Curriculum Vitae

Mohamed-Amine Choukou, PhD

Table of Contents

1. Profile 2
2. Awards and Recognitions 3
3. Academic Experience 3
4. Teaching Experience 4
5. List of Trainees and Research Assistants 6
6. Student Awards mentorship 9
7. Research Grants (University of Manitoba) 9
8. Training Grants 10
9. Research Grants (Before joining the University of Manitoba) 10
10. Media Relations 10

10.1. TV and Radios 10
10.2. Invited interviews/feature stories 10
10.3. Blog posts 11
10.4. Public events 11

11. Creative work / Technology development 11
12. Publications (Google Scholar Link) 12

12.1. Peer-reviewed Journal Articles 12
12.2. Patent 14
12.3. Peer-Reviewed conference proceedings 14
12.4. Abstracts / Conference Presentations 15
12.5. Invited Talks 18
12.6. Edited Book (peer-reviewed) 18
12.7. Invited Book Chapters (peer-reviewed) 18

13. Services 20

13.1. Local 20
13.2. National 20
13.3. International 21

14. Professional Development 22
15. Computer Skills 22

1. Profile

Mohamed-Amine Choukou, PhD

Associate Professor
Department of Occupational Therapy, College of Rehabilitation Sciences University of Manitoba
(2022 — current) **webpage**

Assistant Professor
Department of Occupational Therapy, College of Rehabilitation Sciences University of Manitoba
(2018 — 2022) **webpage**

Adjunct Professor
Biomedical Engineering Program, University of Manitoba (2018 — current)

Adjunct Professor
Master Santé parcours Recherche, Gestion de projets et Pratiques Professionnelles en Ergothérapie (RG3PE) (MSc Program), Université Paris Créteil-Est, Institut de Formation En Ergothérapie (2022- current)

Researcher

- Riverview Health Centre (2018 — current)
- University of Manitoba Centre on Aging (2018 — current)
- Quebec Rehabilitation Research Network (REPAR) (2020-2023)

Research Areas of Interest

Technology for Assisted Living
Telerehabilitation
Telemonitoring
Telepresence
Wellbeing
Dementia
Stroke
Aging

LinkedIn
Twitter
YouTube

Education

Ph.D. Human Kinetics
School of Human Kinetics, Université Paris Sud
(2009-2012)
Area of research: Gait and Posture, Physical Activity, Age and Gender, In-situ Activity Monitoring

M.Sc. Motor Control and Perception
School of Human Kinetics, Université Paris Sud
(2007-2009)
Area of research: Gait and Posture, Sport Performance

B.Sc. Human Kinetics
School of Human Kinetics, Université Paris Sud
(2002-2006)
Area of concentration: Human Movement Sciences

Laboratory
Rehabilitation Technologies Lab

Written and Spoken Languages: English, French, and Arabic.

2. Awards and Recognitions

- The Gerry McDole Professorship In Improved Healthcare Delivery to Rural, Remote and Underserved Populations of Manitoba ($150,000) (2020-2023)
- TRB Truck and Bus Safety Committee (ANB70) Deborah Freund Paper Award (2017)
- Postdoc: Fonds de Recherche en Santé (Québec), Ministère du Transport du Québec, Natural Sciences and Engineering Research Council of Canada, Knowledge Translation Canada (a total of $180,000) (2013-2017)
- Doctoral Fellowship: Ministère de l'Éducation Nationale, de l'Enseignement Supérieur et de la Recherche (≈ $80,000) (2009-2013) (Supervisors' research funds)
- AGE-WELL Network of Centres of Excellence Access Award ($1000) (2016)
- Travel Award of the Provincial Rehabilitation Research Network: Canadian Society for Psychomotor Learning and Sport Psychology, Waterloo, ON, Canada ($500) (2016)
- Best Post-Doc Presentation Award, 17th Research Colloquium on Rehabilitation, McGill University, Montreal, QC, Canada ($300) (2016)
- Elsevier Reviewer Recognition (2016)
- Knowledge Translation Canada Travel and Conference Stipends: 3rd Annual TVN Conference: Improving care for frail elderly Canadians, Toronto, Ontario, Canada ($1000) (2015)
- Best Poster Award: HQP Competition, Auto21 Conference: "Solving the Challenge of Tomorrow Today", Niagara Falls, ON, Canada ($250) (2014)

3. Academic Experience

Assistant Professor, Technology Assisted Living
Department of Occupational Therapy, College of Rehabilitation Sciences University of Manitoba
(Winnipeg. Manitoba, Canada)
2018 — current

Adjunct Professor
Biomedical Engineering Program, University of Manitoba
2018 — current

Director R&D *(full time)*
TOPMED – Centre collégial de transfert de technologie en orthèses, prothèses et équipements médicaux
(Québec, Québec, Canada)
2017-2018
Led a team of 15+ engineers and interns and reported to a general and a board of directors.

Postdoctoral fellow *(full time):* **Rehabilitation & Assistive Technology**
Centre interdisciplinaire de recherche en réadaptation et intégration sociale (CIRRIS)/Université Laval
& Centre de recherche interdisciplinaire en réadaptation du Montréal métropolitain (CRIR)/McGill University
(Québec, Québec, Canada)
2016-2017

Postdoctoral fellow *(full time):* **Knowledge Translation in Elderly Rehabilitation Shared-Decision making**
Faculty of Medicine, Department of Family Medicine and Emergency Medicine, Université Laval
(Québec, Québec, Canada)
2015

Postdoctoral fellow *(full time):* **Driving abilities & Elderly Driving & in-simulator training**
Faculty of Medicine, Department of Kinesiology Université Laval
2013-2014 (Québec, Canada)

4. Teaching Experience

- *Graduate Teaching*

MOT Program, College of Rehabilitation Sciences, University of Manitoba
Critical Inquiry Research Projects

- Advisor: MOT 2 – One group of two students: 2021-2022 (Topic: A virtual reality-based exercise program targeting upper and lower extremities function in stroke survivors who are discharged home)
- Advisor: MOT 2 – One group of three students: 2020-2021 (Topic: E-coaching for adults with neurological conditions during transition of care)
- Advisor: MOT 2 – One group of three students: 2019-2020 (Topic: Acceptance of ambient assisted living technology in rehabilitation)

- *Undergraduate Teaching*

Assistant Professor (Full Time),
University of Manitoba
2019 (Winnipeg, MB)

- Assistive technology (Biosystems Engineering undergraduate course): 1 session

Lecturer and Research Associate (full time)
School of Human kinetics, Université de Reims Champagne Ardenne
2012-2013 (Reims, France)

- Teaching graduate and undergraduate courses: biomechanics, research methodology and laboratory methods.
- Teaching research methodology and applied statistics to PhD students
- Created and graded course assessments to ensure students understood material and stayed on track.
- Mentoring 4 M.Sc. students (100%)
- Guided the students in preparation and presentation of research findings

Lecturer and Research Associate (part time)
School of Human kinetics Université Paris Sud
2011-2012 (Orsay, France)

- Teaching undergraduate courses: biomechanics, ergonomics, laboratory methods, and the determinants of human performance

Lecturer and Research Assistant (part time)
School of Human kinetics Université Paris Sud
2008-2009 (Orsay, France)

- Teaching undergraduate courses: biomechanics, ergonomics, laboratory methods, and the determinants of human performance

- *Graduate Students' Supervision*

PhD Thesis

- Funminiyi Solomon Olatoye, PhD Applied Health Sciences, University of Manitoba (Topic: Use of telepresence robot in the occupational therapy practice) (in co-supervision) (2021-)

MSc Thesis

- Francois Prats, MSc "Master Santé : parcours recherche, gestion de projets et pratiques professionnelles en ergothérapie (RG3PE)"/ Université Paris-Est Créteil (Paris, France) (Technology to support financial management in people with traumatic brain injury) (co-supervision)(2022-)
- Ali Asgari, MSc Biomedical Engineering, University of Manitoba (Topic: In home hand telerehabilitation of patient poststroke) (2021-)

- Jasem Bani Hani, MSc, Rehabilitation Sciences, University of Manitoba (Topic: In home hand telerehabilitation of patient poststroke) (2021-)
- Amarzish Qadeer, MSc Biomedical Engineering, University of Manitoba (Topic: Ambient assisted living and cognitive ability assessment) (2021-)

- ***Thesis Committees***

MSc Thesis

- Conversational Companion Robots for Older Adults to Help with Loneliness: An In-Home Exploration. Adriana Lorena González De la Garza. Department of Computer Science, University of Manitoba (2020-2022) / Committee member
- Elicitation study: an exploration of age and related differences in context of hand gesture interaction. Yurii Vasylkiv. Department of Computer Science, University of Manitoba (2020) / Committee member
- Comparaison entre un entraînement de la marche avec et sans soutien du poids corporel chez une population atteinte de sclérose en plaques. Samuel Rousseaux-Robidoux. Faculté des Sciences de l'Activité Physique, Universite de Shebrooke (2019) / external examiner

PhD Thesis

- Neuromuscular adaptations to acute exercise following acute and repeated bout of fatiguing arm elevation. Kara-Lyn Harrison. Department of Kinesiology, University of Manitoba (2021-2024) / Committee member

5. List of Trainees and Research Assistants

Trainee / Education	Start date	End date	Context/Program	Location	Role	Project	1st Occupation post-training
Students performing a research project as part of a coursework (2 groups)							
Liz He and Kelly Moslenko	9/2021	6/2022	OT Course 7752	U of Manitoba	Advisor	Critical Inquiry Research Project : A virtual reality – based exercise training program targeting upper and lower extremities function in stroke survivors who are discharged home	In progress
Judy Dang, Paige Kirby & Laura Parsons, MOT Students	9/2020	6/2021	OT Course 7752	U of Manitoba	Advisor	Critical Inquiry Research Project : E-coaching technologies for at-home therapy	Graduated summer 2021
Taylor Shortly, Nicole Leclerc & Derek Freier, MOT Students	9/2019	6/2020	OT Course 7752	U of Manitoba	Advisor	Critical Inquiry Research Project : Evaluating the Acceptance of Ambient Assisted Living Technology in Rehabilitation	Occupational Therapist (Working or on the job market), Minnesota (USA)(T.Shortly) and Manitoba
Postdoctoral fellow (1)							
Ali Maddahi PEng, MSc, PhD	4/2019	3/2022	Postdoc / Mitacs Accelerate	U of Manitoba	Supervisor 100%	Development and implementation of a haptic-enabled multimodal robotic platform for upper-limb fine motor skills retraining	In progress
Master and doctoral students (thesis-based) (10) (ongoing :6)							
Francois Prats	1/2022	12/2023	MSc Student	Université Paris Creteil – Université de Montréal	Co-Supervisor, 50%	Budgeting technology for people with Acquired Brain Injury	In progress
Funminiyi Solomon Olatoye	1/2021	12/2024	PhD student, Applied Health Sciences	U of Manitoba	Co-Supervisor, 50%	Topic: Telepresence and Dementia	In progress
Ali Asgari BSc, Mechanical Engineering	1/2021	12/2022	MSc Student/ Biomedical Engineering graduate Program	U of Manitoba	Supervisor 100%	In home hand telerehabilitation of patient poststroke	In progress
Jasem Bani Hani PT	1/2021	12/2022	MSc Student/ MSc in Rehabilittaion Sciences 100% Supervision	U of Manitoba	Supervisor 100%	In home hand telerehabilitation of patient poststroke	In progress
Amarzich Qadeer	1/2021	12/2022	MSc Student/	U of Manitoba	Supervisor	Ambient assisted living and	In progress

BSc Software Engineering			Biomedical Engineering graduate Program		100%	dementia prescreening	
Samia Hijazi, PT	9/2011	8/2013	MSc Student	Université de Reims Champagne Ardenne	Supervisor 100%	Validity of a therapist-independent shoulder relocating device	PhD student, Human Kinetics, Université Reims Champagne-Ardenne
Pierre Lecheverel, BSc Kinesiology	9/2011	8/2013	MSc Student	Université de Reims Champagne Ardenne	Supervisor 100%	Validity of tools and methods of assessing the plantar force and pressure repartition	Strength and conditioning coach for a regional level soccer club
Samir-Samuel Ghouli, PT	9/2011	8/2013	MSc Student	Université de Reims Champagne Ardenne	Supervisor 100%	Safety shoes and musculoskeletal disorders	Physiotherapist and Medicine Student, Université Reims Champagne-Ardenne
Frank-Jourdan Ferrari, BSc Kinesiology	9/2011	8/2013	MSc Student	Université de Reims Champagne Ardenne	Supervisor 100%	Effects of taping techniques on recovery from ankle sprains	Podiatrist and PhD student, Human Kinetics, Université Reims Champagne-Ardenne
Research Associates							
Joel Desilets, BSc Kinesiology, in transition to MOT Program	5/2021	8/2021	Research Assistant	U of Manitoba	Supervisor 100%	Active at Home poststroke training Porgram (« Home PSP »)	-
Celine Murdock, Educator	6-2021	12/2021	Research Assistant	U of Manitoba	Supervisor 100%	A tablet-based program (« Movement Matters ») targeting indigenous people living with dementia	
Golnaz Arbab	5/2021	-	Volunteer Research Associate	RTLab	Supervisor 100%	In home hand telerehabilitation of patient poststroke	-
Mohammad-Masoud Shabanijou, BSC, MSc, Computer Science in progress	4/2021	8/2021	Research Assistant	U of Manitoba	Supervisor 100%	A tablet-based program (« Movement Matters ») targeting indigenous people living with dementia	-
Siddhi Pandare, UG student, Veermata Jijabai Technological Institute, India	5/2021	8/2021	Mitacs Globalink Internship	U of Manitoba (Virtual from India)	Supervisor 100%	Activity monitoring platform for ambient assisted living	-
Eloise Zaghrini, UG student, École Nationale Supérieure des Mines de Nancy, France	5/2021	8/2021	Mitacs Globalink Internship	U of Manitoba (VirtuaL from France)	Supervisor 100%	Activity monitoring platform for ambient assisted living	-

Nathalie Kaboha, English literature Major / Marketing Management Minor	1/2021	4/2021	Mitacs Business Strategy Internship	iAccompany (start-up) & University of Manitoba	Supervisor 50% (Start-up, 50%)	Marketing Research and Strategy Implementation with iAccompany	Graduated, Summer 2021
Safeena Shajani UG sstudent, Biomedical Engineering, McMaster Univesity	5/2020	8/2020	Co-oP Student / Biomedical Engineering	McMaster University	Supervisor 100%	Exploring a platform for posture and body language recognition in patients with dementia	3rd year Student at McMaster U
Amir Nassiri, MSc student, Computer Science	9/2019	8/2020	Research Assistant	U of Manitoba	Supervisor 100%	Dementia App, Smart Suite related activity monitoring platform	Developer in Tactile Robotics
Anna Polyvyana BSc Psychology	9/2019	3/2020	Research Assistant /Psychology	U of Manitoba	Supervisor 100%	Senior roommate, Dementia App	Research Assistant/Coordinator at GI Research Institute & The IBD Centre of BC
Sophia Mbabaali BSc Kinesiologt, MSc in progress	2/2019	Current	Research Assistant / Kinesiology	U of Manitoba	Supervisor 100%	AAL scoping reviews	Project Coordinator, George & Fay Yee Centre for Healthcare Innovation
Camille Sivelle BSc Computer Science	6/2019	9/2019	International summer student	U of Manitoba	Supervisor 100%	Exploring a platform for posture and body language recognition in patients with dementia	3rd year Student at Mines Nancy
Noemie Laguelle BSc Computer Science	6/2019	9/2019	International summer student	U of Manitoba	Supervisor 100%	Exploring a platform for posture and body language recognition in patients with dementia	3rd year Student at Mines Nancy
Ryan East BSc Computer Science	5/2019 1/2020	9/2019 8/2020	Co-oP Student / Computer Science	U of Manitoba	Supervisor 100%	Exploring a platform for posture and body language recognition in patients with dementia	3 Co-op terms
Maude Potvin-Gibert BSc Kinesiology	5/2016	8/2016	Summer Student	U Laval/CIRRIS	Supervisor 100%	A Scoping review of propelling-related technologies for manual wheelchairs	MSc Student, Kinesiology, Western University, Ontario (Sept 2016)
Marie-Michelle Chrétien BSc Kinesiology	5/2016	8/2016	Summer Student	U Laval/CIRRIS	Supervisor 50%	A Scoping review of propelling-related technologies for manual wheelchairs	BSc Student, Physiotherapy, Université Laval
Catherine Bluteau BSc Kinesiology	5/2013	8/2013	Summer Student	U Laval	Supervisor 50%	Naturalistic study of driving behavior in drivers aged 65 and over	Msc Student, Physiotherapy, Université Laval

6. Student Awards mentorship

- EPIC-AT - EPIC-AT Health Research Training Platform : Monitoring and Pattern Recognition System for Behaviour & Activities of Daily Living Among Patients with Dementia Using Smart Algorithms and Assistive Technology - $8000
- Mitacs BSI Business Strategy Internship (BSI-Indigenous). Nathalie Kaboha ($10,000). Marketing Research and Strategy Implementation with iAccompany, 2021.
- Mitacs Globalink, Eloise Zaghrini, International Summer Student ($7000), 2021.
- Mitacs Globalink, Siddhi Pandare, International Summer Student ($7000), 2021.
- Undergraduate Research Award, University of Manitoba, Anna Polyvyana ($6000), 2020.

7. Research Grants (University of Manitoba)

PROJECT	Role	FUNDING SOURCE	*Year*	BUDGET	STATUS
Improving quality of life and social participation of seniors and persons living disabilities	PI	College of Rehabilitation Sciences / U of Manitoba	*19-24*	$200,000	-
An Activity Monitoring Platform for AAL	PI	Collaborative Innovation Res Fund (CIRF), UM	*19-20*	$50,000	Closed
Creating a research roadmap for ambient assistive living (AAL) in Manitoba	PI	CIHR SPOR	2022	$4984	In progress
Telepresence robot project for people with dementia	Co-PI	Victoria General Hospital Foundation & Research Manitoba	*20-22*	$360,000	In progress
Evaluation and validation of end users' perception, attitude and behaviour toward iAccompany online healthcare services	PI	Mitacs – Epyonne (Indigenous Startup, Manitoba)	*21*	$30,000	Closed
Mobile Application for Training of Family Members Caring for Someone with Dementia	PI	MARTI-Riverview-AgeWell	*19-20*	$6,000	Closed
MARIA – A Virtual Senior Roommate	PI	MARTI-Riverview-AgeWell	*19-20*	$6,000	Closed
A Virtual reality (VR)-based exercise program for stroke survivors who are discharged home and living in rural Manitoba	PI	The Gerry McDole Professorship In Improved Healthcare Delivery to Rural, Remote and Underserved Populations of Manitoba	*20*	$150,000	In Progress
Development and implementation of a haptic-enabled multimodal robotic platform for upper-limb fine motor skills retraining	PI	Mitacs – Tactile Robotics (100% PDF Salary)	*19-22*	$135,000	In progress
A Sensor-Based monitoring Program Targeting Patients with stroke discharged home	PI	Deer Lodge Centre Foundation	*21-22*	$13,589	In progress
Implementation of a validated home tele-rehabilitation intervention for geriatric patients: perspectives of stakeholders	PI	Mitacs – Deer Lodge Centre Foundation	*21-22*	$15.000	In progress
Posture and body language recognition in persons with dementia	PI	Riverview health centre	*19-20*	$13,600	Closed
Careband: measuring life space in PwD	Co-PI	CAHBI	*19*	$30,075	*Awarded /withdrawn*

8. Training Grants

PROJECT	Role	FUNDING SOURCE	*Year*	BUDGET	STATUS
Early Professionals, Inspired Careers in AgeTech (**EPIC-AT**) Health Research Training Platform	Principal Applicant	CIHR - Health Research Training Platform	***22-27***	$2.4M	In progress

9. Research Grants (Before joining the University of Manitoba)

Closed ($221,000)

PROJECT	Role	FUNDING SOURCE	*Year*	BUDGET	STATUS
Development of a treadmill for the rehabilitation of people with Multiple Sclerosis	PI	NSERC - Applied Research and Development Grant	***17***	$75 000	**Closed**
Development of an ergonomic door for nursing home	PI	NSERC - Applied Research and Development Grant	***17***	$75 000	**Closed**
Development of a suspension system f the rehabilitation of people with Multiple Sclerosis	PI	Age-Well NCE	***17***	$50 000	**Closed**
Barriers and facilitators of integrating an immersive wheelchair simulator (miWe) as a clinical tool for training powered wheelchair driving skills	Co-I	AgeWell Strategic Investment Program	***17***	$21 000	**Closed**

10. Media Relations

10.1. TV and Radios

- April 2021: Radio Canada (Le 6 à 9) Des robots pour assister les personnes atteintes de démences
- Dec 2020: Radio Canada (Le Téléjournal – Manitoba) Aînés: rester actifs, malgré la pandémie
- Dec 2020: Radio Canada (Le 6 à 9) Table ronde sur les aînés durant la pandémie.
- Sept 2020: CBC Telepresence robots to help people with dementia
- July 2019: CTV NEWS Pilot Project aiming to use cameras to monitor patients with dementia without breaching their privacy

10.2. Invited interviews/feature stories

- July 2022: OT Symposium highlights occupational therapy research / The Active @ Home Program - https://news.umanitoba.ca/ot-symposium-highlights-occupational-therapy-research/
- March 2022: Early Professionals, Inspired Careers in AgeTech (EPIC-AT) Health Research Training Platform https://news.umanitoba.ca/health-research-projects-receive-31m-in-federal-funding/
- June 2022: Case study Virtual neurocognitive recovery treatment – featured in a start-up/contractor website https://www.stellarx.ai/use-cases/manitoba
- Oct 2021: Bannatyne Legacy Circle Celebration for the HSC Foundation: https://www.youtube.com/watch?v=oHkjGxfeT-I (segment begins at min 44:40)
- April 2021: Winnipeg Free Press: Bots offer warm (tele)presence where needed - Pilot project aims to help people with dementia
- April 2021: Research at Riverview Health Centre: Enhancing Patient Care and Quality of Life

- March 30: The Manitoban Pilot study to help dementia patients – Goal to ease burden on family caregivers with telepresence robots
- March 2021: UM News: New Gerry McDole Professor to test virtual-reality yoga for stroke rehabilitation
- March 2021: Research Manitoba/Research Today: Robots allow family members to 'drop in' on loved ones living with dementia
- December 2020: RadyUM Smart Solutions
- October 2020: Winnipeg Free Press Robots to connect people living with dementia, caregivers
- September 2020: The Victoria General Hospital Foundation: New Strategic Partnership To Support Informal Caregivers Through Innovative Telepresence Robot Project
- September 2020: UM News College of Rehabilitation Sciences' telepresence robots to assist people with dementia, caregivers
- June 2020: UM News Online conference highlights smart technologies
- April 2020: UM News Augmented Human conference moves online due to COVID-19
- Dec 2019: UM News Dutch researchers welcomed at College of Rehabilitation Sciences
- October 2019: UM News High-tech research projects to create futuristic health-care aids
- September: 2019 UM News Rady Faculty alumni celebrate Homecoming by "coming home"
- July 2019: UM News CoRS researcher, interns pilot high-tech safety program for dementia patients
- 2019: AgeWell NCE Website Profile
- May 2013: Les skieurs français préparent les Jeux olympiques d'hiver de 2014 à l'université de Reims Champagne-Ardenne

10.3. Blog posts

- March 2021: AAL Program Blog : How the COVID-19 pandemic breaks new ground for in-home telerehabilitation
- November 2020: AAL Program Blog: Caring for the seniors with dementia in the middle of the COVID-19 pandemic: 4 things you need to know

10.4. Public events

- November 2021: International Science Festival - Fête de la Science, Alliance Française, Outdoor Display, Front Garden, Winnipeg, Manitoba https://news.umanitoba.ca/celebrate-science-month/

11. Creative work / Technology development

- Data Streamer
- iManus: an In-home hand rehabilitation platform
- Caring4Dementia: a mobile application to train people caring for patients with dementia
- Home PSP: Active at Home Post-Stroke Program
- Tablet-based in-home telerehabilitation of Indigenous people living with dementia

12. Publications (Google Scholar Link)

12.1. Peer-reviewed Journal Articles

N.B. Names of supervised interns or students or postdoctoral fellows are underlined

In Preparation

1. Bani Hani, J., Cooke, C, Choukou, M.A. Technology-assisted interventions for hand Rehabilitation in stroke patients: a scoping review protocol. Systematic Reviews
2. East, R., Eskicioglu, R., Ashraf, A., Irani, P.P., Choukou, M.A. Ambient-Sensing-System for Occupant Activity Monitoring and Fall Detection in Suboptimal Sensing Conditions

Under review

3. Choukou, M.A., Olatoye, F., Urbanowski, R., Caon, M., Monnin, C. Digital health technology to support staff and family caregivers caring for patients with cognitive impairment, JMIR Mental Health
4. Choukou, M.A., Seigneur, J.M., Bani Hani, J., Kaboha, N. The value of mobile apps in assisting informal caregivers for older adults: a critical review with insights into future development. International Journal of Medical Informatics
5. Lettre J, Routhier F, Archambault P.S., Giesbrecht E, Choukou M.A, Miller W.C. Barriers and facilitators of integrating the miWe immersive wheelchair simulator as a clinical tool for powered wheelchair training
6. Alsulami, M.H., Almalki M., Alshdadi A.A., Almuayqil, S.N., Alsaqer, M.S., Atkins, A.S., Choukou, M.A. Delivering Digital Healthcare for Elderly: A Holistic Framework for the Adoption of Ambient Assisted Living. International Journal of Environmental Research and Public Health

Published

7. Sanchez Ramirez, D.C., Choukou, M.A., PoL, M. Effect of telemonitoring and telerehabilitation on physical activity, exercise capacity, health-related quality of life and healthcare use in patients with lung diseases or COVID-19. Journal of Telemedicine and Telecare (Accepted) **2022**
8. Maddahi A., Leach T., Saeedi M., Dhannapuneni P.R., Maddahi Y., Choukou M.A., Zareinia K. Roboethics in Remote Human Interactions and Rehabilitative Therapeutics. Appl. Sci. **2022**, 12, 6033.
9. Choukou, M.A., Sanchez-Ramirez, D., Pol, M. Uddin, M., Monnin, C., Syed-Abdul, S. COVID-19 infodemic and digital health literacy in vulnerable populations. Digital Health, **2022**, 8:1-13.
10. Maddahi, A., Bani Hani J., Asgari, A., Nassiri, A., Choukou, M.A. Therapists' perspectives on a new portable hand telerehabilitation platform for home-based personalized treatment of stroke patients. European Review for Medical and Pharmacological Sciences,**2021**, 25:5790-5800.
11. Choukou, M.A., Polyvyana, A. Sakamoto, Y. Osterreicher, A. **2021**. Ambient Assisted Living Technologies to support Older Adults' health and wellness: A systematic mapping review. European Review for Medical and Pharmacological Sciences, 25(12): 4289-4307.
12. Choukou, M.A., Mbabaali, S. Bani Hani, J, Cooke, C. **2021**. A scoping review of haptic-enabled interventions for hand rehabilitation in stroke patients: a scoping review. Applied Sciences, 11: 3712.
13. Choukou, M.A., Sakamoto, Y. Irani, P. **2021.** Attitude and perceptions of older and younger adults towards ambient technology for assisted living. European Review for Medical and Pharmacological Sciences, 25(10): 3709-3717.
14. Choukou, M.A., Taha, A. Qadeer, A, Monnin, C. **2021.** Digital health technology for remote care in response to COVID-19 pandemic: a scoping review. European Review for Medical and Pharmacological Sciences, 25(8):3386-3394.
15. Choukou, M.A., Mbabaali, S. East, R. Healthcare Professionals' Perspective on Implementing a Detector of

Behavioural Disturbances in Long-Term Care Homes, International Journal of Environmental Research and Public Health (Section: Mental Health), **2021**, *18*(5): 2720.

16. Choukou, M.A., Shortly, T., Leclerc, N., Freir, D., Lessard, G., Demers, L., Auger, C. **2021.** Evaluating the Acceptance of Ambient Assisted Living Technologies (AALT): A Scoping Review. International Journal of Medical Informatics, 150: 104461.

17. Choukou, M.A., Maddahi, A. Polyvyana, A. Monnin, C. **2021.** Telehealth for Indigenous Older Adults: A Scoping Review. International Journal of Medical Informatics, 148: 104408.

18. Choukou, M.A., Potvin-Gilbert, M., Best, K.L., Gagnon, D., Borisoff, J., Routhier, F. **2021**. Scoping review of propulsion-related aids for manual wheelchair. Assistive Technology, 33(2): 72-86.

19. Mecheri, S., Laffaye G., Triolet, C., Leroy, D., Dicks, M. Choukou, M.A., Benguigui, N. **2019**. Relationship between Split-Step Timing and Leg Stiffness in World-Class Tennis Players when Returning Fast Serves. Journal of Sports Sciences, 37(17): 1962-1971.

20. Choukou, M.A., Best, K.L., Craven, B.C., Hitzig, S.L. **2019**. Identifying and classifying quality of life tools for assessing Neurologic Bowel Dysfunction after Spinal Cord Injury. Topics in Spinal Cord Injury Rehabilitation. 25(1): 1-22.

21. Choukou, M.A., Routhier, F., Lettre, J., Noreau, L., Monacelli, E., Rabreau, O., Leyrat, P.A., Coulmier, F. **2017** Becape: Skills assessment rig to driving. 1st IEEE International Symposium on Last-Mile Smart Mobility, August 24-26, 2016, Paris, France

22. Hirsch, P., Choukou, M.A., Bellavance, F. **2017**. Transfer of Learning Basic Vehicle Control Skills from Truck Simulator to the Real World in Entry-Level Truck Driver. Transport. Res. Rec. 2637: 67–73.

23. Benjamin, D., Ahram, T., De Ru, E., Choukou, M.A., Abdi, E., Gardan, N., Constant Boyer, F., Regnault,P. Taiar, R. **2016**. Comparison of FAP scores with the use of safety footwear and regular walking shoes. Theoretical Issues in Ergonomics Science, *Published online: 12/12* (http://dx.doi.org/10.1080/1463922X.2016.1260180)

24. Laffaye G., Choukou, M.A., Benguigui, N., Padulo, J. **2016**. Age- and gender-related development of stretch shortening cycle during a sub-maximal hopping task. Biology of Sport 33:29-35.

25. Ferrari, F.J., Choukou, M.A., De Ru, E., Abdi, E., Boyer, F.C., Trenchard, H., Taiar, R. **2015.** Does "Kinesio-Taping" Influence Dynamic Standing Balance? International Journal Series in Multidisciplinary Research *2(1):1-10*

26. Gardan, N., Laheurte, J., Gouy, E., Dey, N., Abdi, E., Asgher, U., Choukou, M.A., Schneider, A., Taiar, R. **2015**. Computational fluid dynamics for the nordic combined skiing jump. Series on Biomechanics 29: 31-38.

27. Choukou, M.A., Bluteau, C., Germain Robitaille, G., Simoneau, M., Lavallière, M., Moskowicz, T., Laurendeau, D., Teasdale, N. **2014**. Naturalistic study of stop-controlled intersections negotiation and respect for speed limits in drivers aged 65 and over. Recherche, Transport et Securité 30: 271-281.

28. Choukou, M.A., Hijazi, S., Boyer, F.C., Taiar, R. **2014**. Treatment of shoulder dislocation due to rotator cuff syndrome: A comparative study between a manual relocating technique and a shoulder rehabilitation device. Journal of Advances in Biomedical Engineering and Technology 1: 1-7.

29. Choukou, M.A., Ghouli, S., Boyer, F.C., Taiar, R. **2014**. Effects of unstable footwear on stance pattern. Journal of Biosciences and Medicines 2: 20-24.

30. Choukou, M.A., Laffaye, G. Taiar R. **2014**. Reliability and validity of an accelerometric system for assessing vertical jumping performance. Biology of Sport 31(1): 55-62.

31. Choukou, M.A., Hijazi, S. **2013**. Effectiveness of ankle taping on ankle joint kinematics during walking on level ground. Foot and Ankle Specialist 6(5): 352-355.

32. Choukou, M.A., Laffaye, G., Taiar, R. **2013**. Validity of an accelerometric system for measuring force- time based data during jumping tasks. Computer Methods in Biomechanics and Biomedical Engineering 1: 84-85.

33. Laffaye, G., Debanne T., Choukou, M.A. **2012**. Is the ball velocity dependent on expertise? A multi- dimensional study in handball. International Journal of Performance Analysis in Sport 12: 629- 642.
34. Choukou, M.A., Laffaye, G., Heugas-De Panafieu, A.M. **2012**. Sprinter's motor signature does not change with fatigue. European Journal of Applied Physiology 112(4): 1557-68.
35. Laffaye, G., Choukou, M.A. **2010**. Gender bias in the effect of dropping height on jumping performance in volleyball players. Journal of Strength and Conditioning Research 24(8): 2143-8.

12.2. Patent

1. Ali Maddahi, Mohamed-Amine Choukou, Amir Mahdi Nassiri, and Yaser Maddahi, "A remote training and practicing apparatus and system for upper-limb rehabilitation", US Patent, US 63/178,735, **2021** (Pending)

12.3. Peer-Reviewed conference proceedings

1. Qadeer, A., Choukou, M.A., Seigneur, J.M. Recognition System for Behavior & Activities of Daily Living Among Patients with Dementia Using Smart Algorithms and Assistive Technology. In 13th Augmented Human International Conference (AH2022), May 26, 27, 2022, Winnipeg, Canada. ACM, New York, NY, USA
2. Seigneur, J.M., Choukou, M.A. How should metaverse augment humans with disabilities?: This paper discusses how the metaverse should augment the humans with disabilities. In 13th Augmented Human International Conference (AH2022), May 26, 27, 2022, Winnipeg, Canada. ACM, New York, NY, USA
3. Choukou, M.A., Ripat, J., Mallory-Hill, S., Urbanowski, R. **2021.** Designing the University of Manitoba Technology for Assisted Living Project (TALP): A Collaborative Approach to Supporting Aging in Place. In: Black N.L., Neumann W.P., Noy I. (eds) Proceedings of the 21st Congress of the International Ergonomics Association (IEA 2021). IEA 2021. Lecture Notes in Networks and Systems, vol 220. Springer, Cham
4. Bani Hani, J., Mbabaali, S., Monnin, C., Taiar, R., Choukou, M.A. 2**021**. Users' Perspectives on Haptic Technology Use in Hand Rehabilitation. In 12th Augmented Human International Conference (AH2021), May 27, 28, 2021, Geneva, Switzerland. ACM, New York, NY, USA
5. Kaboha, N., Bani Hani, J., Seigneur, J.M., Choukou, M.A. **2021**. The Role of Technology in Senior Co-Caregiving Support: A Scoping Review of Senior Care Mobile Applications. In 12th Augmented Human International Conference (AH2021), May 27, 28, 2021, Geneva, Switzerland. ACM, New York, NY, USA
6. Maddahi, A., Polyvyana, A., Nassiri A.M., Maddahi, Y., Choukou, M.A. Caring4Dementia: A Mobile Application to Train People Caring for Patients with Dementia. Augmented Human 2020 May 27-29 **2020**, Winnipeg, Canada. In: Proceedings of the 11th Augmented Human International Conference. 8: 1–7.
7. Maddahi, A., Choukou, M.A., Maddahi, Y. An interactive sensory system to record and monitor human motion in physical rehabilitation. Augmented Human 2020 May 27-29 **2020**, Winnipeg, Canada. In: Proceedings of the 11th Augmented Human International Conference, 22: 1–2.
8. Ganesan, B., Yip, J., Luximon, A., Choukou, M.A., Al-Jumaily, A. Kinect-based 3D assessment for clubfoot deformity: an exploratory study. Augmented Human 2020 May 27-29 **2020**, Winnipeg, Canada. In : Proceedings of the 11th Augmented Human International Conference, 17: 1–4.
9. East, R., Mbabaali, S., Sivelle, C., Laguelle, N., Choukou, M.A. Unobtrusive camera-based monitoring of behavioural disturbances in patients with dementia living in long term care facilities. Augmented Human 2020 May 27-29 **2020**, Winnipeg, Canada. In : Proceedings of the 11th Augmented Human International Conference, 27: 1–2.
10. Routhier, F., Archambault, P. S., Choukou, M.-A., Giesbrecht, E., Lettre, J., & Miller, W. C. 2018. Barriers and facilitators of integrating the miWe immersive wheelchair simulator as a clinical tool for training powered wheelchair driving skills. 12th World Congress of the International Society of Physical and Rehabilitation Medicine, Paris, France, July 8-12, **2018**. In : Annals of Physical and Rehabilitation Medicine. 61: e91

11. Choukou, M.A., Routhier, F., Monacelli, E., Rabreau, O., Leyrat, P.A., Vincent, C., Noreau, L. Test-retest reliability of a new tool assessing car-driving-related motor skills in adults living with physical disabilities. 93rd Annual Conference of the American Congress of Rehabilitation Medicine, November 2-4, **2016**, Chicago, IL, USA (Poster presentation). In: Archives of Physical Medicine and Rehabilitation, 97(12): e26

12. Choukou, M.A., Routhier, F., Monacelli, E., Rabreau, O., Leyrat, P.A., Vincent, C., Noreau, L. Test-retest reliability of a new tool assessing car-driving-related motor skills in adults living with physical disabilities. Canadian Society for Psychomotor Learning and Sport Psychology, september 30, **2016**, Wilfried Laurier University, Waterloo, ON, Canada. In : Proceedings of the SCAPPS 2016 Annual Conference, 48(1): 5.

13. Choukou, M.A., Ghouli, S., Taiar, R. Effets du port de chaussures de sécurité à semelles convexes sur la posture érigée et le cycle de la marche. 20ème congrès de la Société Francophone Posture, Equilibre et Locomotion. 29–30 Novembre **2013**, Genève, Suisse (Oral presentation). In: Clinical Neurophysiology, 44(1): 149–150

14. Choukou, M.A., Hijazi-Hejouj,S., Ghouli, S., Taiar, R. Efficacité du bandage de la cheville sur le comportement cinématique de la cheville lors de la marche sur terrain plat. 20ème congrès de la Société Francophone Posture, Equilibre et Locomotion. 29 – 30 Novembre **2013**, Genève, Suisse (Poster presentation). In: Clinical Neurophysiology, 44(1): 143–144

15. Choukou, M.A., Gaillet, J.C., Taiar, R. Comparaison de deux techniques de contention souple et leur influence sur l'équilibre postural. 20ème congrès de la Société Francophone Posture, Équilibre et Locomotion. 29 – 30 Novembre **2013**, Genève, Suisse (Poster presentation). In : Clin.Neurophysiology, 44(1): 148

16. Ferrari-Portafaix, C., Choukou, M.A., Gaillet, J.C., Taiar, R. Effet d'une barre rétro-capitale pronatrice sur la marche normale: analyse cinétique. 20ème congrès de la Société Francophone Posture, Équilibre et Locomotion. 29 – 30 Novembre **2013**, Genève, Suisse (Poster presentation). In : Clinical Neurophysiology, 44(1): 134

17. Choukou, M.A., Ghouli, S. Quinart, H., Taiar, R. Effects of wearing safety shoes with convex soles on gait cycle. 28th Congress of Physical Medicine and Rehabilitation, October 17 – 19, **2013**, Reims, France (Oral presentation). In: Annals of Physical and Rehabilitation Medicine, 56(S1): e26

18. Choukou, M.A., Ghouli, S., Taiar, R. Postural adaptations to wearing safety shoes with convex soles. 28th Congress of Physical Medicine and Rehabilitation, October 17 – 19, **2013**, Reims, France (Poster presentation). In: Annals of Physical and Rehabilitation Medicine, 56(S1): e161-e162

19. Choukou, M.A., Ferrari, F.J., Gaudron J.L, Taiar, R. Effects of proprioceptive new-generation strapping on maintaining the standing position. 28th Congress of Physical Medicine and Rehabilitation, October 17 – 19, **2013**, Reims, France (Poster presentation). In: Annals of Physical and Rehabilitation Medicine, 56(S1): 154

20. Hijazi, S., Choukou, M.A., Quinart, H., Gaudron, J.L., Boyer, J.F., Taiar, R. Treatment of the scapulohumeral dislocation due to rotator cuff syndrome; A comparative study between a manual relocating technique and a shoulder rehabilitation device. 28th Congress of Physical Medicine and Rehabilitation, October 17 – 19, **2013**, Reims, France (Oral presentation). In: Annals of Physical and Rehabilitation Medicine, 56(S1): e184-e185

12.4. Abstracts / Conference Presentations

1. Prats F., Choukou, A. Piquer, O., Beaulieu-Bonneau, S., Wittich, W. Soutien technologique au budget une opportunité pour vos usagers? 4th Quebec Congress in Adaptation-Rehabilitation Research. June 3-4, 2022, Sherbrooke, Quebec, Canada

2. Asgari, A., Bani Hani, J., Mahdi Nassiri, A., Maddahi, A., Choukou, M.A. Design and evaluation of iManus: a smart portable hand telerehabilitation platform. Collaborating for Health and Wellness, Virtual Conference, 2021, Saskatoon, SK, Canada (Oral presentation, teleconference) (reported)

3. Bani Hani, J., Asgari, A., Mahdi Nassiri, A., Maddahi, A., Choukou, M.A. iManus A Smart Telerehabilitation glove for upper extremity dysfunction after stroke. Collaborating for Health and Wellness, Virtual Conference, 2021,

Saskatoon, SK, Canada (Oral presentation, teleconference) (reported)

4. Choukou, M.A., Mbabaali, S., Cooke C. Technology-assisted interventions for hand telerehabilitation in stroke patients: A scoping review. Movement: Brain, Body, Cognition" at the Sorbonne, Paris, France, September **2020** / postponed 15-17 September 2022 (Oral presentation)

5. Choukou, M.A., Maddahi, A., Polyvyana, A. Telerehabilitation: the Great Absentee of Digital Health Technology for Indigenous Older Adults. Collaborating for Health and Wellness, Virtual Conference, October 1 – 2, **2020**, Winnipeg, Manitoba, Canada (Oral presentation, teleconference)

6. Choukou, M.A., Polyvyana, A., Maddahi, A. Nassiri, A., Maddahi. Y. Caring4Dementia: An Interactive Mobile Application to Train People Caring for Patients with Dementia. Collaborating for Health and Wellness, Virtual Conference, October 1 – 2, **2020**, Winnipeg, Manitoba, Canada (Oral presentation, virtual conference)

7. Choukou, M.A, Maddahi, A., Maddahi, Y. An Information and Computer Technology-Based Mobile Application for Training of Family Members Caring for Someone with Dementia. Building Rehabilitation Connections: Thinking Outside the Box, Saskatoon, SK, September 21 and 22, **2019** (Oral presentation, virtual conference)

8. East*, R., Sivelle, C., Laguelle, N., Choukou, M.A. Hazardous behaviour recognition in patients with dementia living in long-term care facilities. Aging & Technology Networking Event. Winnipeg, Manitoba, June 19, **2019** (Poster presentation) (*Best Poster Award)

9. Maddahi, A., Maddahi, Y., Choukou, M.A. i-RobohabProgram: Deploying Robotics and Haptics to Serve the Aging Population. Aging & Technology Networking Event. Winnipeg, Manitoba, June 19, **2019** (Poster Presentation)

10. Auger, C., Kairy, D., Demers, L., Routhier, F., Archambault, P., Verduyckt, I., Choukou, A., Vincent, C., Latulippe, K., Hébert, A.-M., Dussault-Picard, C., Rousseau, J.. Se regrouper autour du besoin d'outils méthodologiques pour mesurer l'utilisabilité des technologies de réadaptation. Séminaire « Utilisabilité et participation sociale », IRDPQ du Centre intégré universitaire de santé et de services sociaux de la Capitale-Nationale (CIUSSS-CN), Québec, QC, Canada, **2018** (Oral presentation)

11. Choukou, M.A., Beaupré-Laflamme, R, Tremblay, I., Hébert, M.A., Martin, C. Développement d'un tapis de marche à propulsion non-motorisée pour la réadaptation physique des personnes atteintes de troubles musculo-squelettiques et neurologiques. Journée scientifique et assemblées annuelles REPAR-INTER **2018**, Québec, QC, Canada (Oral presentation)

12. Choukou, M.A, Best K.B., Routhier, F., Borisoff, J., Gagnon, D. Propulsion Aids for Manual Wheelchairs: A Scoping Review. The 34th International Seating Symposium, March 6-9, **2018**. Vancouver, BC, Canada (Oral presentation)

13. Routhier F, Archambault P, Choukou* MA, Giesbrecht E, Lettre J, Miller WC. (2017). Barriers and facilitators of integrating the miWe immersive wheelchair simulator as a clinical tool for training powered wheelchair driving skills: Methodological approach. AGE-WELL's 3rd Annual Conference, October 17 – 19 **2017**, Winnipeg, MB, Canada. (Poster Presentation)

14. Choukou, M.A, Best K.B., Routhier, F., Borisoff, J., Gagnon, D. Propulsion Aids for Manual Wheelchairs: A Scoping Review. Journée scientifique et assemblées annuelles 2017 du Réseau Provincial de Recherche en Adaptation-Réadaptation, 18 Mai **2017**, Montréal, Québec, Canada. (Oral presentation)

15. Hirsch, P., Bellavance, F., Choukou, M.A. Transfer of Training in Basic Control Skills from a Truck Simulator to a Real Truck. Transportation Research Board (TRB) 96th Annual Meeting, January 8–12, **2017**, Washington, D.C., USA (Poster presentation)

16. Choukou, M.A., Routhier, F., Monacelli, E., Rabreau, O., Leyrat, P.A., Vincent, C., Noreau, L. Test- Retest reliability of a new tool assessing car-driving-related motor skills in adults living with physical disabilities. Canadian Society for Psychomotor Learning and Sport Psychology, October 20-22, **2016**, Waterloo, ON, Canada (Oral presentation).

17. Choukou, M.A., Routhier, F., Lettre, J., Noreau, L., Monacelli, E., Rabreau, O., Leyrat, P.A., Coulmier, F. Becape: Skills assessment rig to driving. 1st IEEE International Symposium on Last-Mile Smart Mobility, August 24-26, **2016**, Paris, France (Oral presentation)

18. Choukou, M.A., Routhier, F., Monacelli, E., Rabreau, E., Leyrat, P.A. Validation d'un banc d'évaluation des

capacités motrices de conduite automobile d'individus ayant des incapacités physiques. 17th Research Colloquium on Rehabilitation, May 6, **2016**, Montréal, QC, Canada (Oral presentation)

19. Choukou, M.A., Routhier, F., Monacelli, E., Rabreau, O., Leyrat, P.A., Vincent, C., Noreau, L. Fidélité test-retest d'un banc d'évaluation des capacités motrices de conduite automobile d'individus ayant des incapacités physiques: résultats préliminaires. Journées scientifiques et Assemblée annuelle du Réseau provincial de recherche en adaptation-réadaptation, May 17, **2016**, Québec, QC, Canada (Poster presentation)
20. Choukou, M.A., Routhier, F., Gagnon, D. Étude de l'efficacité des mains courantes Bbraver ainsi que de la satisfaction et de la douleur ressenties aux épaules suite à leur utilisation : approche méthodologique. Journées de la recherche en santé de la Faculté de Médecine de l'Université Laval, 25-26 mai **2016**, Québec, QC, Canada (Poster presentation)
21. Rabreau O., Monacelli, E., Leyrat, P.A., Coulmier, F., Choukou, M.A., Routhier, F. BECAPE : Outils d'évaluation des aptitudes à la conduite automobile. Colloque Handiversité – Le handicap un vecteur pour l'innovation? 7 Avril, **2016**, Paris, France (oral presentation)
22. Choukou, M.A., Routhier, F., Gagnon, D. Étude de l'efficacité des mains courantes Bbraver ainsi que de la satisfaction et de la douleur ressenties aux épaules suite à leur utilisation : approche méthodologique. Journées des étudiants graduées du CIRRIS, 8 février **2016**, Québec, QC, Canada (Oral presentation)
23. Giguère, A.M.C., Carnovale, V., Holroyd-Leduc, J.M., Kazanjian, A., Straus, S., Urquhart, R., Breton, E., Choukou, M.A., Guo, S., Dumont, S., Durand, P.J., Légaré, F., Tourigny, A., Turgeon, A., Aubin, M., Verreault, R. Key Stakeholders' Views on the Quality of Care and Services Available to Frail Seniors in Canada. 45th Annual Scientific and Educational Meeting, Canadian Association of Gerontology, October 20-22, **2016**, Montreal, Québec, Canada (Oral presentation)
24. Choukou, M.A., Holroyd-Leduc, J.M., Kazanjian, A., Guo, S., Durand, P.J., Straus, S.E., Urquhart, R., Légaré, F., Turgeon, A.F., Tourigny, A., Dumont, S., Verreault, R., Aubin, M., Breton, E., Giguère, A.M.C. Key stakeholders' perceptions of the quality of frail seniors' healthcare in Canada: a mixed methods study. 3rd Annual TVN Conference: Improving care for frail elderly Canadians, September 27-29, **2015**, Toronto, ON, Canada (Poster presentation)
25. Padulo, J., Ardigo, L.P., Laffaye, G., Masala, D., Falese, L., Choukou, M.A., Vando, S. Wii Balance Board as a device for investigating kayak's biomechanics: a pilot study. Sumbitted to: 39th Congress of the Socitety of Biomechanics, August 27-29, **2014**, Valenciennes, France (Oral presentation)
26. Choukou*, M.A., Hirsch, P., Bellavance, F. Effectiveness of Training with a Truck Driving Simulator in Performing Backing Maneuvers in Real World. AUTO21 Conference: « Solving the challenges of tomorrow, today », May 27-28, **2014**, Niagara Falls, ON, Canada (Poster presentation) (**Round 1 Winner of the HQP Competition*)
27. Hirsch, P., Bellavance, F., Choukou, M.A. An evaluation of a blended simulator-based and in-truck training on the development of backing skills on a semi-trailer for learner truck drivers. Canadian Multidisciplinary Road Safety Conference, June 1 - 4, **2014**, Vancouver, BC, Canada (Oral presentation)
28. Dumont, J., Choukou, M.A., Cambier, J., Boyer, J.F., Taiar, R. Spatio-temporal and etiological analysis of gait in patients with Steinert's disease. (**2013**). 28th Congress of the French Society of Physical Medicine and Rehabilitation (Oral presentation)
29. Choukou, M.A., Ferrari, F.J., Gaudron, J.L., Taiar, R. Effects of Flexing with Proprioceptive Stimulation on Standing Posture. (**2013**). 28th Congress of the French Society of Physical Medicine and Rehabilitation. (Oral presentation)
30. Bluteau, C., Choukou, M.A., Laurendeau, D., Mozkowciz, T., Germain Robitaille M., Simoneau M., Teasdale, N. Chaînes de déplacements chez les conducteurs âgés en milieu rural et urbain. 11ème Edition des Journées de la Recherche du Réseau Québécois de Recherche sur le Vieillissement. 1 – 2 Octobre **2013**, Québec, Québec, Canada (Poster presentation)
31. Ferrari, F.J., Choukou, M.A. Le « K-Taping » en podologie: une approche globale. IRBMS: 17th Congress of Sport

Medicine. November 24, **2012**, Lille, France (Oral presentation)

32. Choukou, M.A., Laffaye, G. Effects of age on jumping abilities. 6th International Colloquium « Football & Research », May 29 – 31, June 01, **2012**, Rennes, France (Oral presentation)
33. Choukou, M.A., Laffaye, G. Contribution of Physics to Athletic monitoring. Physics of Sports. EUROMECH 538, April 3–6, **2012**, École polytechnique, France (Oral presentation)
34. Choukou, M.A., Laffaye, G. Accelerometry for outdoor athletic performance assessment. Physics of Sports. EUROMECH 538, April 3–6, **2012**, École polytechnique, France (Poster presentation)
35. Laffaye, G., Choukou, M.A. Modeling human body as spring-mass system to assess athletic activities. Physics of Sports. EUROMECH 538, April 3–6, **2012**. École polytechnique, France (Oral presentation)
36. Choukou, M.A., Laffaye,G. Heugas-de Panafieu, A,M. La signature motrice du sprinter varie-t-elle avec la fatigue? 28th Colloquium of the « Club Locomotion et Motricité Rythmique », September 22-23, **2011**, Marseille, France (Oral presentation)
37. Choukou, M.A., Laffaye,G., Heugas-de Panafieu, A.M. Effect of fatigue on mechanical stiffness during the outdoor 100m sprint. Congress of the « Association des Chercheurs en Activités Physiques et Sportives », October 28 – 30, **2009**, Lyon, France (Oral presentation)

12.5. Invited Talks

1. International Conference on Artificial Intelligence in Health Sciences Education and Healthcare Applications, Kuwait University, Kuwait (Nov 2022)
2. Choukou, M.A. Smart-Technology-Enabled Telerehabilitation for Rural, Remote and Underserved Populations of Manitoba. Health Checks – There's a Whole Lot of Living Left to Do, 2021 (Virtual due to COVID-19)
3. Choukou, M.A. Adaptive rehabilitative technologies for stroke survivors Canadian Partnership for Stroke Recovery (CPSR)'s Stroke Program in Neurorecovery (CPSR-SPiN) workshop. July 19, 2021. (Virtual due to COVID-19)
4. Choukou, M.A., Adaptive rehabilitative technologies for stroke survivors, CanStroke Recovery Trials: Executive Committee Meeting. June, 4, 2021. (Virtual due to COVID-19)

12.6. Edited Book (peer-reviewed)

1. Choukou, M.A. and Syed-Abdul, S. (Eds.). Smart Home Technologies and Services for Geriatric Rehabilitation. Elsevier, Oct **2021.**

12.7. Invited Book Chapters (peer-reviewed)

1. Choukou, M.A., Zhu, X., Abdul-S, S. (**2022**) Digital Health Solutions Transforming Long Term Care and Rehabilitation. In Health Informatics. Healthcare Information Management Systems: Cases, Strategies, and Solutions. Joan M. Kiel, Marion J. Ball and George R. Kim Eds. Springer

2. Ganesan, B., Tong, R., Choukou, M.A., Akter, S. (**2021**). Foot Problems and their Implications for Footwear Design. In A. Luximon (Ed), Handbook of Footwear Design and Manufacture 2d Ed. Woodhead Publishing, Elsevier.

3. Choukou, M.A. (**2020**) Sustainability of mHealth Solutions for Healthcare System Strengthening. In: Digital Health Building Mobile and Wearable Applications for Participatory Health. Elsevier. ISBN 978-0-12-820077-3

4. Rabreau O., Choukou M.A., Routhier F., Lettre J., Noreau L., Monacelli E. (**2018**). BECAPE: Skills Assessment Tools for Car Driving. In: Embedded Systems and Assistive Technology for Last Mile Mobility, Ed. Institut Computer Science, ISBN: 978-2-490255-00-9

5. Laffaye G., Benguigui N. & Choukou M.A. (**2013**). Introduction to human movement science. In: "Physics of sport", pp 413-427. Les Éditions de l'École Polytechnique ParisTech ISBN 978-2-7302-1615-9

6. Choukou MA & Laffaye G. (**2013**). Contribution of Physics to athletic monitoring. In « Physics of sport », pp 445-

449. Les Éditions de l'École Polytechnique ParisTech ISBN 978-2-7302-1615-9

7. Laffaye G., & Choukou MA (**2013**). Modeling human body as spring mass system to assess athletic activities. In: Physics of sport, pp 440-445. Les Éditions de l'École Polytechnique ParisTech ISBN 978-2-7302-1615-9

13. Services

13.1. Local

- College of Rehabilitation Sciences
    - Search Advisory Committee for the Appointment of an Occupational Therapy Assistant Professor (2021)
    - MSc Rehabilitation Award Committee (2020-2023)
    - Moderator at the Illuminate speaker series (2019-current)
    - College of Rehabilitation Sciences Council (2018-current)
- Department of Occupational Therapy
    - OT Council (2020-current)
    - MOT Program Committee (2018-2019)
- Centre on Aging
    - Centre on Aging Advisory Board Committee (2021-2024)
    - Centre on Aging Student Award Adjudication Committee (2021-2022)
- Shared Health (Manitoba)
    - Steering Committee member, Virtual First Strategy, 2021
- Refereeing / Research work Evaluation
    - Helen Glass Research Symposium Graduate Student Research Poster Competition, rady Faculty of Health Sciences (2020)
    - Oral Presentation Awards Judge, Summer Student Symposium, U Laval / CIRRIS (2016)
    - Poster Awards Judge - Journées de la recherche en santé de la Faculté de Médecine de l'Université Laval (2016)
    - Committee member for M.Sc. thesis defense – Université de Reims Champagne-Ardenne (2013)
- Conference
    - Co-Chair: Aging and Technology Event, June19, 2019. Winnipeg, MB Canada
- Productivity club coordinator
    - Université Laval (2015-2016)
    - Université de Reims Champagne Ardenne (2013)
    - Université Paris Sud (2000-2011)

13.2. National

- Mitacs Accelerate Evaluation: (n=4) (2021, 2022)
- Canadian Occupational Therapy Foundation Research and Scholarship Committee: Evaluator (2001 – current)
- Canada Research Chairs (CRC) Program, Peer-reviewer for a nomination of a Candidate to a Canada Research Chair in Human-Centred Artificial Intelligence for Primary Health Care at McGill University (2021)
- Canada Foundation for Innovation : Consultant for the development of a research funding program: « Impact socioéconomique régional résultant du financement de la recherche universitaire en Estrie"
- National Advisory Board Membership
    - CIHR Early Career Researcher (ECR) Observer Program, 2020-2021
    - Canadian Foundation of Innovation (CFI) and "Fonds de Recherche du Quebec" FRQ Advisory Committee, 2020-2021
    - CIHR Institute on Aging, 2020-2023
    - Scientific Advisory Committee, Brain Injury Canada, 2019-2022

13.3. International

- French National Research Agency (ANR) 2022 generic call - Members of the reviewer panel CE19 – "Technologies pour la santé" (2022)
- Chair: 27th International Society for Telemedicine and eHealth (ISfTeH) Annual Conference, Winnipeg, Spring 2023
- Co-chair: 11th International Workshop on Intelligent Environments Supporting Healthcare and Well-being (WISHWell'22), Biarritz, France, June 20-23 2022)
- Co-Chair: 13th Augmented Human International Conference, Winnipeg, Manitoba, May 26-27, 2022.
- Program co-Chair: 12th Augmented Human International Conference, Geneva, Switzerland, May 27-29, 2021.
- Co-Chair: 11th Augmented Human International Conference, Winnipeg, Manitoba, May 27-29, 2020.
- Journal guest editor
    - Co-Guest Editor: Special Issue: "Digital Health in the COVID era: Lessons, Challenges and Opportunities". Sensors, 2022
- Journal Editorial board membership
    - Augmented Human Research (2019 - current)
- Journal Article Reviewing
    - BMJ Open (2021) (1)
    - Canadian Journal of Occupational Therapy (2021) (1)
    - NeuroSci (2021) (1)
    - Applied Sciences (2021) (1)
    - Health Informatics Journal (2021) (1)
    - Journal of Medical Internet Research (2019-2021) (4)
    - The Knee (2016) (1)
    - Clinical Biomechanics (2016) (3)
    - Sport Biomechanics (2016) (1)
    - Journal of Experimental Biology (2016) (1)
    - Perceptual and Motor Skills (2015) (1)
    - Biology of Sport (2014) (1)
    - Journal of Athletic Enhancement (2013-2014) (2)
    - SciTechnol (2014) (1)
    - International Journal of Sports Medicine (2012) (1)
    - Perceptual and Motor Skills (2012) (2)
    - Journal of Strength and Conditioning Research (2011) (2)

14. Professional Development

- Leadership in Innovation course, MIT Professional Education, Feb 28 –April 26, 2022
- Member of the International Society for Telemedicine & eHealth (2020 - current)
- SAN'YAS: Indigenous cultural safety training certificate. Manitoba Core ICS Health (2020)
- Lunch and Learn session: 'Case Formulations and the Reproduction of Oppressive Disability Discourses in Healthcare Education' From the Department of Integrated Studies in Education, McGill University (2020)
- Workshop for new faculty : Evaluative Practice: Unpacking Teacher Evaluations (2020)
- CIHR Institute of Gender and Health Core Competency Module for Sex and Gender in Primary Data Collection with Human Participants (2019)
- Grant Writing Workshop for New Faculty, Rady Faculty of Health Sciences, University of Manitoba (2019)
- Academic Career Advancement (By Vice Dean, Academic Affairs) 2019
- Elsevier Publishing Campus: Reviewer Training (2017)
- Certificate: Innovators of Tomorrow Certificate /AGE-WELL EPIC Program (2016)
- International Society of Posture & Gait Research (ISPGR): Student/Postdoc membership Training in Gait Analysis in special population. A series of 5 webinars (2016)
- Canada's technology and aging network (AGEWELL-NCE) : Highly qualified personnel (2015-16)
- Qualitative and users-centred approaches: focus groups, interview, eDelphi Data Analyses and Statistics (MatLab, Statistica, Statview, SPSS) Cochrane Standard Author Training, Québec (2015)
- Canadian Frailty Network webinars (2013-2014)

15. Computer Skills

- Qualitative data analysis Software: Nvivo
- Systematic Review Software: DistillerSR, Rayyan QCRI, Covidence
- Video and images Analyses (Virtualdubmod, Dartfish, Kinovea)
- 3D modeling / Biomechanics software(platforms AMTI, Zebris, Winpod, WinTrack, Optojump, accelerometers) 3D motion Capture (Vicon Motion System, BodyBuilder)(Gait/Posture/jumping tasks)
- Bibliography Databases Management (RefManager, EndNote, BibTeX)
- Teleconference platforms (Zoom, MS Teams, Google Meet)
- Microsoft Office - Open Office - Internet - Windows & Macintosh