

# THE IALH UPDATE

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## What if everyone was Kung Fu Fighting? Martial Arts and the Body, Brain and Mind



Past IALH Project Coordinator, Phyllis McGee, David Suzuki and other participants take part in a karate class during the filming of CBC's *The Nature of Things*. Photo Credit: CBC

In 1974, the disco song "Everybody Was Kung Fu Fighting" shot to the top of the pop music charts. This catchy certified "gold" tune by Carl Douglas rhapsodizes about the amazing abilities of Kung Fu fighters "fast as lightning", although perhaps a "bit frightening" who "fought with expert timing".

But what if everybody was actually Kung Fu fighting? Or more to the point, committed to training in any martial art? That is, dedicated to attaining extreme skill through dedicated effort, which is what "kung fu" actually means.

Aging is often associated with a decline in neuromuscular function as well as a reduced capacity of the body. Falls are the leading cause of accidental deaths worldwide and the largest comorbidity in older adults. Of course, the expectation of decreased mobility in aging is often brought about by decreased activity itself. Regulation of balance, functional learning for activities of daily living, and strength training improve postural control and mitigate the risk of falls.

Since the "Kung Fu Craze" of the 1970s that spawned "Everybody Was Kung Fu Fighting", interest in martial arts has grown, especially amongst older adults hoping to increase postural and balance control. There is also a growing body of scientific literature showing that martial arts training using coordinated, whole-body movements improves balance, strength, and physiological function. The use of martial arts exercises is a promising treatment technique for individuals with chronic conditions and can also be used as a "pre-habilitation" tool. Additionally, martial arts provide a holistic approach to exercise where the brain, body, and mind reap the advantages if done consistently.

Dr. E. Paul Zehr's Rehabilitation Neuroscience Lab has explored the use of martial arts as a way to keep people motivated and moving. Karate, which shares roots with Kung Fu, was the focus of a 5-week training intervention done in the rehabilitation neuroscience lab with adults 59 to 90 years old. Participants were evaluated using physiological measures of balance, strength, and spinal cord excitability. Overall, the participants significantly improved strength in the arms and legs as well as balance, and there were mixed effects on spinal cord excitability. Additionally, the amount of movements done via training "dose" was observed, which was the first time this was done in the literature. Individuals reported feelings of accomplishment and satisfaction while participating in the intervention and notably, more than two-thirds of the participants continue to train with Dr. Zehr once a week. Unlike other research interventions, the karate study established a form of community within the participants and a desire to continue with training, which has inevitably lead to more skill acquisition and strength.

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Thus, to answer Carl Douglas, if "Everybody Was Kung Fu Fighting", every body would be better off both now and in the future.

For more information, see:

https://www.cbc.ca/natureofthings/episodes/aging-well-suzuki-style

https://www.psychologytoday.com/ca/blog/black-belt-brain/202010/what-if-everybody-really-was-kung-fu-fighting-0

https://www.psychologytoday.com/ca/blog/black-belt-brain/202010/what-if-everybody-really-was-kung-fu-fighting

https://www.psychologytoday.com/ca/blog/black-belt-brain/202011/what-if-everybody-really-was-kung-fu-fighting

Written by H. Mustafa, PhD Student

# Exploring the Use of Telephone Peer Coaches in Supporting Adults with Type 2 Diabetes



As part of their ongoing work to support and encourage individuals with various chronic conditions to manage their health, a team of researchers at the Ladner office of the Institute on Aging and Lifelong Health explored the feasibility of using peer coaches to support adults with Type 2 diabetes. The team, which was lead by Dr. Patrick McGowan (Public Health and Social Policy and IALH Associate Director), asked 115 individuals in the Fraser Health region to participate in weekly 30-minute telephone calls with peer coaches over a six month period. At the time of the study, 38% of all British Columbians with diabetes lived in this health region.

Data on several outcome measures were collected at baseline, and again at 6 and 12 months. At 12 months, participants showed statistically significant improvements in several areas. For example, mean A1c levels decreased by 9%, fatigue decreased by 15% and depression levels decreased by 24%. Further, general health improved by 7%, activation levels increased by 15%, diabetes empowerment increased by 10%, self-efficacy increased by 23% and communication with physicians increased by 22%. The researchers concluded that a low-cost telephone peer-coaching intervention was successful in assisting individuals with type 2 diabetes to self-manage their diabetes.

For more information on this study, see <a href="https://www.sciencedirect.com/science/article/pii/51499267118307500?via%3Dihub">https://www.sciencedirect.com/science/article/pii/51499267118307500?via%3Dihub</a>

For more information on the management of other chronic conditions using the peer coach approach, please see <a href="https://www.selfmanagementbc.ca/healthcoachprogram">https://www.selfmanagementbc.ca/healthcoachprogram</a>

## Canadian Frailty Network's Holistic Framework to Support Healthy Aging

The Canadian Frailty Network (CFN) defines frailty as "a medical condition of reduced function and health." It is currently estimated that over 1.5 million Canadians live with frailty, although it acknowledged that this number may be higher as frailty often goes undetected. Individuals living with frailty may have many health care problems which affect their ability to function and perform activities that are necessary for daily living. The CFN has developed a holistic framework to support healthy aging. This includes:

- a) participating in activities that improve muscle strength, heart function and balance;
- b) supporting your body to resist infections and avoid illnesses by ensuring your vaccines are up-to-date;
- c) optimizing your medications by working with a health care provider to regularly review all prescriptions, over-the-counter medications, and vitamins and supplements;
- d) maintaining social connections with family and friends as well as others in your community; and
- e) ensuring you are eating enough good food and getting proper nutrition.

For more information, see <a href="https://www.cfn-nce.ca/frailty-matters/avoid-frailty/">https://www.cfn-nce.ca/frailty-matters/avoid-frailty/</a>

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## **UPCOMING EVENTS:**

## **Modern Day Democracy: Current Perspectives**

## An Elder Academy Event

Thanks to populism, presentism, extremism and the pandemic, the face of democracy looks much different today than ever before. This series offers four topics which explore the impact of these forces not only on our present context but on the past and the future as well. Our presenters will share their insights and perspectives on these timely issues.

**DATES:** Saturdays, May 1,8,15,22, 2021

**TIME:** 10:00am to Noon. Entry to meeting starting at 9:45am for all 4 events

WHERE: Online via Zoom

**COST**: \$20.00 for the four sessions\*

\*Students may attend free but must register by emailing <a href="UVRAEIderAcademyevents@uvic.ca">UVRAEIderAcademyevents@uvic.ca</a>

For more information on presenters and to register, visit: <a href="https://www.eventbrite.ca/e/democracy-tickets-134224598387">https://www.eventbrite.ca/e/democracy-tickets-134224598387</a>

Questions? Please contact the University of Victoria Retirees Association at <a href="https://www.uversity.com/uversity-nc-2"><u>UVRAEIderAcademyEvents@uvic.ca</u></a>



Retirees Association The UVic Retirees Association provides the public with better mental and physical health for seniors through stimulating education experiences.

### Same Old Same Old



The Belfry Theatre will be presenting **Same Old Same Old** online June 8 to 13, 2021. The play features two actors (James Fagan Tait and Jan Wood) who through snippets and sketches and little scenes, reveal the moments that make up their lives - the mundane and the meaningful, the small but profound, the benign and hurtful, and the real yet unspoken love.

IALH affiliate Debra Sheets (Nursing) will participate in the B4Play panel hosted by CBC's Gregor Craigie on May 29. IALH affiliate Susan McDaniel (Sociology) will write the feature article for the Belfry's *Upstage* magazine.

For more information, see <a href="https://www.belfry.bc.ca/same-old-same-old/">https://www.belfry.bc.ca/same-old-same-old/</a>

## **National Health & Fitness Day**

National Health and Fitness Day is Saturday June 5, 2021 (see <a href="https://www.nhfdcan.ca/">https://www.nhfdcan.ca/</a>).

Watch for more information in the May *IALH Update* and on IALH's website (www.uvic.ca/aging) for how you can participate in this event which aims to encourage Canadians of all ages to "get up, get out, and get active".





The final Masterminds presentation for 2021 will be on Wednesday, April 28 from 7:00 PM to 8:30 PM. Mary Ellen Purkis will discuss *Thinking about Aging in Place*. Register at <a href="https://www.events.eply.com/Masterminds2021">www.events.eply.com/Masterminds2021</a>

Each presentation will be recorded and posted on IALH's YouTube channel and website. The links for the first two presentations are available below:

<u>Plants, People, Places: Lessons in Stewardship and Reciprocity Commercial Sex: A Problem of Gender or Social Inequality?</u>

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## **RESEARCH OPPORTUNITY:**

## Opportunity for older adults & their caregivers to be involved in a research study on the use of assistive technologies



What are assistive technologies? Assistive technologies are used to support a person to do the things they need to do to maintain or improve their level of independence.

#### Why is this study being done?

This study aims to improve the use and access to assistive technologies for older adults in British Columbia. The study also aims to develop better ways of assessing the challenges people experience when using assistive technologies. Bringing older adults, their family members, and other caregivers together to talk about assistive technologies will be helpful for health care workers and others.

#### Who can participate in the study?

If you are an older adult using or wanting to use an assistive technology of some kind, you are invited to share your experiences about such things as ease of access and use, as well as any challenges.

For older adults, you must be 55+ years and living independently. Family members include anyone who is currently providing care and support to an older adult family member. Friends, neighbours and other informal caregivers are also invited to participate if you provide regular support to an older adult. Interested participants must be 19 years or older. You should also be able to complete the interview in English.

#### What will I be asked to do if I choose to participate?

You will have the option to participate in an initial interview about assistive technologies (up to 1-hour). You may also choose to be part of a group session or participate in other project activities. These will be done either online or over the phone from January - March 2021.

#### Who is conducting this research?

The co-leads of the research study are Dr. Karen Kobayashi and Robin Syme. They are both at the University of Victoria. Dr. Kobayashi is in the Department of Sociology. She is also a Research Fellow with the Institute on Aging and Lifelong Health. Robin Syme is the Executive Director of CanAssist.

#### Name of the Study

**Knowledge Implementation for** Scale-up, Spread, and Sustainability of Assistive **Technologies** (KISSS-AT)

#### **Contact Information**

If you interested in being part of this important study or finding out more information, please contact: Dr. Gord Miller, Project Coordinator kisssat@uvic.ca or 250-893-5869

#### Research Team

We are a team of researchers at the University of Victoria, working with CanAssist and the BC Ministry of Health.

#### **Academic Research Contact**

Dr. Karen Kobayashi, Co-Lead kmkobay@uvic.ca

#### **Funded By**

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**Email** 

aging@uvic.ca



Twitter

@UVicAging



Facebook

UVic Institute on Aging and Lifelong Health



Website



Phone

www.uvic.ca/aging 250-721-6369

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