IDEA Lab MONTHLY

A look into current and up-and-coming projects

Jointly organized by:

Sponsored by:
Alzheimer Society

Ideathon
Virtual Case Competition

WINNERS ANNOUNCEMENT

UBC IDEA LAB X UBC PATHS
SPONSORED BY ALZHEIMER SOCIETY OF BC

About IDEA Lab

Dr. Lillian Hung

The IDEA Lab brings people together to contribute to Innovation in DEmentia care and Aging. We are a team of people who innovate together towards the improvement of dementia care. We do Patient-Oriented Research (POR). Our projects with patient partners are potent tools for students, at all levels, to gain practical skills in academic and professional advancement. We learn from each other and support each other's growth. Our productivity outcomes matter and we intend to share through papers, presentations, our website and by elevating voices for greater visibility.

IN THIS ISSUE

IDEATHON

HRI2022

DEMSCAPE

TOCHIE

TELEPRESENCE ROBOT

Newsletter Team:
Ahmed Soltan, Haniya Bharucha and Katrina Jang

Program-At-A-Glance

The purpose of the IDEATHON is to encourage students to think about innovative and novel ideas on how to either improve the quality of life for people living with neurodegenerative diseases or for those who care for them (caregivers and healthcare workers) in our beginner-friendly environment and through support provided by UBC IDEALab, UBC PATHS and the Alzheimer Society of B.C.. We want students to develop a case project and build on their problem-solving presentation and team skills.
*The case competition took place virtually over the video conference platform, Zoom.*

Judges

Dr. Machiel Van der Loos, Ph.D.,P. Eng., is an Associate Professor in the Department of Mechanical Engineering at the University of British Columbia and the Director of the UBC Collaborative Advanced Robotics and Intelligent Systems (CARIS) lab.

Dr. Jim Mann, diagnosed with Alzheimer's disease in 2007, is a researcher and advocate for which he received an honorary doctor of Laws degree from U.B.C in 2020.
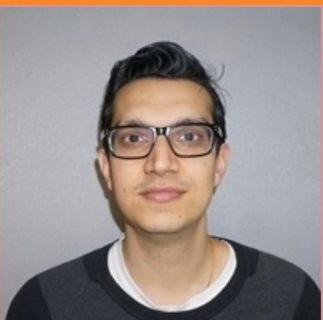
Dr. Rekesh Corepal is the Provincial Research Coordinator at the Alzheimer Society of B.C

Winners Announcement

FIRST PLACE

Self-ManageMATE

This project focused on creating a mobile application exploring reflective journaling. Individuals with Parkinson's disease submit responses to prompts about their mood, fears, and clinical prognosis. Natural language processing and sentiment analysis is then applied to generate a curated list of educational/supportive resources for the caregiver to utilize with the patient.
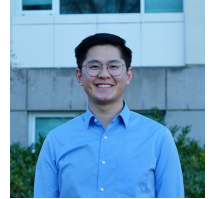
Khanh Linh Tran
Faculty: Science
Year Level: 4

Kelly Nguyen
Faculty: Applied Science/School of Nursing
Year Level: 3

Kevin Lam
Faculty: Science
Year Level: 4

SECOND PLACE

Hug on a Hand

This team of students is developing a wristband that can deliver deep pressure stimulation near the median nerve through the wrist to mimic the sensation of a hug and provide comfort to patients so their heart rate decreases when it is elevated due to stress or anxiety.
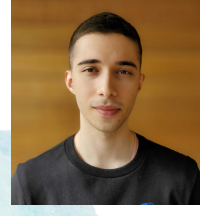
Madhini Vigneswaran
Faculty: Applied Science (BMEG)
Year Level: 3

Anjali Menon
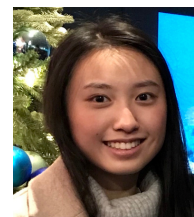Faculty: Applied Science (BMEG)
Year Level: 3

Sepehr Nouri
Faculty of Applied Science (BMEG)
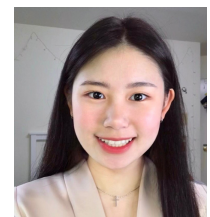Year Level: 3

THIRD PLACE

The Garden of Memories

Ariel and Emily proposed a sensory garden program which will include different stations (art therapy, flower petal tea tasting, etc.) to stimulate sensory perception, and enhance the patient's social connection and self-worth.

Ariel Tzu-Han Chiao
Faculty: BSN (Bachelor of Nursing)
Year Level: 3

Emily Tzu Ling Chiao
Faculty: BSc (Bachelor of Sciences in Chemical Biology)
Year Level: 2

Ideathon
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UBC PATHS X IDEA LAB

Alzheimer Society   IDEA Lab   UBC PATHS

Re-Configuring Human-Robot Interaction Workshop @HRI2022

Joey Wong

We are pleased to participate and share our work at the HRI2022 conference. This workshop calls for positions and discussions to irritate two major, limiting boundaries within human-robot interaction (HRI):

(1) to cross the boundaries of engaging in interdisciplinary work on such new paradigms between divergent disciplines as engineering, design, psychology, philosophy, and sociology.

(2) to cross the boundaries of HRI and the social contexts of robot use – often referred to as 'real world' environments.

Dr. Hung and I shared our recent study working with Ms. Jennifer Perry from the Alzheimer Society of BC and Dr. Jim Mann on exploring the technological risks and ethical issues in telepresence robot use in LTC.

To read our position paper: https://medien.informatik.tu-chemnitz.de/reconfig-hri/files/2022/03/01_Hung.pdf

In the workshop, we discussed and learned about the current research exploring human-robot interactions, e.g., various robot types, different study methods, and insights.

There is still a lot to be discovered on HRI!

To learn more about the workshop and other position papers:

https://medien.informatik.tu-chemnitz.de/reconfig-hri/position-papers/

DemSCAPE
Walk-along interviews

Joey Wong

One of the exciting components of the DemSCAPE project is its data collection method. Research assistants will conduct walk-along interviews with our participants living with dementia.

To prepare for the walk-along interviews, we have recently had a trial of using GoPro with our team and Mario, our lab mentor and person living with dementia

TOCHIE

Sophie Yang

The Tochie team members have worked together to analyze focus group and interview data and are now working to draft a manuscript report. We have regular Zoom meetings to support our writing process. The team members also co-created a poster for our first Tochie project presentation in the West Coast Conference on Aging on April 1 and 2. We look forward to seeing our project co-lead, Irene Chen, present. Register here to attend the conference: https://geriatricconference.providencehealthcare.org

TELEPRESENCE ROBOT

Joey Wong & Erika Young

The telerobot project is heading on into Phase 2! With collaboration from our Staff Champions and leaders at the sites, we are solidifying plans in order to test pilot this intervention over a 3-16 week period. In the meantime, our project team members are presenting findings from Phase 1, while doing supplementary work on the engagement of patient partners and family partners during a pandemic and also ethical considerations of using this technology in an LTC environment. We are pleased to say we are making great strides because of our dedication from the team!
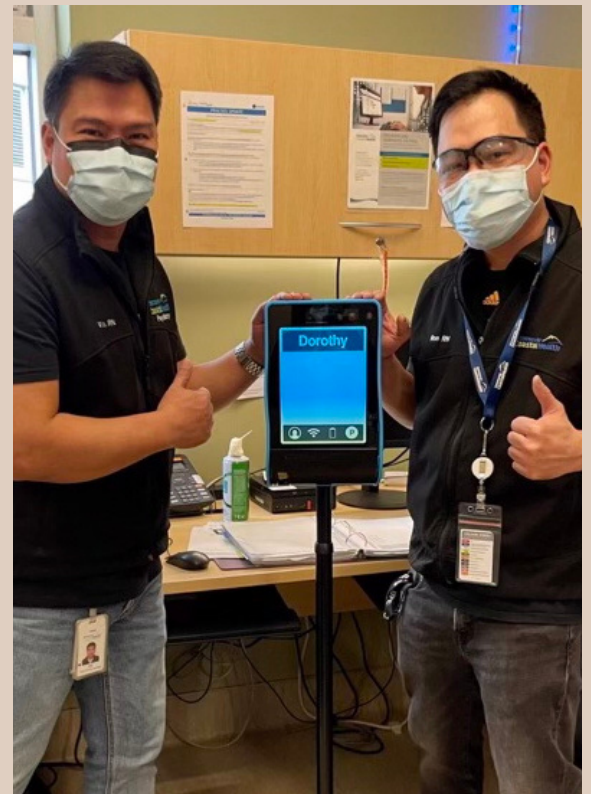
IDEA LAB FACT

We do Patient-Oriented Research (POR) for all our projects. It's citizen science where everyone does their part to contribute and make the world a better place.