Over the following days the coaches delivered safe fall seminars under supervision at the Baku Clinic to older employees of the National Railway Company.

## Judo Flanders carefree falling project for elderly people

Mr Jean-Pierre Dziergwa, BEL, Judo Center Louvain, Judo Flanders

Since 2014, all info about this project is [here](#) available. The real start of this project dated several years earlier.

I saw a gap in Flanders prevention guidelines and asked my self if it could be possible to learn elderly people judo *ukemi's* with the main purpose minimizing injuries by a fall. I decided to start and by success to contact Judo Flanders. I saw it also as an opportunity for judo, to play a role in an healthcare issue. The idea was that 'we', judo trainers should go to 'the elderly', in their local accommodation and not in *judogi*.

All do's and don'ts resulted in a 1 'home repeatable' lesson of 1 hour. As introduction we use the notion of 'Lifestyle Integrated functional exercises'. From judo we give an answer to tripping and slipping and we end with 'motoric visualization'. In my explanation I will tell more about our theoretical framework and methodology. I will conclude with some figures from our questionnaire. At least Judo Flanders proved that *ukemi's* can be learned by elderly people, without injuries and that they like it.

## Judo KENKO Taiso (No throw judo)

Professor Yasuhiko Moriwaki, Kokushikan University, All Japan Judo Federation

Dr Maja Sori Doval, Tsuda University, All Japan Judo Federation

As Japan has the highest average life expectancy and the highest healthy life expectancy among the G7 countries, closing the gap between average life expectancy and average healthy life expectancy by enabling seniors to have an active, healthy and independent lifestyle as long as possible has become a pressing issue. Therefore, Japanese society is in dire need for functional gymnastic programs suitable for senior citizens. Functional gymnastics for seniors should not only strengthen lower extremities and core, but also improve overall motor skills by stimulating all senses. Within this context I want to discuss the potential value of Judo KENKO Taiso. Judo KENKO Taiso is a physical exercise based on patterns of attack and defense, following the principle of action-reaction. When adapted to their individual needs, Judo KENKO Taiso can increase physical strength, range of movement, cardiovascular function and other related organic functions in the elderly.

## All Japan Judo Federation Fall Prevention Project

Dr Akitoshi Sogabe, JPN, Konan University, All Japan Judo Federation

Dr Maja Sori Doval GER Tsuda University All Japan Judo Federation

Japan is facing a rapid demographic change, turning the country into a super-aged society. According to the European Parliament's briefing material on "Japan's Ageing Society", Japan is the fastest ageing society on the planet with 28.7 % of the Japanese population being of age 65 or older. By 2036, people aged 65 and over will represent an estimated third of the overall population in Japan (European Union 2020: p.1). Especially women, who are forming the majority of the senior population and have a longer life expectation than men are prone to fall-related injuries. Previous research on fall prevention in Japan, mainly focused on the causes and mechanisms of falling, while programs for fall prevention are still lacking. Addressing this issue, the AJJF launched a fall prevention project targeting senior citizens in 2022. The program will include assessment of motor ability and risk factors, physical training based on judo movements with the aim of improving general fitness, balance and coordination and, safe break-falling adapted to the needs of seniors. Our presentation will analyze the potential use of *Seiryoku-zenyo-kokumin-taiiku-no-kata* for physical training targeting senior citizens, and how the practice of kata-based solo-drills can improve the general motor ability in seniors, including physical strength, balance and coordination.

## Educating Judo Coaches for Older Practitioners (EDJCO) and ukemi project

Dr Slavisa Bradic, CRO, Rijecki Sportski Savez, IJF Academy

Mrs Nusa Lampe, SLO, Judo Golovec, Slovenian Judo Federation

The EdJCO project aims to develop a specialized e-learning educational program adapted to judo coaches with a focus on the elderly, aligned with European policies on health-enhancing physical activities and coaching competencies.

The project addresses a significant public health problem - fall-related deaths among older Europeans. With judo's emphasis on safe fall techniques, the EdJCO project positions judo as a valuable preventive measure for the elderly.

The project brings together a diverse team of academic and sports experts from seven countries, using the expertise of the International Judo Federation Academy Foundation. The collaboration aims to generate research based on evidence and eminence, including the perspectives of judo coaches and scientists in geriatric physical activity.

Various judo methodical systems adapted to the target age category are included in the implementation of the project. The program contains the learning and application of basic judo elements as well as the adaptation of different forms of exercise such as kata with the adaptation of elements such as safe fall techniques as the main educational goal.

The outcomes will inform the development of specialized modules for the certification course delivered via the IJF Academy's online platform. This initiative is aimed at the specific needs of judo coaches and the exchange of knowledge and educational resources to improve the health of the European and international judo community.

## Adapted Utilitarian Judo (JUA)

Dr DelCastillo-Andrés, Óscar. University of Seville. Royal Spanish Judo Federation.

Dr Campos-Mesa, María del Carmen. University of Seville. Royal Spanish Judo Federation.

The concept of Adapted Utilitarian Judo (JUA) is explored in this proposal, focusing on the application of traditional Judo principles and techniques tailored to the specific needs of the elderly population. The primary objective is to enhance the health and overall quality of life for older adults by addressing functional abilities and autonomy in Basic and Instrumental Activities of Daily Living. The adaptation of Judo for utilitarian purposes is argued to not only positively impact the physical well-being of older adults but also to promote key elements crucial for active and healthy aging. The proposal emphasizes the preservation of Judo's traditional martial art values while strategically aligning with the functional requirements of an aging demographic.

Particularly noteworthy is the innovation presented in JUA as an effective approach to actively prevent falls, a significant risk factor associated with aging. It concludes that JUA serves as a timely and relevant social and educational tool, aligning with international scientific community recommendations for programs aimed at improving the health and quality of life of the rapidly aging population, with a specific emphasis on the European context. This proposal contributes valuable insights into the potential of adapted martial arts as a holistic strategy for addressing the unique health challenges of older adults.



## The Nijmegen Falls Prevention Program & Zeker Bewegen

Prof Vivian Weerdesteyn, NED, Radboud University Medical Centre, Judo Bond Nederland

While the efficacy of exercise training for lowering the risk of falling is now well-established, the utility of ukemi techniques for reducing the severity of (residual) falls has remained understudied. In several studies from our group, we have demonstrated the beneficial biomechanical effects<sup>1,2</sup>, as well as the safety<sup>3</sup> and trainability<sup>4</sup> of ukemi techniques in young and older individuals. In the Netherlands, practice of ukemi techniques for community-dwelling older people was introduced over 20 years ago as a component of the Nijmegen Falls Prevention Program (n=113, mean age 74 yrs)<sup>5</sup>. This 5-weeks exercise program (15 hours of training in total) includes ~4.5 hours of ukemi practice. Following demonstrated efficacy of the program in terms of fall risk reduction, a national training course was set up for physiotherapists (~2000 PTs participated to date) that facilitated nation-wide implementation in clinical practice<sup>6</sup>. In addition, practice of ukemi techniques is the core element of the community-based program 'ZekerBewegen' (6 sessions, 9 hours in total). This program - led by the Dutch Judo Federation (JBN) - aims to reduce fear of falling and enhance older people's mobility-related confidence. As per the Dutch coalition agreement, fall-prone older people are encouraged to participate in these programs, with the costs being covered by the health insurance or by municipal health funds. In my talk, I will discuss the Dutch approach to ukemi practice for older people, as well as the lessons learned on the way from development to clinical implementation.

**References** (with QR codes to the free full-text versions of the papers; note that the first QR code includes refs 1-4)

<sup>1</sup>Groen et al., J Biomech, 2007

<sup>2</sup>Groen et al., J Electromyogr Kinesiol, 2008

<sup>3</sup>Groen et al., BMC Res Notes, 2010

<sup>4</sup>Groen et al, Osteoporosis Int, 2010

<sup>5</sup>Weerdesteyn et al., Gerontology, 2005

<sup>6</sup>Weerdesteyn et al., J Am Gerontol Soc, 2009



## Thank you

### University of Hertfordshire

Professor Mike Callan, Professor of Judo Education

Jen Jones, Head of the Institute of Sport

Dr Lindsay Bottoms, Head of the Centre for Research in Psychology and Sports Science

Dr Richard Southern, Dean of the School of Life and Medical Sciences

Mr John O'Callaghan, Director of the Herts Sport and Physical Activity Partnership

### Tokai University

Professor Kazue Sugano, Dean of the School of Health Studies

Professor Shuichi Uchiyama, Dean of the School of Physical Education

Professor Hiroshi Yamada, Director of the Sports Medical Science Research Institute

Professor Yasuhiro Yamashita, Vice President

Professor Kosei Inoue, Faculty of Physical Education

Teruyoshi Yamaguchi, Sports Promotion Center

Yuri Shoji, Department of Martial Arts

Tokai University Judo Club, Student Helpers

### IJF Academy

Envic Galea, Chair

Dr Tibor Kozsla, Education Director

Florin Daniel Lascau, Sport Director

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Professor Kosei Inoue, Chairman

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Toshikazu Suzuki, Chief Executive

Hiroko Ozawa, Executive

Madoka Kawado, Executive

### Judospace Educational Institute

Professor Mike Callan, Managing Director

Katie Mills, Executive Assistant

### DEFIER

Hitoshi Sugai, Managing Director

Mr Fujiya, Executive

# Notes

JUDO

**FALL**

**SEVEN TIMES**

**STAND UP**

**EIGHT**

七転び八起き