Going Beyond: Inquire.
Persist. Revolutionize.

Vantage One Capstone Conference 2018



Program Guide Orchard Commons July 16-17, 2018

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# **Schedule Overview**

### Monday, July 16

11:00 am	Conference Registration	Vantage Commons Level 2
11:30 am	Official Welcome	Vantage Commons Level 2
12:00 - 1:15 pm	Oral Presentations 1	Orchard Commons Levels 1 and 3
1:15 - 1:30 pm	Break and snacks	Orchard Commons Level 3 hallway
1:30 - 2:45 pm	Oral Presentations 2	Orchard Commons Levels 1 and 3
2:55 - 4:10 pm	Oral Presentations 3	Orchard Commons Levels 1 and 3
4:10 - 5:00 pm	Reception	Orchard Commons Open Kitchen

### Tuesday, July 17

9:00 — 10:00 am	Applied Science project setup	Vantage Commons Level 2
	Arts and Science poster setup	Orchard Commons Levels 3 and 4
10:00 am — 2:00 pm	Engineering projects on display	Vantage Commons Level 2
	Arts and Science posters on display	Orchard Commons Levels 3 and 4
10:00 am — 12:00 pm	Engineering project adjudication	Vantage Commons Level 2
10:00 - 11:00 am	Arts and Science poster adjudication A	Orchard Commons Levels 3 and 4
11:00 am — 12:00 pm	Arts and Science poster adjudication B	Orchard Commons Levels 3 and 4
12:00 pm - 1:00 pm	Lunch	Orchard Commons 1001
1:00 - 2:00 pm	Arts and Science poster adjudication C	Orchard Commons Levels 3 and 4
2:00 - 2:45 pm	Vantage One Exit Survey	Orchard Commons classrooms
3:00 - 3:45 pm	Keynote Panel	Life Sciences Centre 1001
3:45 - 4:30 pm	Conference Awards Ceremony	Life Sciences Centre 1001

# **About the Vantage One Capstone Conference**

#### **About Vantage One**

The Vantage One program is an 11-month program for international students offering the opportunity to begin degree-focused studies, while developing academic English abilities. The program consists of four streams: Arts, Science, Engineering, and Management. Students who successfully complete their Vantage One year will transition seamlessly into second year at UBC.

#### **Conference Overview**

The Vantage One Capstone Conference is an annual academic conference showcasing student research projects completed in the first year of their UBC program. The conference is an opportunity for students to present their work, and build a connection between UBC's dual campuses: UBC Vancouver and UBC Okanagan. Please join us for this exciting event showcasing student achievements in the Vantage One program. Share your experiences with #UBCCapCon18.

# Welcome Message from Dr. Claudia Ruitenberg

Dear Vantage students,

Welcome to the fourth annual Vantage Capstone Conference! You may not have been able to imagine when you started your program in September 2017 that you would be presenting a research or design project at the end of your year, but here you are, and you are ready! Your fellow students as well as the Vantage faculty and staff are looking forward to seeing your projects and posters and hearing what you have discovered in your research. The Capstone Conference is a great opportunity to practice your presentation skills, to celebrate the achievements of your classmates, and to learn about the research and design projects done in other programs.

The theme of this year's Capstone Conference provokes you to "Go Beyond" by Inquiring, Persisting, and Revolutionizing. Whether in science, politics, the arts, or any other domain of life, revolutionary changes and discoveries that push us "beyond" are never the work of a single person. The theme is, therefore, a great reminder that we can only go beyond by inquiring, persisting, and revolutionizing together. You need your fellow students to ask you critical questions to make your project better, just as they need your questions to make their projects better. By being open-minded and willing to learn from others, both within and outside of your current areas of interest, you create the best opportunities for interdisciplinary discoveries and innovations.

I look forward to seeing and hearing your questions, findings, and ideas, and wish you an inspiring Capstone Conference!

Dr. Claudia Ruitenberg

Academic Director, UBC Vantage College

# **Keynote Panelists**

Keynote Panel: Tuesday, July 17 3:00 - 3:45 pm, Life Science Centre 1001



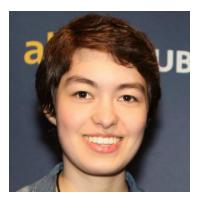
#### Ella Li, MASc, P. Eng.

Ella is currently a Structural Engineer at RJC Engineers, one of North America's leading engineering firms specializing in Structural Design and Building Science. After graduating from Tongji University in China, Ella moved to Canada and completed her master's degree at UBC in 2012. Since then, Ella has been involved in several major developments in Lower Mainland and is an active member at EGBC and industry associations such as UDI and ULI.



#### Daryl Hatton, CEO

Daryl Hatton is founder and CEO of the innovative social commerce company ConnectionPoint, producer of the award winning global crowdfunding platform FundRazr and the innovative sponsored crowdfunding system Sponsifi. He has founded multiple tech start-ups and helped bring one to a successful NASDAQ IPO in 1999. He actively serves as board member or special advisor to handfuls of other hot companies in Canada. In addition, he is a Director and Crowdfunding Ambassador for the National Crowdfunding Association of Canada. As a social media guy and frequent public speaker, his Twitter tagline reads "#KingOfGastown, entrepreneur, cardiac survivor, foodie, whisky nut, philosopher, mentor, father and friend.



### Michelle Kunimoto, Ph.D. Candidate in Astronomy

Michelle is a PhD student in Astronomy at UBC. Inspired to study astronomy by Star Trek: The Original Series, her work is all about exoplanets - planets outside of the Solar System - with a focus on those that might be able to support life. Her discovery of four new planet candidates as a UBC undergraduate landed her on the Forbes 30 Under 30 for Science in 2017, and she continues to hunt for exoplanets as part of her research. By the end of her PhD, she hopes to find and characterize hundreds of new planets, as well as estimate the number of Earth-like planets in our galaxy.



#### Eisha Sharda, Undergraduate Psychology lab manager

Eisha Sharda is a 4th year science student majoring in Neurophysiology through Integrated Sciences. She is currently part of the Social Identity Lab as the current lab manager and a previous research assistant and The Cognitive Neuroscience of Thought Lab where she will be completing her honour's thesis. Her research interests include stereotype threat, gender bias, mental wellbeing, mind-wandering and brain dynamics. She is particularly interested in the way gender bias shapes the job market, the impact gender bias and stereotype threat have on job satisfaction and workplace organization, and the interactions between external stimuli and brain function.

# **Oral Presentations 1: Schedule**

## Monday, July 16, 12:00 – 1:15 pm

Orchard 300	2 (Mana	gement) -	- Chaired b	y Somin Lee
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12:00 – 12:15 pm	Tai Chia (Daisy) Yeh Goomaral Purevjargal	Could students eat healthy on campus and what can we offer to support?
12:20 - 12:35 pm	Haoting (Carina) Yu Ya (Gloria) Gao	Issues of international students in the use of counselling services
12:40 - 12:55 pm	Yuheng Ao Kexin Yu	Motivation leads international students to exercise in Gym
1:00 - 1:15 pm	Yushi Han Jingyi (Ann) Ni Ziqi (Liana) Li	Why International Students are Skipping Breakfast in University? The Important of Eating Breakfast.

### Orchard 3004 (Science) - Chaired by Chloe Yan

12:00 – 12:15 pm	Hongyi Hu Jinglin Xu	Exploring the temperature for the maximum density of water with the change in salt
12:20 - 12:35 pm	Yining Guo Xiaoxuan Lu	The relationship between salt concentration in water and the Leidenfrost point
12:40 - 12:55 pm	Yunan Xu Wucheng Zhang	The Impact of Solute Interactions on the Drying Pattern of Mixed Solutions
1:00 - 1:15 pm	Tianyi Wen Yiheng Sun	The Effects of Salt and it's Alternatives on The Melting Rate of Ice.

### Orchard 3018 (Science) - Chaired by Eleanor Liu

Orchara 3016 (Scien	ice) – Chairea by Elear	10r LIU
12:00 - 12:15 pm	Ruirui Wang	The Comparison of Two Island Volcanoes: Jeju Hallason
	Sungwon Kim	Volcano and Kilauea Volcano
12:20 – 12:35 pm	Mohamed Samassi	Humidity, Temperature and Air Quality
12:40 - 12:55 pm	Yalin Liu	A Comparison of Different Weather in Vancouver,
	Xinyu Gu	Dongying and Shanghai during June 2018, and the
		Factors that Cause the Differences
1:00 - 1:15 pm	Cheng Zhou	Addressing the Influence on Building on Different Factors
	Samuel Chen	in Earthquake

Orchard 1001 (Arts) 12:00 — 12:15 pm	<b>– Chaired by Tergel N</b> Shiqi Feng	laranbaatar Possible factors of purchasing luxury goods	
12:20 – 12:35 pm	Genevieve Ke Phoebe Ye	Influence of Ads from YouTube on students' Purchasing behaviors	
12:40 - 12:55 pm	Yuki Hosotani Kai Arii	Fast Fashion or Slow Fashion?: The Influence of Commodity Fetishism on Selection of Fashion	
1:00 - 1:15 pm	Thanjira Molkul Yunxin Wang	Sociological Motivation in Fashion Clothing Consumption	
<b>Orchard 3074 (Arts)</b> 12:00 — 12:15 pm	<b>– Chaired by Joy Hua</b> Maria Teran Valeria Moncada	I <b>ng</b> The influence of Twitter in 2016 US Presidential Elections	
12:20 - 12:35 pm	Erin Wu Yuxin Sun	Mentally III? The stories US mainstream media tells about gun violence and mental health.	
12:40 - 12:55 pm	Munkh-Ochir Idertsogt	To what extent does violence portrayed in media and Hollywood movies influence copycat crimes?	
1:00 — 1:15 pm	Xiaonan Xia YiFan Zhang	The relationship between mental illness and gun violence in American schools	
Ough and 2052 (Auto)	Chaired by Cambin I	:	
12:00 – 12:15 pm	- Chaired by Sophia I Huangran Tian Jiahui Li	Gender Inequality in Workplaces: A Sociological Perspective	
12:20 - 12:35 pm	Xiyuan Cao	Survey on gender inequality experience by UBC VANT 149 students	
12:40 – 12:55 pm	Yigit Atlan	Macbeth, Gender and Pop Culture	
1:00 — 1:15 pm	Yuffie (Chih-Yu) Lin	Gender Inequality through the Lens of News Stories: Donald Trump and Hillary Rodham Clinton	
Orchard 3058 (Arts) — Chaired by Erin Deng			
12:00 – 12:15 pm	Maryo Wahba	Western Media's Normalization of Violence in the Middle East and the Degradation of Cosmopolitism	
12:20 - 12:35 pm	Han Chen	Investigating Chinese International Students' Perceptions Toward the 2008 summer Beijing Olympics	
12:40 - 12:55 pm	Ariane Arnaud	Social Media and Middle Eastern Women: Comparison of the Evolution in the Discourse About Women	
1:00 - 1:15 pm	Basheer Amin	The Reflection of the Factionalization of Kurdish Politics in Syria on Syrian-Kurdish Media	

# **Oral Presentations 2: Schedule**

## Monday, July 16, 1:30 – 2:45 pm

Orchard 3002 (Management) - Chaired by Dais
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1:30 - 1:45 pm	Richard Wang	Building the bridge between car-sharing market and
	Ga Qing	university students
	Rong Zhang	Sinversity steading
1:50 - 2:05 pm	Dechang Ma	Car Sharing as an Opportunity of Communication: It
	Hexuan Chai	Reduces the Acculturative Stress from International
		Students
2:10 - 2:25 pm	Yudan Chen	Make Bicycle Riding in Winter a Possibility: Innovated
·	Zhanyi Feng	Bike Sharing System in UBCO Campus
2:30 - 2:45 pm	Xinyi(Jessica) Hao	Behind the Secrete of Travelling Behaviours: An
	Ruizhi (Aliena) Huang	Innovation of Car-Sharing in the Smartest City in BC

#### Orchard 3004 (Science) - Chaired by Tugce Ozaydin

1:30 – 1:45 pm	Quinnie Yang Walter Wang	Nutrition levels of water in three different areas
1:50 - 2:05 pm	Chenyu (Yvette) Wu	The Relationship Between Weight and Size of Clam at Wreck Beach
2:10 - 2:25 pm	Ding Handong Xiyue (Cynthia) Feng	Influences of Tinting by Different Drinks on Egg Shells (Compare to Teeth)

### Orchard 3018 (Science) - Chaired by Ali Gazor

1:30 – 1:45 pm	Huaze Xu Yi Lin	Investigating the relationship between lights frequency and photosynthesis rate
1:50 - 2:05 pm	Yiqi Zhu Xiaoyun Zhang	Compare the Size Distribution of Clam at Wreck Beach and Jericho Beach
2:10 - 2:25 pm	Yuhui Jiang Qiuchen Luo	Jericho Beach zooplankton dry biomass during the high and low tides
2:30 – 2:45 pm	Tianyu Feng Zonglin (Antony) Xi	The Oxygen Production of the Trees Planted along the Main Mall at UBC

Orchard 1001 (Arts) — 1:30 — 1:45 pm	<b>Chaired by Genevieve</b> Fan Li Yu Wu	<b>Ke</b> The Impact of Insomnia on Undergraduates' Learning Efficiency
1:50 - 2:05 pm	Mingyang Xu	Does Cocoa Butter Consumption Influence Stress Levels for New International Students?
2:10 - 2:25 pm	Doga Findikoglu	Understanding Sleep Deprivation: A Glance at the Situation of First year University Students
2:30 - 2:45 pm	Tianqi Peng Eva Ng	A psychological study on the ways stress impacts sleep quality among international students
Orchard 3074 (Arts) — 1:30 — 1:45 pm	Chaired by Sherry Han Shijia Huang Qingyuan Chen	Anxiety and memory: the effects of different levels of anxiety during memory formation
1:50 - 2:05 pm	Peishan Li	The key to success in university life: Learning to balance health and academic stress
2:10 - 2:25 pm	Shan Lu Xinwen Hu	Potential factors leading to depression in students from collectivistic cultures
2:30 - 2:45 pm	Xinhui Xu Wenjing Deng	The Sources of VANT148 Students' Negative Stress
Orchard 3052 (Arts) — 1:30 — 1:45 pm	Chaired by Alex Wang Min Han	The influence of social media: The power of prejudice and injustice
1:50 - 2:05 pm	Congshan Qiu Beibei Huang	Intentions of permanent residence study of international intellectual class in Canada
2:10 - 2:25 pm	Mauricio Jean Pieer Trujillo	News flash: Information mattersonly in the right places
2:30 - 2:45 pm	Chuang Chen Zebin Lin	How media and public view First Nations before and after Canadian government apologize
O	Charles I has Carre Ca	
Orchard 3058 (Arts) — 1:30 — 1:45 pm	Tianqi Gu Qianning Gu	Whether there will be difference between North and South Chinese young people for TV series in Vantage College
1:50 - 2:05 pm	Yixuan He	Relationship Between Univerrsity-specific Features and International Student Choice
2:10 - 2:25 pm	Mingzhao Li Pelin Dogdas	Why Not Seek Help?: Poor Engagement in Writing Supports Held by Universities Among International
2:30 - 2:45 pm	You Xiao Menghan Gao	Students Does volunteering really show altruism? A psychological study with Vantage students

# **Oral Presentations 3: Schedule**

## Monday, July 16, 2:55 – 4:10 pm

2:55 – 3:10 pm	Somin Lee Isabelle Atienza	The Barriers International Students Face when Making Local Friends: Connecting Students through Global Buddies
3:15 – 3:30 pm	Jialei Dong Minh Le Duolong Zhang	Promoting Environment-Friendly Food Packaging Systems
3:35 - 3:50 pm	Jackson Zhong Doris Liu	Youth Retention And Recruitment
3:55 – 4:10 pm	Kosar Mohammadi Pour Anvari Can Umut Tas	Fundraising for homeless women in Canada

### Orchard 3004 (Science) - Chaired by Cynthia Feng

2:55 – 3:10 pm	Theodorus Susanto Dezhao Feng	The Effect of Fin Number in Hydropower Plant to the Production of Electrical Power
3:15 – 3:30 pm	Eleanor Liu Yuxin (Elsa) Zhang	Improvement of Energy Efficiency on UBC Buildings over UBC History
3:35 – 3:50 pm	Shiyu Deng Kailin Xu	A Scientific Piece of Art, or Trash - Effect of Heat on Film Colour Performance

### Orchard 3018 (Science) - Chaired by Luke Yang

2:55 – 3:10 pm	Kewei Li Yuhang Zeng	How Amount of Developers Influenced Size of OSS (Open Source Software) Projects?
3:15 - 3:30 pm	Yanbai Chen Xindong Lin	Runtime Comparison of Multiple Programming Languages on Different Platforms
3:35 - 3:50 pm	Sicong Zhou Yuqin Wan	The difference of degrading level between different kind of disposable boxes in soil

Orchard 1001 (Arts) — Chaired by Tianqi Peng		
2:55 – 3:10 pm	Cen Liu	The influence of the Korean wave on beauty perceptions of Chinese international students
3:15 - 3:30 pm	Houyu Lin	Varieties in societal attitudes
3:35 - 3:50 pm	Chenyuwen Qin Haoyan Yan	Investigating roles of mothers in the higher level educational attainment in South Korea and Turkey
3:55 – 4:10 pm	Rinas Melli	The Role of the Syrian Official Media in Framing the Syrian Revolution as a Sectarian Ideology Movement, and the Changing of Public Opinions
Orchard 3074 (Arts) 2:55 — 3:10 pm	<b>– Chaired by Eva Ng</b> Yutong Zhu Xinchang Lei	People's decision making under time pressure
3:15 – 3:30 pm	Yi Huang Luyi Pan	Beyond time planning: A quantitative and qualitative analysis of procrastination from a psychological perspective
3:35 - 3:50 pm	Ying Chun Kelvin Muk Taiquan Wang	Exploring the effectiveness of sexual education for college students
3:55 – 4:10 pm	Selin Ergun	Investigating the effect of standard time tables on first- year international students' experiences
Orchard 3052 (Arts)	- Chaired by Mingzho	io li
2:55 – 3:10 pm	Mingruo Ji	Vantage college students' food perception towards healthy food practice
3:15 - 3:30 pm	Zhiming Zhang	What do UBC's first year international students do with their trash?
3:35 - 3:50 pm	Yilin Chen Wenyan Tang	The effects of human-canine relationship
Orchard 2059 (Arts)	- Chaired by You Xia	•
2:55 – 3:10 pm	Shreetika Singh	The Power of Public Art
3:15 – 3:30 pm	Junhui Jiang	How do people react to immigration? An analysis of immigration in Vancouver through news media
3:35 - 3:50 pm	Yiqiong Fu Yuxin Hu	Practical strategies on sustaining long-distance dating relationships: A survey based study of university students' perceptions

# **Poster Presentations: Schedule**

## Tuesday, July 17, 10 am — 11am and 11am — 12pm

#### Science

Presenter(s)	Location	Title
Zhongzhe Cheng	11	Which things will influence bottle shape changing under atmosphere pressure and how big it is
Amber Zhao Rola Yang	14	Search the plants hydrophobic change after dipped in ethanol
Yunfei Li Xinmeng Liu	17	Investigating the Cleanup of Britannia Mine's Acid Mine Drainage
Haodan Zheng Sitian Yin	23	Grass Biomass Production of Lawns in UBC
Chang Wei Xiaoshan Huang	35	The type and causation of damaging landslide from 2015 to 2018 in BC $$
Gengyao Liu	41	First-Year University Students' Math Performance as a Predictor of Their Math Performance in Second Year
Yidan Yan Jia Huang	53	Distribution of Different Sediments in Vancouver's Beaches and Rivers
Xinyi Yuan Haoyue Wang	65	The Relationship Between Zooplankton Biomass and Water Temperature

#### Arts

Presenter(s)	Location	Title
Zhanhao Zeng Lin Zheng	2	How Important is Copyright? Comparing Public Awareness of Music Copyright in China and the United States of America
Ed Li Veronika Wang	5	Living Abroad: How International Students Balance their Emotions, and the Impact on their Social Lives
Tergel Naranbaatar	8	"I never leave home without my lucky bracelet": Superstitious belief – does luck really matter?
Kanbei Yen	20	To eat or not to eat? The relationship between nutrition knowledge and diet

Kristy Liu Stanny Chen	26	The relationship between social media usage time and university students' perception of academic review
Sophia Li Shuyi Qiu	29	Does playing video games affect students' behavior?
Michelle Kim	32	Cultural Differences towards Bullying: How Different Countries Accept Bullying Societally
Dingfeng Xu Tianyun Wang	38	The contrasting portrayal of money laundering by different news agencies
Wencheng Liu Weibin Xiao	44	How do individual athletes potential perceive boycotts in Olympic Games on their careers?
Yuchen Song Haozhou Ye	47	Personal information security issues: Students' awareness of personal information privacy following the Cambridge Analytic incident
Becky Sun Siyi Zhao	50	Childhood obesity and mother blaming
Shumeng Shi Sihan Wang	56	Social Media Sina Weibo and Renren, Speech Censorship in China
View Chiayapuck Mark Wang	59	Choice of Connection: Survey based study of the investigation of International Students' motives of moving to Canada
Yuxin Deng	62	Changes to first year undergraduate Chinese students' attitudes about relationships after their first year in Canada
Jiale Ding Jinjia Ye	68	Aggressive behavior caused by violent video games: What is the most significant factor?
Helin Ciftci	71	How Do Media Campaigns Raise Awareness About Women's Body Confidence?

# Tuesday, July 17, 10am – 11am and 1pm – 2pm

### Science

Presenter(s)	Location	Title
Jiahui Li Shuhong Cao	7	The Trends of a Water Drop's Movement on a High Temperature Surface
Siwei Ran Junze Hao	13	Students Waste Investigation for Educational Purposes
Jidan Liang Yuxin Tian	16	How Does Salinity of the Ocean Vary Between Locations and Weather Condition in Vancouver
Qiushi Ye Owen Tong	19	Investigating the Acid Precipitation Effects on the Growth Rate of Plants
Jiaxin Zhao Xiaotong Liu	31	How does Stream Sinuosity Vary with Stream Type?
Siwen Peng Seungki Hong	52	Relationship between Lightening and Volcanic Eruption
Zhe Wang Zhentian Yuan	61	What is the relationship between humidity and mold growth rate?
Shuhao Liu	64	Volcanic hazard due to Pyroclastic projectile in Vancouver

### Arts

Presenter(s)	Location	Title
Shihe Zhang Tianyang Du	1	Chinese teenagers attitude towards inheritance of China culture heritage, with a focus in the traditional music area
Ying Wang Zhiyi Li	4	Examining the degree of international students' knowledge of and access to mental health support services
Meiheng Lin LuQi Liu	22	Analyzing the relationship between expectations and experiences: Voices of university freshmen
Yuzhen Han Xinyi Guo	25	Shouldn't have missed China: How Chinese-made social media platforms have made China the biggest consumer market for K-POP
Yuxi Liu Zhe Su	28	Social media and individual cognition
Kary Ontaneda	34	Constructing sexuality and purchasing power: Analysis of the impact of the North American culture

Blanche Chen	37	Unequal pay in Work Place Generated by Women's Family Responsibility
Jianxin Hong Yaxuan Lu	40	Chinese Students' Obstacle of Self-Expression in English- speaking Classes
Junyi Zhang Ziying Han	46	The Correlation between Conscientiousness and Short-Term Memory Capacity of New University Students in Canada
Zexing Hao	49	Sports' Impact on Modern World Politics
Hao Yang Guannan Shen	55	How do people talk about poverty? An analysis of poverty in Vancouver through posts on social media
Thea Yang Sieun Lee	58	"I just want to sleep five more minutes!" — A Study of Sleep and Academic Performance
Ying Zhang	67	Sexual abuse against women
Yirou Liu Wentao Huang	70	Different Classifications of Indirect Bullying in Education Systems in Chinese and American newspapers

# Tuesday, July 17, 11am – 12pm and 1pm – 2pm

### Science

Presenter(s)	Location	Title
Feng Yuekun Hou Ruijie	27	Influence of different pH on brittleness of human hair
Luke Yang Winston Yang	33	The Relationship between the Volume of a Balloon and its Fragmentation When Bursting
Shengyu Jia Sijia Huang	42	How the Effectiveness of Different Types of Sunscreen on Blocking UV Light Changes Over Time
Yuheng Wu Hehan Zhang	45	Similarities among ten most deadly volcanoes in the last one- hundred years
Yuejiao Xiao Huilin Pan	51	Investigating the Safe Zone from the Cliff at the University of British Columbia
Luhong Lu Yinliang Zhang	57	Features of Earthquakes around Juan de Fuca Plate and Potential Impacts on UBC Buildings
Alireza Gazor Tugce Ozaydin	63	Measuring Heat Loss of Different Type of Rocks
Yuhao Deng Jiaqi Wang	69	Heating up Coquitlam: A geological map about hazards of a hypothetical volcano in Coquitlam
Ruoyin Li Zhangfeifan Yang	72	The relationship between pendulum period and string length in the water

### Arts

Presenter(s)	Location	Title
Junyi Cheng	3	The influence of sleep deprivation on Vantage students
Xiran Cui Yuheng Liu	6	Personal Characteristics of Students and Class Size
Jianwei Kang	9	Vantage College students' attitudes and opinions on crime
Yuning Zhang Silu Chen	12	How team sports and individual sports affect international students' attitudes and social skills
Anya Paiboonsirijit Steven Tse	15	Impacts of Chinese aging population on social pension system

Zhihan Qi Zihan Liu	18	The contribution of food delivery applications on eliminating gender inequality by reducing hours on housework
Guantong Lin Sicheng Li	21	Research on Vantage College Students' Awareness of the Environmental Problems in China
Yanhua Guo Minge Wang	24	The difficulties faced by international Chinese students in Western higher education systems
Ryan Ren	30	Does technology influence first year Vantage students?
Chuhan Zhang	36	Factors that cause college students to stay up late
Peixuan Tian	39	The role of social media in shaping political opinion
Zixin Cai Hua Dong	48	The effect of peer pressure on adolescents' behavior
Sana Sheikhi	54	Examining Female Politician's Representation in Canadian Media
Evelyn Yin Yolanda He	60	Young Adults' Perspectives on the Concerns of Chinese Elderly Mental Health
Yuyun Shen Jingting Tang	66	Analyzing Facebook's influence on Vantage students' social circles and connections

Management

ORCH 3002, 12:00-12:15 pm

# Could students eat healthy on campus and what can we offer to support?

Presenter(s): Tai Chia (Daisy) Yeh and Goomaral (Marla) Purevjargal

Adapting to a new lifestyle could be challenging especially for international students. Through our research, we recognize the choices of healthy food consumption is limited in students' everyday life. Therefore, we introduce the idea of "Global Box" which offer students the opportunity to purchase ready to cook ingredients with easy to follow instructions in a box. In addition, all raw materials are the second graded product that comes from the collaboration with the Enactus club. The Global Box is targeting to reduce potential food wastes, provide convenient online order services, minimize grocery costs, learn culinary skills, and introduce new food cultures to the students. Our final goal is to encourage international students to eat healthier through this research project.

Management

ORCH 3002, 12:20-12:35 pm

# Issues of international students in the use of counselling services

Presenter(s): Haoting (Carina) Yu and Ya (Gloria) Gao

How to promote international students to confront and solve their emotional issues in use of counselling services? According to the World Health Organization, mental disorder is the 4th leading cause of disability in North America and 47% of UBC international undergraduates has experienced depressed that it is difficult to function. In order to make an improvement based on today's situation, a survey distribution is conducted by us to exam whether the counselling services functioned well. Our final goal is to encourage counseling services to provide additional supports to the international students.

Management

ORCH 3002, 12:40-12:55 pm

# Motivation leads international students to exercise in Gym

Presenter(s): Yuheng (Bella) Ao and Kexin (Joanna) Yu

Gyms have been widely generalized and used in North American universities, However, there are still nearly half of Canadians are inactive during their leisure time (Statistics Canada, 2014). The number of people who really insist on exercising indoors or outdoors is relative on the minority. Prior research has investigated the possible causes contribute western countries' people to engage in exercise, this study will examine the following questions: why international students do not actively exercise even when they have a fitness facility? What can we do to attract more international students to exercises, utilizing the means of improving fitness facilities or shifting gym operations? Our goal is to have a great insight on youth's motivation that leads them to exercise or not, toward further tackle the causes and improve the gyms' facilities status to guide more teenagers would like to engage in a healthy life. Through online survey distribution, it gives some significant sample could demonstrate international students' motivation for not to exercise/exercise.

Management

ORCH 3002, 1:00-1:15 pm

Why International Students are Skipping Breakfast in University?: The Importance of Eating Breakfast.

Presenter(s): Yushi Han, Jingyi (Ann) Ni and Ziqi (Liana) Li

It is widely believed that breakfast is highly valuable among youth's health, which as the most important meal in the day (Godin, Patte & Leatherdale, 2018). Based on previous researches, we found that most of university students tend to skip the breakfast. The study of skipping breakfast among teenagers has great importance for the future development of both young people and society, because students who habitually skipped breakfast had a lower grade and performance than those who had breakfast every day (Boschloo, Ouwehand, Dekker, Lee, de Groot, Krabbendam & Jolles, 2012). While some existing researches strongly figured out the reasons of skipping breakfast among youth groups (mostly high school students), university students may have different situations. University may contain more students from different backgrounds, races and countries (Duncan, 2009), so that there will be a larger number of out-of-town and international students in university than that in high school. Our research aims to explore reasons of skipping breakfast among international students in the university and to make a promotion plan to arouse their more attention to breakfast.

Science

ORCH 3004, 12:00-12:15 pm

Exploring the temperature for the maximum density of water with the change in salt and alcohol concentration.

Presenter(s): Hongyi Hu and Jinglin Xu

Density of water depends on temperature, we explored the effects of temperature on the density of water and the relationship between the temperature for the highest density of water and water's salinity. We measured the mass and the volume of sample liquid at different temperatures and calculated their density. The data for the density and temperature were then compared to see investigate the relationship between them. It was concluded that above 0 degrees Celsius, the density of water increases to its highest density then decreases. Addition of salt increases the density of water. The temperature for the highest density of water increases with increasing salinity.

Science

ORCH 3004, 12:20-12:35 pm

# The relationship between salt concentration in water and the Leidenfrost point

Presenter(s): Yining Guo and Xiaoxuan Lu

Leidenfrost Phenomenon is a physical phenomenon happens when a liquid drop which is near contact with a metal surface significantly hotter than the liquid's boiling point, produces an insulating vapour layer avoiding that liquid drop from boiling rapidly. The significantly high temperature on the metal surface when the Leidenfrost Phenomenon happens is called the Leidenfrost point. The relationship between the different concentrations of salt in deionized water and its corresponding Leidenfrost point was investigated in this experiment. The aim of this experiment was to explore the influence that salt (NaCl) dissolved in water has on the liquid's Leidenfrost point. The experiment showed that the Leidenfrost temperature of distilled water is lower than that of NaCl solution and the Leidenfrost temperature increasing as the concentration of NaCl solution increasing.

Science

ORCH 3004, 12:40-12:55 pm

# The Impact of Solute Interactions on the Drying Pattern of Mixed Solutions

Presenter(s): Yunan Xu and Wucheng Zhang

Pattern formation of dried droplet is a phenomenon with complex mechanisms related to the Marangoni effect and water evaporation. The formation can be affected by many factors such as concentration and temperature in the field of printing and two-dimensional crystallization. This study was proposed to investigate whether the interaction between different solutes in mixed solution would affect the formation of the pattern. After the selection of coffee, dish-soap and vodka, they were dropped in separate and mixed solutions of different concentrations to get different patterns. By the analysis of comparing the formation patterns of solutions with individual solute and the formation patterns of mixed solutions, the impact of interaction was proved to exist and a linear correlation between the inner/outer radii ratio and the concentration of coffee was found.

Science

ORCH 3004, 1:00-1:15 pm

The Effects of Salt and It's Alternatives on The Melting Rate of Ice.

Presenter(s): Tianyi Wen and Yiheng Sun

Using salts to melt icy road has negative impacts to the environment. We want to see if we can make the ice melt faster in some environmental-friendly ways, such as adding beet juice and tomato juice on the ice. The experiment aimed to explore the effectiveness of brine, beet juice, and tomato juice on increasing the melting rate of ice. According to the results, all three types of solution had positive effects on increasing the melting rate of ice, and brine was approximately three times more effective than the other two. The result of this experiment could be important for searching an alternating environmental-friendly way for road snow removal process.

Science

ORCH 3018, 12:00-12:15 pm

# The Comparison of Two Island Volcanoes: Jeju Hallasan Volcano and Kilauea Volcano

Presenter(s): Ruirui Wang and Sungwon Kim

The activities of volcanoes are important, and deserve full study to explore the potential causes that trigger eruptions. In this project, we examined two typical island volcanoes, one in Korea and one in Hawaii. We focused on the topography, hazards and eruption history, and found the Kilauea Volcano is more active and dangerous compared to Hallasan Volcano.

Science

ORCH 3018, 12:20-12:35 pm

### **Humidity, Temperature and Air Quality**

Presenter(s): Mohamed Samassi

Owing to the enigma of rapid rise in pollution levels, especially in urban areas, scientists are indeed formulating new theories on the effect of temperature, humidity and air quality (Nguyen, Schwartz & Dockery, 2014). Although, still a debatable topic, it has received widespread analysis from scientists from all the four corners of the globe. Consequently, this research seeks to investigate whether these elements of weather do exercise significant effects on the overall purity of air.

This research took place within two states, namely Vancouver and New York. The reason is that due to New York's high population density and as well as vehicle emissions, it presents a sound opportunity to measure air purity. On the other hand Vancouver 's relatively population and industrial nature coupled with its low temperature offer a similar but opposite result. Relative humidity in % form will be used as well as AQI (Air Quality Index) (Nguyen et al., 2014). The findings was that high temperature and high humidity worse the air quality.

**Science** 

ORCH 3018, 12:40-12:55 pm

A Comparison of Different Weather in Vancouver, Dongying and Shanghai during June 2018, and the Factors that Cause the Differences

Presenter(s): Yalin Liu and XinYu Gu

Weather was closely related to people's lives, and always caused deep impact on people's daily lives. For example, Vancouver was known as "Raincouver" since it rained a lot, yet winter in Shanghai seldom rained. However, majority of people still did not exactly know what cause this kind of weather varies in different region. In this research project, we compared the three different weather in Vancouver Canada, Shanghai China and Dongying China during June 2018 by collecting data that was provided on the Internet day by day, and summarized five different factors which caused the different weather by analyzing the temperature, humidity, atmospheric pressure, precipitation probability and wind direction that were given by the data. Finally, we found that the four factors which caused the different weather in the three mentioned cities during June 2018 were East Asian raining season, extra tropical cyclones, subtropical high pressure ridge and descending air.

Science

ORCH 3018, 1:00-1:15 pm

# Addressing the Influence on Building on Different Factors in Earthquake

Presenter(s): Cheng Zhou and Samuel Chen

Earthquakes are one of the most common disasters on Earth. To save more lives and help design an earthquake-resist building, an investigation on some factors which relate to seismic capacity in the earthquake such as height of building, frequency of earthquake, structure of building, contract area of building and humidity of building foundation. We found that the height of building and frequency of earthquake, these two factors relate to the resonance of building and cause collapse. We also found that polygon structure, larger contact area and medium humidity of foundation material could make the seismic strength of building better.

**Arts** 

ORCH 1001, 12:00-12:15 pm

### Possible factors of purchasing luxury goods

Presenter(s): Shiqi Feng

The continuing trend of purchasing luxury products among young people is growing. However, luxury products are usually not ordinary goods that we really need in our daily life. Due to the limited financial resources of young people, the amount of money spent (on luxury goods) is often supported by their parents. In order to explore the possible factors that affect the purchasing behavior of young people towards luxury products, a quantitative survey was administered to twenty-five participants who are current Vantage students. The results of this study could have important implications for encouraging young adults to be more reasonable and sustainable consumers. Moreover, the research findings may help people in purchase decision-making.

**Arts** 

ORCH 1001, 12:20-12:35 pm

# Influence of Ads from YouTube on students' Purchasing behaviours

### Presenter(s): Genevieve Ke and Phoebe Ye

In recent decades, manufacturers have increasingly invested in online advertisements to boost the sales volume, due to the greater influence of social media. Previous research has found a significant influence by online ads on the buying intention of social media users. However, little information about how they impact is available to us. This presentation aims to investigate characteristics of the situation of online ads on YouTube which have impacts on social media users. Semi-structured interviews were conducted with 4 undergraduate-level YouTube users into two phases. First, we showed two ads on YouTube and then examined participants' purchasing ideas about the products in ads. Huge attributions can be gained to the manufacturers and designers on how to design and put their ads on online browsers which can be appealing to more people without being annoying.

**Arts** 

ORCH 1001, 12:40-12:55 pm

# Fast Fashion or Slow Fashion?: The Influence of Commodity Fetishism on Selection of Fashion

Presenter(s): Yuki Hosotani and Kai Arii

The continuing movement of fast fashion, using cheap labour and materials for production, has a global impact and harms the environment to maximize production on the latest trends. The purpose of this research is to examine people's awareness of production activity based on their decision-making behaviour when shopping for clothes. In this experiment, participants were given two T-shirt samples: one made in humane working conditions while the other made by child labour in a developing country, to measure how much money people would be willing to spend and whether different conditions influence their purchase decisions. This study found individuals do not seem to care about working conditions as their priority, which may provide insight into the structure of capitalism creating "commodity fetishism" in which people often perceive purchasing products as simply the exchange of money, rather than reflecting on the social relationship between producers and individuals.

**Arts** 

ORCH 1001, 1:00-1:15 pm

### Sociological Motivation in Fashion Clothing Consumption

Presenter(s): Thanjira Molkul and Yunxin Wang

Nowadays, the desire of people for freedom of choice has become a rising trend; one of those rights is the right to clothing that anyone could dress up as they like. However, social norms toward people's dressing still have significant effects on people choosing their outfits. Everyone is expected to wear clothes which fit their sexual identities or social roles. This social norm reveals the insufficient freedom for dressing of individuals. This study intends to examine and discuss the influences of modern social expectations on clothing preferences. To examine the influences of various social factors, a number of university students were interviewed with a semi-structured approach. The results have shown that most students are influenced by surrounded culture that has expectation on what they should wear. This study may provide insights into social right movement which may allow for everyone to recognize their rights as individuals.

**Arts** 

ORCH 3074, 12:00-12:15 pm

### The influence of Twitter in 2016 US Presidential Elections

Presenter(s): Maria Teran and Valeria Moncada

The 2016 United States presidential election has been highly debated and analyzed in many fields, especially in political science. Research has paid close attention to the discourse analysis of Trump's and Clinton's tweets during their presidential campaigns in 2016. However, there is little research which analyzes the gendered negative evaluative language that the tweets contained about the opponent. The aim of this research is to show the negative language used by presidential candidates 15 days prior to the end of the election campaign. Through discourse analysis, the negative evaluative language, specifically gendered comments, used to describe their opponent was analyzed. This study aims to provide insight into how criticism is not based on individual characteristics but on gender, impacting on gender discrimination.

**Arts** 

ORCH 3074, 12:20-12:35 pm

Mentally III? The stories US mainstream media tells about gun violence and mental health.

Presenter(s): Erin Wu and Yuxin Sun

Nowadays, mass shootings may evoke images of flying bullets and chaotic situations as exemplified by the Las Vegas shooting last year. Previous research has shown that mentally ill criminals only make up a small portion of total mass shooters, and yet automatic connections between mental illness and gun violence are made. This research aims to investigate the trend US mainstream media follows when reporting on mass shootings committed by criminals who might be mentally ill. A discourse analysis of various online news articles about mentally ill shooters was conducted in order to find the patterns of language features which may be used to stigmatize the criminals. A series of descriptive adjectives and verbs were analyzed and categorized into positive, neutral and negative categories. This research may have implications for mental health initiatives and contribute to the current research on US gun violence.

**Arts** 

ORCH 3074, 12:40-12:55 pm

# To what Extent Does Violence Portrayed in Media and Hollywood Movies Influence Copycat Crimes?

Presenter(s): Munkh-Ochir Idertsogt

Although children and adolescents are often the readiest to adapt to and learn to use new technologies, they are exposed to different kinds of violence through movies and social media almost every day. Even though media violence can inform the public about important crimes, it can also have a negative influence and may encourage violent behaviors, such as copycat crimes. Copycat crime is a crime committed in imitation of another crime, especially one that is sensational and highly publicized. As time passes, the increasing media reports of events for instance, mass shootings and school-related gender-based violence, continue to pull attention from the public. In spite of the fact that association between violence portrayed in media (e.g. Hollywood movies) and copycat crimes has been examined for almost 50 years, judgments about the impacts of violence portrayed in media remain varied, specifically among scholars. Consequently, this research will continue to study Hollywood movies/movie programs, their strength and destructive natural force in the media on children and adolescents. There will be 30 Asian and Western action and adventure movies collected based on viewers' ranking or preference on the Internet Movie Database www.imdb.com and data sets will be analyzed.

**Arts** 

ORCH 3074, 1:00-1:15 pm

# The relationship between mental illness and gun violence in American schools

Presenter(s): Xiaonan Xia and YiFan Zhang

Gun violence in schools is a major issue that has gripped America by many school shootings that took place over the years despite measures being brought in to prevent them. This is an important issue from a psychology perspective as there must be an underlying psychological reason for the frequent occurrence of these atrocities. This research aims to find the common psychological factors between different shooters to establish whether mental conditions may provide a link between the different shooters. A discourse analysis of various American news articles about the shootings in the past 5 years have been gathered and analyzed for evidence of psychological disturbance of the shooters. The findings of this study may generally support the idea of going forward with the common psychological link that can contribute to the prevention of future shootings.

**Arts** 

ORCH 3052, 12:00-12:15 pm

# Gender Inequality in Workplaces: A Sociological Perspective

Presenter(s): Huangran Tian and Jiahui Li

Currently in Canada, females make less than 70% of what males make on average when measuring annual income. Gender inequality is not only able to reflect discrimination against women, but also able to demonstrate the society's preferences towards gender roles. The objective of this research is to explore how annual salaries are differentiated in male-dominated and female-dominated jobs by exploring job posts in two particular fields, engineering and nursing. To analyze the wage gap, a discourse analysis was conducted through collecting annual salary information on a Canadian government job seeking website called Job Bank. Salaries would be divided into two categories, one is salary with exact amount or range, the other one is "salary to be discussed" which provide more negotiated wages. As more engineering posts showed "salary to be discussed", this research would help to mark the unequal distribution of opportunity, wealth, and power between each gender.

**Arts** 

ORCH 3052, 12:20-12:35 pm

# Survey on gender inequality experienced by UBC VANT 149 students

Presenter(s): Xiyuan Cao

In the current society, gender stereotypes have been largely reduced, yet gender inequality still remains as it is deeply rooted in people's behavior, habits and minds due to varies reasons, such as culture, history, family, religion, and etc. The purpose of this research is to investigate the gender inequalities experienced by UBC VANT 149 students in Vancouver, BC, Canada. A quantitative and qualitative survey composed of Likert scale questions and open-ended questions was administered to 20 participants. The analysis of the preliminary results may indicate the major causations of gender inequality. The result of this research could be used for presenting and raising awareness in the public on how to further reduce gender inequality.

**Arts** 

ORCH 3052, 12:40-12:55 pm

#### Macbeth, Gender and Pop Culture

Presenter(s): Yigit Atlan

In the times we live in, pop culture acts as a very important component to our very basic daily life. A day doesn't pass by without us seeing a kid holding the newest Avengers toy or someone with a Star Wars t-shirt on. Seeing how much influence the pop culture has over us, it's really important for us to observe what it has changed for us overtime. My sources include how pop culture was served within certain works of Macbeth. Sometimes recreated as a parody as a modern version movie. My research aims to examine how these changes impact the gender roles. I will be conducting this research by comparing the discourse analysis I will be doing on two Macbeth movies. One being a modern adaptation, the other taking part in the Shakespearean era.

**Arts** 

ORCH 3052, 1:00-1:15 pm

# Gender Inequality through the Lens of News Stories: Donald Trump and Hillary Rodham Clinton

Presenter(s): Yuffie (Chih-Yu) Lin

From the controversy of the 2016 United States presidential election to other female political figures around the globe, the issue of gender inequality has been brought up multiple times. Using systematic selection of texts, this discourse analysis researches news articles from various publishers related to the presentation of politicians Hillary Rodham Clinton and Donald Trump. Focusing on context and language use, the research explores public consciousness on gender from different opinions. By analyzing the presentation of both politicians in news articles, the study can further uncover the untold story of our current society. This exploration on the specific area of gender introduces a unique aspect on the topic with hopes of leading to the awareness of roles and relations between men and women.

**Arts** 

ORCH 3058, 12:00-12:15 pm

# Western Media's Normalization of Violence in the Middle East and the Degradation of Cosmopolitism

Presenter(s): Maryo Wahba

While a large body of the existing literature sufficiently expands upon the overarching Orientalist practices of Western media; the potential political and social implications of these practices have been marginalized. The current study provides a discourse analysis of Western televised news reports examining patterns of Normalization, Naturalization and Rationalization of violence in the Middle East. Moreover, the study showcases how the media's framing of the region has an ideological impact on the degradation of cosmopolitanism in the West. The significance of this research resides in its potential provision of a viable solution for minimizing incidents of violence in the Middle East through offering a critical evaluation of the media's representation of the region.

**Arts** 

ORCH 3058, 12:20-12:35 pm

# Investigating Chinese international students' perceptions toward the 2008 summer Beijing Olympics

Presenter(s): Han Chen

This project is to investigate Chinese international students' perceptions about hosting the 2008 Summer Beijing Olympics and whether or not their perceptions match the perspectives of local residents and experts outlined in previously written journal articles. Majority of disciplines have already examined urban legacies of Beijing Olympics from local residences' and experts' viewpoint, involving infrastructure and relocation projects. International students are often exposed to a wide variety of opinions in Vancouver while most of them used to receive positive opinions about Olympics from teachers in China. A qualitative research has been adopted by my study to interview five VANT 149 students to explain their own experience and viewpoints, including detailed analysis on transportation system, environmental issue, tourism attractiveness, community integrity and architecture designs. Despite participants' culturally diverse experiences as international students in Vancouver, this study further supports previous studies conclusions and illustrates how Olympics can boost nationalism and attitudes of national pride may not be shaped by studying internationally.

Arts

ORCH 3058, 12:40-12:55 pm

# Social Media and Middle Eastern Women: Comparison of the Evolution in the Discourse About Women

Presenter(s): Ariane Arnaud

Internet and social media are part of people's lives and contribute to societal changes. This research intends to explore the potential impacts of social media on the women in two different Middle Eastern counties: Turkey and Iran. A significant number of disciplines have explored the daily impacts of social media, but few focus on a potential positive effect of its use by women and on the language used to describe Middle Eastern women in newspaper articles. A discourse analysis of eight newspaper articles regarding women's use of social media was completed. Two articles from Iran and two articles from Turkey were selected in the early age of social media and two articles from both countries with a recent publication date were analyzed. This study may have significant implications for the discourse used to depict women in Middle East and contributes to the current research on Internet and social media.

**Arts** 

ORCH 3058, 1:00-1:15 pm

# The Reflection of The Factionalization of Kurdish Politics in Syria on Syrian-Kurdish Media

Presenter(s): Basheer Amin

Kurds have been presented to the international community as one united body aiming for the independent Kurdistan. While this can be true about the vast majority of Kurds, but Kurdish political parties might show some divisions in which represents the contrast. In Syria, especially after Arab Spring movements, Kurds are playing a highly effective role in politics of the region as well as in the international relations. Hence, the importance of this study lies in the importance of Kurdish movement aims in relation to geopolitical relations. This research was conducted through textual analysis of Kurdish written media reports, those of which cover the independence referendum in Iraqi Kurdistan in September 2017. The results of this study may challenge the claims of Kurd's unity in declaring Kurdistan state and might contribute in answering current inquiries about Kurds situation in the Middle East.

Management

ORCH 3002, 1:30-1:45 pm

# Building the bridge between car-sharing market and university students

Presenter(s): Richard Wang, Ga Qing and Rong Zhang

As the university students who do not own a private car, Kelowna's unpleasant transportation condition (i.e. the narrow cycleway and occasionally unpunctual bus) may cause difficulties for them in taking other transport. Then, these students might be interested in car sharing service. Previous studies have a lack of specific research of university students. As a result, our research question would be: What are the influential and prior determinants on university students' willingness of using car sharing services? We hypothesize that the cost might be a vital factor. Other factors, such as traveling distance and time, might influence students' preference in various degree. The aim of our research is to contribute improving car service for students. This study may to be committed to build a bridge between students and car sharing services companies to reduce the mismatch between services and students' demand.

Management

ORCH 3002, 1:50-2:05 pm

# Car-Sharing as an Opportunity of Communication: It Reduces the Acculturative Stress from International Students

Presenter(s): Dechang (Kenneth) Ma and Hexuan (Ron) Chai

The study of acculturative stress has greatly important for international students when they go abroad. "Car-Sharing", as a tool to increase person-to-person communication, not only facilitates travel, but also provides opportunities for people who want to communicate more with others, thereby making more friends. Nowadays, studying abroad is becoming ever more popular all over the world. More and more international students are facing the stress caused by cultural differences (Lee, Koeske & Sales, 2004). Different languages, cultures, and lifestyles make them unable to adapt well to study in North America (Yan & Berliner, 2013). From a psychological ideology, social support can reduce stress, and communication is part of them (Lam, 2018). So, we propose the idea of "Car-Sharing", which provides more opportunities for international students to communicate with domestic students, it is a kind of informational support because they can talk about the local culture. We will do online surveys to hundreds of international students. The data information surveys can indicate how many students are willing to use and which way they prefer to take. Therefore, we hypothesis that "Car-Sharing" may reduce the stress of international student's due to cultural differences and create a healthy living environment. Based on the data information, we will establish a website to help international students contact with local students. Also, we will build the relationship between the carpool company and schools to better provide the car to student who does not have.

Management

ORCH 3002, 2:10-2:25 pm

# Make Bicycle Riding in Winter a Possibility: Innovated Bike Sharing System in UBCO Campus

Presenter(s): Yudan (Camelia) Chen and Zhanyi (Fiona) Feng

Innovated bicycle system in UBCO will allow students to carry a lot of stuff and even can be used in winter. Although a bike-sharing system has been built in UBC Okanagan Campus, students seldom use it frequently. The reason can be that the temperature is only -4 °C in winter and the roads are icy. As a result, our group want to investigate current students with the existing barriers and problems for system usage. Besides, our group tend to change original two bicycle tires into three fat tires and add blankets on bicycle body. Our research also wants to exam our innovated solutions to determine whether it is practical and able to increase its utilization ratio.

Management

ORCH 3002, 2:30-2:45 pm

# Behind the Secret of Travelling Behaviours: An Innovation of Car-Sharing in the Smartest City in BC

Presenter(s): Xinyi (Jessica) Hao and Ruizhi (Aliena) Huang

Have you ever struggled with the poor transportation system in a small city? Imagine that you are either local people, international students or even tourists here in Kelowna, and you do not have a car, so you have to travel with the public transportations; then, what will you do to make your life become easier? It is our mission to innovate a better solution for people who demand and desire the convenience of life through our program and services. We will be doing this by digging at the reasons of why some people especially university students in Kelowna are not attracted by such a car-sharing service. Thus, in order to help people who might face the above situation in their life, trying our best to build a type of application that provides multiservice which are suitable, convenient, and beneficial for all customers and the society in the future.

**Science** 

ORCH 3004, 1:30-1:45 pm

#### Nutrition levels of water in three different areas

Presenter(s): Quinnie Yang and Walter Wang

Since water pollutions like eutrophication are becoming big concerns recent years, study of the nutrition composition of water in different water areas helps to solve these problems. In order to investigate the nutrition level of water in British Columbia, this experiment was designed to determine the concentrations of nitrite, nitrate and ammonia in water from Fraser River and Wreck beach. Since the annual rainfall in British Columbia is relatively high, we measured the nutrition level of water on both sunny and rainy day by using the test stripes to determine whether the different weather conditions would influence the nutrition level of water. It was shown that all nitrite, nitrate and ammonia contents of water were higher on rainy day than sunny in both Fraser River and Wreck beach. Additionally, the nitrate content of water in Fraser River was shown to be higher than Wreck beach on both rainy and sunny day.

Science

ORCH 3004, 1:50-2:05 pm

# The Relationship Between Weight and Size of Clam at Wreck Beach

Presenter(s): Chenyu (Yvette) Wu

Clams, as a part of ecosystem, are also popular among people, thus it is necessary to study them. According to a research, size and biomass displayed important spatial structure There is a published study indicating that there is an inverse relationship between size and density of clams in San Jorge Gulf( (Liuzzi, López-Gappa& Olivieri,2016), but little is known about the relationship between weight and size of clams at Wreck Beach in UBC. Is there any functional relationship between weight and size? To accomplish this study, the data of the weight and size of captured calms were collected at Wreck Beach. After analyzing the data, it is most likely to be a liner relationship between weight and size.

Science

ORCH 3004, 2:10-2:25 pm

# Influences of Tinting by Different Drinks on Egg Shells (Compare to Teeth)

Presenter(s): Handong Ding and Xiyue Feng

Different kinds of soft drinks may have a different influence on eggshells. The pH, the concentration of sugar and colouring in the drink may cause some effects on eggshells. The aim of this research is to find out how to do these drinks effect on human teeth, especially be coloured by using eggshells to represent human teeth. Moreover, judging whether the toothpaste can reverse the changes made by different drinks is taken into experiment as well. Different brands and kinds of soft drinks and same weight eggshells with similar areas will be prepared. Eggshells will be immersed in 50 mL drinks which will be sealed in vessels at room temperature. Moreover, the pH of different drinks and the concentration of sugar will be measured as well. In addition, the tinting of egg shells will be observed after 12 (based ordinary brushing teeth frequency) or 24 and 36 hours (based on not good brushing teeth habit) of immersion and observe the condition of the egg shell surface.

Science

ORCH 3004, 12:20-12:35 pm

# The relationship between salt concentration in water and the Leidenfrost point

Presenter(s): Yining Guo and Xiaoxuan Lu

Leidenfrost Phenomenon is a physical phenomenon happens when a liquid drop which is near contact with a metal surface significantly hotter than the liquid's boiling point, produces an insulating vapour layer avoiding that liquid drop from boiling rapidly. The significantly high temperature on the metal surface when the Leidenfrost Phenomenon happens is called the Leidenfrost point. The relationship between the different concentrations of salt in deionized water and its corresponding Leidenfrost point was investigated in this experiment. The aim of this experiment was to explore the influence that salt (NaCl) dissolved in water has on the liquid's Leidenfrost point. The experiment showed that the Leidenfrost temperature of distilled water is lower than that of NaCl solution and the Leidenfrost temperature increasing as the concentration of NaCl solution increasing.

Science

ORCH 3018, 1:50-2:05 pm

# Compare the Size Distribution of Clam at Wreck Beach and Jericho Beach

Presenter(s): Yiqi Zhu and Xiaoyun Zhang

There were studies about the influence of clams' different sizes on water filtration rate (Chien & Hsu, 2006) and the food quality available for consumers (Redjah, 2008) at the beach. However, there has been no research done about comparing size distribution in Wreck Beach and Jericho Beach. The size of the clams is related to differences in environment. The size of the clam could be important for consumers. So a study is needed. To conduct this study, the data of clams' sizes and number in 1 square meter was collected and recorded in three different areas on Wreck Beach and Jericho Beach. Then, those records were plotted on the graph to see the distribution in numbers of different sizes. It was hypothesized that if one of the beaches closer to the shore, the range of size distribution was larger. This study might provide information about the closeness clams' growing place to the shore on the beaches. It can be used for people living near the beaches who want to collect clams for food.

**Science** 

ORCH 3018, 2:10-2:25 pm

# Jericho Beach zooplankton dry biomass during the high and low tides

Presenter(s): Yuhui Jiang and Qiuchen Luo

The study investigated the impacts of low and high tide on dry biomass of zooplankton at Jericho beach. Dry biomass of zooplankton at low tide and high tide was filtered by plankton mesh and dried at room temperature. The estimated results show that dry biomass of zooplankton was higher in low tide than in high tide.

Science

ORCH 3018, 2:30-2:45 pm

# The Oxygen Production of the Trees Planted along the Main Mall at UBC

Presenter(s): Tianyu Feng and Zonglin (Antony) Xi

The aim of this research was to find the production of oxygen of all the oaks along Main Mall, which was determined by the average of the production of oxygen per leaves' area, the average volume of the oaks and the average of leaves' area. By measuring the production of the oxygen, we could have a clear understanding of the quality of the environment of Main Mall. The results showed that the whole oxygen produced by the oaks along the Main Mall was 136942.04L per day.

**Arts** 

ORCH 1001, 1:30-1:45 pm

# The Impact of Insomnia on Undergraduates' Learning Efficiency

Presenter(s): Fan Li and Yu Wu

Currently, psychologists have paid attention to the considerable proportion of insomniac within undergraduates caused by increasing employment competition and demands on the ability of young people, while their indication of insomnia's negative impact on undergraduates' learning efficiency is being challenged due to the negligence of the normally accompanying depression's similar impact. The purpose of this research is to evaluate the authentic association between undergraduates' insomnia and their learning efficiency. To eliminate the interference, a quantitative survey was held within 23 Vantage Arts students to assess their sleep quality, mental status, and learning efficiency, and the association between learning efficiency and the other two variables were assessed separately through statistical tools. Except identifying insomnia's initial impact, the results of this study could be the reappraisal of depression's function through contrast and exclusion and could implicate a new approach to the cognition and solution of the impacted academic performance during learning process.

**Arts** 

ORCH 1001, 1:50-2:05 pm

# Does Cocoa Butter Consumption Influence Stress Levels for New International Students?

Presenter(s): Mingyang Xu

Increasing numbers of studies investigate the relationship between the benefits of food on different physical diseases, but little research has been conducted to see whether food can reduce stress. Specific types of dessert like chocolate with the key ingredient of cocoa butter, has been shown to release stress. To further explore the result of this study, the aim of this research is to help situate stress, not as a disorder to be cured with medicine, but as a common condition which could be positively influenced by chocolate. A mixed-methods approach was applied with twenty international students who did pre and post-comparison surveys, one before they tasted chocolate and one after they finished the experiment. The results of study may provide insights into the study of stress for developing new beneficial food resources to be released to international students.

**Arts** 

ORCH 1001, 2:10-2:25 pm

# Understanding Sleep Deprivation: A Glance at the Situation of First year University Students

Presenter(s): Doga Findikoglu

The trend of sleep deprivation in first year university students has had an observable impact on students' academic standing and personal health. Unfortunately, these impacts cannot be (easily) determined and analysed by merely observing student interaction in daily life. While past research for understanding sleep deprivation used surveys or interviews separately, this study seeks to gain further knowledge about how students are affected in their academic and daily lives by conducting a qualitative survey, followed by semi-structured interviews. The data shows the similarities of information between surveyed and interviewed students. Similarities such as irregular sleep schedule identifiers are a notable trend. This mixed-method study may provide deeper insight into how surveys and interviews complement each other to uncover scholarly knowledge that was missing in understanding sleep deprivation's effects on students' life.

**Arts** 

ORCH 1001, 2:30-2:45 pm

## A psychological study on the ways stress impacts sleep quality among international students

Presenter(s): Tianqi Peng and Eva Ng

Sleep quality among university students is determined by many social and psychological factors. Research has shown that daily stress could be an important indicator to negative sleep experiences. However, there is scarcity of research findings in the stress level on the sleep quality among international students. The present study investigates what contributes to an increase of international students' stress and how it influences their sleep quality during their first year. Face-to-face semi-structured interviews were conducted with six first-year international students at UBC Vantage College to find out patterns and characteristic of students' sleep and causes of stress. This research may contribute to a deeper understanding of how stress influences sleep quality of international students and might also have implications for Vantage College to help students cope better with their stress and improve their sleep quality.

**Arts** 

ORCH 3074, 1:30-1:45 pm

# Anxiety and memory: the effects of different levels of anxiety during memory formation

Presenter(s): Shijia Huang and Qingyuan Chen

Nowadays, students are facing increasing pressure from various aspects, such as the academic workload and interpersonal relationship. This pressure may lead to stress and anxiety that affects their memorizing ability thus influences their academic performance. Based on it, this research intended to investigate the impacts of different levels of anxiety on students' ability to memorize learning materials during the memory formation. An experiment was conducted in which participants were required to remember random word pairs during a simulation videotaped situation which was used to arouse anxiety, and their answers were tested after it. Additionally, participants filled out questionnaires that tested their anxiety level before and after the memory test. For the field of psychology, the findings of this research might be able to contribute to the current research in psychology on anxiety and memory, and could also help educators to support students' learning efficiency.

Arts

ORCH 3074, 1:50-2:05 pm

# The key to success in university life: Learning to balance health and academic stress

Presenter(s): Peishan Li

One of the common difficulties for contemporary university students to overcome is effectively dealing with academic stress in order to maintain a high quality of health and well-being. In this regard, the aim of this research is to explore how university students' sleep quality and eating habits would be affected under exam periods. Semi-structured interviews were conducted in order to collect various real-life experiences from university students. Results indicate that most students' personal life would be influenced by examination stress. This study could have important educational implications for university students to budget their time rationally and further achieve a suitable schedule of study and rest.

**Arts** 

ORCH 3074, 2:10-2:25 pm

# Potential factors leading to depression in students from collectivistic cultures

Presenter(s): Shan Lu and Xinwen Hu

For most university students, depression is not an urgent topic that they will encounter presently. However, extensive evidence has shown, students' rate of having depression is considerably higher than people expected. Existing research mainly focuses on individualistic culture students' causes of depression, while very little research has been done on collectivistic culture students which give rise to this research. The purpose of this study is to explore the potential sources of depression for collectivistic culture students. The semi-structured interviews provided many questions related to the possible sources of depression. After conducting this research, we found that besides education and relationship, weather and times for doing exercise may also influence the depression rate. This result can be further discussed to help the future studies on depression.

**Arts** 

ORCH 3074, 2:30-2:45 pm

## The Sources of VANT148 Students' Negative Stress

Presenter(s): Xinhui Xu and Wenjing Deng

According to Sümer, Poyrazli and Grahame (2008), one of the most depressed groups are international students. It makes the society have to pay attention to the pressure of international students. This research is going to focus on the disciplines of psychology and try to find the reasons for forming negative stress. To analyze the sources of stress, the information was collected by interviewing five international students randomly by asking some questions from three different perspectives—the environmental differences, homesickness and academic life. The results demonstrated that students' stress mostly comes from academic life. The study of the sources of VANT148 students' negative stress has great implications on better knowing the problem of psychological health of international students. Also, it may help international students gain an accurate awareness and a clear understanding of their own pressure, so as to better arrange their life and study.

**Arts** 

ORCH 3052, 1:30-1:45 pm

# The influence of social media: The power of prejudice and injustice

Presenter(s): Min Han

The power of social media is enormous because the negative media coverage can easily lead someone to be falsely accused of a crime. Even though the conventional mass media can be useful sources to be raising awareness of injustice, it can also be a source of injustice in the first place. This research will explore a case study of a case of injustice by a jury who convicted the American student Amanda Knox who was falsely accused and imprisoned for four years in Italy with a specific focus on its prejudice by social media. Data were collected through a discourse analysis of news articles and documentaries which contained the various perspectives toward Amanda Knox. The findings imply that the power of social media movement can easily drive innocent person to be a victim of society

**Arts** 

ORCH 3052, 1:50-2:05 pm

# Intentions of permanent residence study of international intellectual class in Canada

Presenter(s): Congshan Qiu and Beibei Huang

Research shows that the rapid increase of international students in Canada has resulted in noticeable talent market transition. However, little data has revealed why intellectual class, represented by university graduates, reject to stay or work permanently in Canada. To analyze types of brain drain and the reasons for their departure, this online survey aims to examine Vantage student intentions and attitudes towards staying in Canada because they are from diverse political, academic and cultural background. The research might serve as a reference for the Vantage college to revise its courses offered for Arts program. It may also give advice to faculty academic advising centre in university about internship opportunity management.

**Arts** 

ORCH 3052, 2:10-2:25 pm

News flash: Information matters...only in the right places

Presenter(s): Mauricio Jean Pieer Trujillo

One of the key variables that correlates with information spread used to be the relative Geographical Proximity. Apparently, the creation of social media platforms decreased the importance of the origin of the information on determining its reach. Recent research often overlooks information's geographical origin by focusing on the different types of produced information. This research aims to reevaluate the role of the geographical origin of information in comparison to the different types of information (News). Over a period of 3 days, news posted on Facebook from 2 major U.S, Canada, Mexico, Peru and Chile News outlets were classified in Music, Political, Technology and Celebrity related. These variables were correlated to the number of Reactions, Comments(Engagement) and Shares(Diffusion) in order to assess which variable performs better in those 3 Information Response Indicators.

**Arts** 

ORCH 3052, 2:30-2:45 pm

# How media and public view First Nations before and after Canadian government apologize

Presenter(s): Chuang Chen and Zebin Lin

The ideology of white supremacy influences the life of ethnic minority in Canada such as Aboriginal peoples. Government set up a large number of residential schools which hurt those First Nations in Canada by restricting their freedom and suppressed them. Fortunately, in the end of the 20th century, Canadian government recognized such a behavior is highly likely to marginalize the First Nations and causes the significant discrimination and racism on First Nations. The government gradually closed the residential school as well as apologize to Aboriginal people in 2008. There are a myriad of media coverage of the matter. The research will focus on the view of public media on Indigenous peoples before and after the apology of Canadian government. In order to access the possible information, this research utilized discourse analysis. A discourse analysis of the perspective of mainstream media on this issue was conducted. This is aims to find some productive overages from local Canadian media such as Vancouver Sun and CBC News to explore the perspectives of mainstream media on how they view First Nations. The results of this research could have important educational and social values and implications for future Vantage students and novice scholars

**Arts** 

ORCH 3058, 1:30-1:45 pm

# Whether there will be difference between North and South Chinese young people for TV series in Vantage College

Presenter(s): Tianqi Gu and Qianning Gu

The geographic division can have significant influence on human culture, and people living in different environments within same country may have various preferences. The purpose of this research is to explore why people in the same nation might have different TV series choices through geographical factors. A quantitative and qualitative online survey was administered to 25 Chinese students in Vantage College in order to analyze the relationship among living background, personality, and TV preferences. The result of this study could have important social implications for a narrowed geographical culture study, which figures out the relationship between cultures and personality within one country.

**Arts** 

ORCH 3058, 1:50-2:05 pm

# Relationship Between University-specific Features and International Student Choice

Presenter(s): Yixuan He

As the increasing number of international students choose to study abroad, there are many studies concerns on the initial reasons why they choose to study abroad. However, there are few studies about the influential factors which can impact international students' choices of the university. This study finds out the relationship between university-features and students choices. This study applied both qualitative and quantitative research methods that used Likert type questions, multiple choices and open-ended question for getting both large number and deep answers. The research finding shows that the rank of the university, the rank of program and political factors are the top three factors in their decisions. Besides the factors we provided before, participants were also significantly influenced by their friends' choices. Overall, it is clear that the combination of internationalization and international marketing approach can have a strong influence on international students' choice to come to UBC

**Arts** 

ORCH 3058, 2:10-2:25 pm

# Why Not Seek Help?: Poor Engagement in Writing Supports Held by Universities Among International Students

Presenter(s): Mingzhao Li and Pelin Dogdas

International students in new learning environments seek help from higher education institutions as the writing assignments are much heavier and harder than in high school. To ensure students will have better writing skills as well as successful academic careers, many universities have provided various workshops with experienced teachers but few students attend. This study aims to investigate why international students may not prefer to attend workshops held by the post-secondary institutions to solve their writing challenges. Structured 15-minute interviews were held to collect data from 13 Vantage College Arts students containing 15 questions about office hours and writing challenges to find out what motivates them to attend workshops. These results might provide two key educational implications: a) Vantage instructors could adjust their ways of providing help on solving writing challenges; b) International students will understand the effectiveness of workshops and be engaged in attending.

**Arts** 

ORCH 3058, 2:30-2:45 pm

### Does volunteering really show altruism? A psychological study with Vantage students

Presenter(s): You Xiao and Menghan Gao

The increasing number of student volunteers in many universities and communities has received considerable attention in recent years, and scholars in this area have identified different intrinsic and extrinsic factors that can motivate students to volunteer. While the previous studies have focused on both factors, only few studies have compared which factors play a bigger role in promoting student's motivation for volunteering. This research makes a comparison of these two factors and examines the main factors guiding student's engagement in volunteering activities. To analyze student volunteer's experiences and reasons for volunteering, an online survey was administered to 50 vantage students with different backgrounds. The results of this study could have important social implication for student volunteers understanding the practice of volunteer work is inclined to egocentrism instead of altruism.

Management

ORCH 3002, 2:55-3:10 pm

# The Barriers International Students Face when Making Local Friends: Connecting Students through Global Buddies

Presenter(s): Somin Lee and Isabelle Atienza

70% of international students feel isolated in their first year in university. They experience more stress compared to local students due to the new culture and environment they are exposed to. International students tend to socialize with individuals from their home country; however, previous research has discussed the benefits of forming friendships with locals for both students. With that, Global buddies aim to eliminate this issue by connecting foreign and domestic students.

Management

ORCH 3002, 3:15-3:30 pm

#### **Promoting Environment-Friendly Food Packaging Systems**

Presenter(s): Jialei (Jerry) Dong, Minh (Mark) Le and Duolong (Jonathan) Zhang

There are only 0.4 million tonnes of disposable material products has been deducted out of 3.4 million tonnes of total packaging waste in Canada. In school place, a third of campus meal, approximately 350,000 to-go boxes have been used every year. In order to create a sustainable environment for students, staff members and indigenous community, University of British Columbia (UBC) has implemented a program called Eco-box. This program involves replacing disposable take-out boxes with reusable containers in cafeterias around its campus. However, this program is operated by Alma Mater Society (AMS) and merely available in UBC Vancouver. Recognizing the potentials of this program, we suggest an expansion of this system to UBC Okanagan campus which could result in reducing the cost of recycling procedure and simultaneously creating funds for schools' projects.

Management

ORCH 3002, 3:35-3:50 pm

#### Youth Retention And Recruitment

Presenter(s): Ziyang (Jackson) Zhong and Yitong (Doris) Liu

We are interested in finding out what makes talented students choose other cities over Kelowna when it comes to their employment. Also, what could the employers do to attract and retain these youths? In Kelowna's job market, it has a lacking supply of permanent employees which concerns the city's long-term economic growth. The city's technology and tourism industries are far more developed than other sectors, what about other sector's employment opportunities? Kelowna is the seventh most expensive city in Canada, and its rental market has caused many students to live under the pressure of money. We are going to use online surveys to gather perspectives of our students and to dig deeper into the potential solutions to this problem.

Management

ORCH 3002, 3:55-4:10 pm

#### Fundraising for homeless women in Canada

Presenter(s): Kosar Mohammadipour Anvari and Can Umut Tas

When walking down the streets in Kelowna, there are number of homeless people. The majority of homeless individuals are men, but the number of homeless women is growing rapidly. From our previous researches, we noticed that there are stigmas around homeless women. In this project, we are looking for ways to make students familiar with the facts about homeless women and see if familiarity with these facts would persuade international to donate money to these women.

**Science** 

ORCH 3004, 2:55-3:10 pm

# The Effect of Fin Number in Hydropower Plant to the Production of Electrical Power

Presenter(s): Theodorus Susanto and Dezhao Feng

Our present civilization is based on the use of gasoline. However, due to the great depletion of fossil energy, we are urgently in need of a renewable, clean energy. The water power is one of the most applicable energy. To maximize the water power we can get, our research aims to find the answer to "How many fins can maximize the power we get from water in the turbine?". To answer this question, we build a prototype of a hydropower plant and make several propellers with a different number of fins. Then we will count the rotation per minute for each set of fins to compare which one will produce the most power. Based on our research, the number of fins does affect the maximum power we get from water, more fins will give more power that is measured by rotation per minute. Therefore, the design of current hydropower plant could be changed in order to get more power and to save billions of dollars spent on energy every year from water sources.

Science

ORCH 3004, 3:15-3:30 pm

### Improvement of Energy Efficiency on UBC Buildings Over UBC History

Presenter(s): Eleanor Liu, Yuxin (Elsa) Zhang

Buildings in UBC were constructed in different time with different materials. There had been a tradition of installing thermal insulation material inside of the walls since 19 centuries (Bozsaky, 2010). As the technology developed the choice of thermal insulation materials have increased and this may influence the energy efficiency of the building. The use of thermal insulation materials in the wall and roof of the building is expected to reduce the heat transfer and control a comfortable indoor temperature without wasting too much energy. In this project, we aimed to find out whether there is any improvement of energy efficiency on UBC building over UBC history. We measured the temperature using an infrared thermometer of the air and wall from both inside and outside of 23 building that were built from 1945 to 2016. The temperature difference on two sides of the wall was calculated to represent the energy efficiency and related to the year the building had built. It was expected to see that the newer building has higher efficiency which means higher temperature differences in this case, but the result showed that the newer building and the old building has similar temperature differences.

Science

ORCH 3004, 3:35-3:50 pm

### A Scientific Piece of Art, or Trash - Effect of Heat on Film Colour Performance

Presenter(s): Shiyu Deng and Kailin Xu

In film photography, film is one of the essential consumables for photography. The quality of film directly influences the quality of the image taken. Two factors that can affect the quality of film are temperature and humidity. Unused films are usually preserved in sealed individual packages which are stable environments in terms of humidity and brightness. However, the temperature of films can still be changed, which might cause damages to the film and affect the image quality. To identify the level of the damage can be done, films were placed under certain temperatures and then taken pictures with. The image quality was evaluated after the photos were developed. It was determined that high storage temperature might cause the film to be less light-sensitive and dark brown dots to appear on images. Researching in this topic will give film photographers a reference on how would high-temperature storage environments, such as a car exposed to sunlight, might affect the outcome of the images taken.

Science

ORCH 3018, 2:55-3:10 pm

# How Amount of Developers Influenced Size of OSS (Open Source Software) Projects?

Presenter(s): Kewei Li and Yuhang Zeng

Open Source Software (OSS) has recently being increasingly popular. OSS are usually hosted on OSS communities such as GitHub, SourceForge etc. GitHub has become one of the biggest OSS community, by September 2017, GitHub had almost 24 million users and 67 million repositories (GitHub, 2017). This study was devoted to model the relationship pattern between the amount of developers and the size of OSS project on GitHub platform, since there exists no recent study focused on this relationship. In this study, a program was developed to create this model by analyzing repositories newly built on GitHub between September 2016 and September 2017. Repositories in this range were grouped into 17 groups by the amount of developers and the average of project size in each group were plotted into the model. This study concluded a quantitative formula describing the relationship between the amount of developers influenced the size of OSS projects. This verification of this relationship can potentially benefit the OSS communities, software companies or personal developers, by giving them a general understanding of how the amount of developers influenced the size of software project.

Science

ORCH 3018, 3:15-3:30 pm

### Runtime Comparison of Multiple Programming Languages on Different Platforms

Presenter(s): Yanbai Chen and Xindong Lin

In computer science, the knowledge of the variation in multiple programming languages is essential. This knowledge helps programmers to choose the appropriate programming languages in specific fields to optimize the overall efficiency. Three of the top programming languages, which are Python, Java and JavaScript, were chosen to be the study objective. This research seeks to experimentally compare the runtime performance of different languages & IDE. For each contestant, we will design a Fibonacci sequence calculator with the algorithms respectively kept identical. The data was collected through built-in timers inside the languages under the same complexity and running environment. Five tests were conducted for each combination to reduce error. The average runtime for each test was recorded and put into bar charts for statistical analysis.

Science

ORCH 3018, 3:35-3:50 pm

### The difference of degrading level between different kind of disposable boxes in soil

Presenter(s): Sicong Zhou and Yuqin Wan

Today, disposable box is one of the most popular and useful containers in restaurants and shops. Disposable box is easy to product and carry, this is the best way that restaurants and shops can save money. Although disposable box is convenient, how to take charge of the waste become a large social problem. Some of the disposable box can hardly degrade in soil or product some pollution during the degradation. Degradation of disposable boxes is a serious problem that every environment protectors focus on. There are many restaurants, stores and dinning rooms around our residences, they have many disposable boxes for food delivery. We notice different restaurants or stores have different types of disposable boxes. Boxes are not only made by different companies and their materials are totally different. In this research, we are able to collect different types of disposable boxes around UBC and figure out which type of boxes have the strongest degradation level in soil.

**Arts** 

ORCH 1001, 2:55-3:10 pm

### The influence of the Korean wave on beauty perceptions of Chinese international students

Presenter(s): Cen Liu

The cultural phenomenon of the Korean wave (Hallyu), including K-pop music, drama and cosmetic products, has received popularity all around the world. One of those countries—China, which is geographically close to South Korea, is significantly impacted by the Korean Wave, especially about the way they think of beauty. Despite its noticeable influences, lack of investigation work on how Korean culture has influenced the beauty perception on Chinese young adults exposed to the multicultural background. This research aims to explore whether and how Chinese youth's perceptions of beauty is influenced by the Korean Wave (Hallyu) particularly in the multicultural conditions. A quantitative and qualitative online survey was administered to 30 female Chinese Vantage College students in UBC, seeking information about their attitudes and frequencies of using the Korean products. This study may have social implications for new cross-cultural understanding and make contributions to the current research on globalized changing beauty perceptions.

Arts

ORCH 1001, 3:15-3:30 pm

Varieties in societal attitudes

Presenter(s): Houyu Lin

LGBT acceptance is a social issue that affects the interaction between LGBT community and society. Among the effects, discrimination has been identified as a delimiting factor of the former's right to join sports and social gathering. The research aims to identify the positive effects especially rising acceptance such as brought by LGBT representation in real life. In order to collect information, the study utilizes discourse analysis on the text of different individuals' views for LGBT and their work. Present studies have not yet found enough findings that majority of public understand LGBT's significance. Though, it is still hoped that collective efforts of LGBT community will put more efforts to lessen discrimination for them to have the chance in expressing their potential in every department of society which makes culture pluralistic.

**Arts** 

ORCH 1001, 3:35-3:50 pm

### Investigating roles of mothers in the higher level educational attainment in South Korea and Turkey

Presenter(s): Chenyuwen Qin and Haoyan Yan

The education gap between male and female is widely concerned by the public. For instance, the existing Turkish and South Korean literature indicates that patriarchalism or the Confucianism has a great influence on female educational attainment. However, the roles of the mother in family members' education has not been analyzed. Therefore, this research intends to develop valuable evidence for how mothers affect Turkish and South Korean students' enrollment in Vantage UBC. To explore mothers' influences on children's higher level of educational attainment, data were collected by having a qualitative interview with Turkish and South Korean students. The results show that the family members' educational attainment is tightly tied to mother's career. This study may have some practical implications for the female education and contributes to the current research on the social area.

**Arts** 

ORCH 1001, 3:55-4:10 pm

# The Role of the Syrian Official Media in Framing the Syrian Revolution as as Sectarian Ideology Movement, and the Changing of Public Opinions

Presenter(s): Rinas Melli

Public opinions are dynamic, making it essential to investigate how and why they change quickly. This paper examines the impetus for changes in public opinion regarding the Syrian uprising. This research analyzes the Syrian official media and how it functioned to delegitimize the Syrian uprising by framing it as a sectarian retroactive power which has subversive goals against the Syrian multi-sectarian society. Existing research investigates how the Syrian revolution lost public support after the conflict became a massive armed conflict, by showing the brutal attack from the regime and the weak political speech plus the emergence of the Islamic armed parties. This new study uses discourses analysis of the official Syrian TV news, which covered the first six months of peaceful demonstrations, to see how language and speech were framed. The author employs a sociological approach connecting media to societal power. The research has implications for the use of social media in future social movements, as a platform to reach the society and enable social groups to access a variety of opinions.

**Arts** 

ORCH 3074, 2:55-3:10 pm

#### People's decision making under time pressure

Presenter(s): Yutong Zhu and Xinchang Lei

Time pressure is an important factor that can affect people's decisions. A person in a highly urgent situation tends to encounter more difficulties, which can lead to poor judgements and negative consequences. However, research in this area has not addressed how limited amount of time influences people's decision making. Therefore, the aim of this research is to examine the relationship between time pressure and people's decision making. With this aim, 20 participants were randomly separated into control and experimental groups. Experimental group participants performed Math questions and memory tasks within 1 minute, while control group performed tasks without a time limitation. Through this process, these participants behaved differently and the result shows students are more focused under time pressure, which means they can positively deal or respond to difficulties. This finding may indicate that time pressure is an important factor that can lead Vant 149 students to make better decisions.

**Arts** 

ORCH 3074, 3:15-3:30 pm

### Beyond time planning: A quantitative and qualitative analysis of procrastination from a pyschological perspectve

Presenter(s): Yi Huang and Luyi Pan

Academic procrastination is a psychological self-management failure which increasingly affects university students in terms of their academic success. Although many researchers have investigated the reason and influence of academic procrastination, few studies focus on international freshmen. The aim of this study is to examine whether and how the effective time planning could contribute to lower level of academic procrastination. To explore the relationship between academic procrastination and the strategies of time planning, a quantitative and qualitative online survey was conducted among 50 Vantage College Arts students, seeking the information about how their time plans were created and used. Moreover, the description and self-evaluation of participants' procrastination behaviours were claimed in the questionnaire. This study may provide practical insights into how university students could avoid academic procrastination behaviors through successful efficiency of implantation beyond the time planning.

**Arts** 

ORCH 3074, 3:35-3:50 pm

Exploring the effectiveness of sexual education for college students

Presenter(s): Ying Chun Kelvin Muk and Taiquan Wang

**Arts** 

ORCH 3074, 3:55-4:10 pm

### Investigating the effect of standard time tables on first-year international students' experiences

Presenter(s): Selin Ergun

Choosing ideal courses in the first year of university, one of the most stressful events for every student can influence students' adaptation and motivation and motivation to their university studies. This study aims to help determine negative and positive effects of implementing standardized timetable programs on first-year university students. Through examination, additional factors such as friendship, mental health, social boundaries and location were considered. Structured interviews were conducted with 7 current first-year international student participants with standardized timetables. The findings of this study which are negatively perceived will provide a better way of understanding the struggles of the standardized timetables for first-year students and may provide insights for helping successful.

**Arts** 

ORCH 3052, 2:55-3:10 pm

### Vantage college students' food perception towards healthy dietary practice

Presenter(s): Mingruo Ji

Dietary behaviour is a major determinant of chronic disease and the promotion of healthy dietary behaviours in all populations has been a public health priority for decades. Current studies suggest the overall increasing acceptability of healthy diets in the whole society and people's growing desire for organic, local, sustainable, and non-processed foods. Nevertheless, very little research has been done to show different generations' food perception towards this ongoing trend, especially on younger generations. To investigate whether university students' dietary behavior and perception regarding healthy alternative food production practices are allying with overall trends, a quantitative survey was conducted at Vantage College among 33 Vantage students. The results of this study could provide insights into further studies which focus on the comparison of dietary behaviour among different generations.

**Arts** 

ORCH 3052, 3:15-3:30 pm

### What do UBC's first year international students do with their trash?

Presenter(s): Zhiming Zhang

This research aims to discover UBC's first year international students' behaviors on trash recycling and the factors influencing those behaviors. International students, especially the ones who didn't experience trash recycling in their home country may have frustration that stem from possible penalties of not properly categorizing all recyclable material. This may lead to students putting everything in the garbage. However, according to Aquino (2015), correctly recycling different categories is important for health of trash collectors. By interviewing students about their trash recycling behaviors and factors influencing those behaviors, conclusion of what international students usually do with their trash and why they do that have been made. Discovering this and the reason of why students do so is important because students' attitudes towards trash recycling may change due to acknowledging the behaviors and importance of trash recycling.

Arts

ORCH 3052, 3:35-3:50 pm

#### The Effects of Human-Canine Relationship

Presenter(s): Yilin Chen and Wenyan Tang

Dogs play various important social roles in people's daily lives. They are family members, guides and workmates. Indeed, dogs' company might improve the quality of people's life. This closer relationship between dogs and their owners is demonstrated through the study by Prato-Previde et al. (2003) who has indicated these pets show more enthusiasm and longer duration greeting for their owners than strangers. Further research about the social support provided by dogs is still ongoing. The purpose of this research is to examine the effects of dogs on stress reduction for first-year international students. This research was based on a structured interview which was conducted with the experiences between international students and their dogs. The result of this study suggests positive influence of having the company with canine has great contribution to help international students maintain mental health. This finding may indicate an important social implication to value the positive mental support from dogs to humans and animal-friendly policy in society.

**Arts** 

ORCH 3058, 2:55-3:10 pm

The Power of Public Art

Presenter(s): Shreetika Singh

Public art is a powerful method to institute emotions and responses among individuals, by using it to spread awareness, ignite dialogue and initiate action with the community. Art tends to be viewed as a hobby, something to pass time with, or a way to make something visually appealing. However this study present art through a different lens, allowing individuals to witness art as a way of spreading awareness and presenting issues in society such as the lack of female representation in politics. To witness the effect of public art, Vantage students were interviewed about three art installations, a form of public art, regarding the topic of female empowerment and representation in politics. The responses of the interviewees proved that public art could be used as a powerful tool to spread awareness and create dialogue among one another. Exhibiting to individuals that there are many ways of spreading awareness, the use of various methods open doors for more and possibly faster change to take place.

**Arts** 

ORCH 3058, 3:15-3:30 pm

# How do people react to immigration? An analysis of immigration in Vancouver through news media

Presenter(s): Junhui Jiang

The city of Vancouver is a multi-culture city that has absorbed a large number of immigrants, and immigrants have already played roles in the society. Therefore, this research aims to examine what level people are reacting and perceiving immigration in order to infer a better understanding of the city that we have lived in. There are existing research papers by scholars examining the impact and factor of the immigration, yet this research focuses on the data that I collected from press media and use the method of discourse analysis to measure how people react to immigration and how they feel about immigrants. In the method of my research, the paper would be mostly analyzing the news articles from credible local press media such as The Vancouver Sun and also authoritative news website like CBC

**Arts** 

ORCH 3058, 3:35-3:50 pm

Practical strategies on sustaining long-distance dating relationships: A survey based study of university students' perceptions

Presenter(s): Yiqiong Fu and Yuxin Hu

The study of long-distance dating relationships (LDDRs) has great importance for university students since graduating from school, seeking for different working environment or engaging in the exchange program may cause increased separation in the modern society. The purpose of this research is to explore how to maintain a long-distance dating relationship. A quantitative and qualitative online survey was administered to Vantage students who are in a long-distance dating relationship based on multiple-choice questions as well as short answer questions to further explore the strategies to keep a long-distance dating relationship. The results of this study could have significant implications on: a) psychological support for university students who are seeking practical tips of maintaining LDDRs with their romantic partners currently or in the future; b) the buildup of confidence among romantic relationships in sociology and communication field.

**Science** 

Poster location 11, 10 - 11 am and 11 am - 12 pm

### Which things will influence bottle shape changing under atomsphere pressure and how big it is

Presenter(s): Zhongzhe Cheng

This experiment aims at finding the biggest influence which effect the shape of a kind of plastic bottle, record how big it is and choose which reason effect the most. In this experiment, the normal drink bottles would be chosen and liquid in bottles would be controlled to be the variable. The research variable were temperature, volume, concentration and wind. The result would be concluded by those variable and the trend of shape changing would be recorded by recording the height change of liquid level. After collecting data, those data would be compared with the virtual number which got from calculating by definition and function, the result is the temperature inside of the bottle would affect the shape changing most in normal situation.

Science

Poster location 14, 10 - 11 am and 11 am - 12 pm

#### Search the plants hydrophobic change after dipped in ethanol Presenter(s): Amber Zhao and Rola Yang

Plant with hydrophobic or super-hydrophobic surface regards as an ideal character for things with waterproof property. Knowing how plant's surface cause hydrophobic can help creasing waterproof materials and widely used in our daily life. And also, hydrophobic or super-hydrophobic surfaces with special characteristic can be applied in professional fields like self-cleaning and anti-icing, icing, or applied to reduce cost of creating heat-transfer and drag reduction materials. In this study, we will focus on finding out what reasons that can make different plant hydrophobic, which can be used in the future's application by human. The aim of the experiment is finding out what specific reason (one or more than one) makes different plants have the ability of hydrophobic. Based on the main reason should be structure and wax, the ethanol was used to remove the wax in the surface of the plants, and check whether the plants become more hydrophobic or not. Then the result inferred what reason makes specific plant have the hydrophobic ability, whether it is based on its own structure or wax on the surface.

**Science** 

Poster location 17, 10 - 11 am and 11 am - 12 pm

### Investigating the Cleanup of Britannia Mine's Acid Mine Drainage

Presenter(s): Yunfei Li and Xinmeng Liu

In this study, we investigated the results of the clean-up of the Acid Mine Drainage of Britannia Mine. AMD (acid mine drainage) has a severe impact on the environment. If there still exist some near Britannia Mine, the loss and damage could be severe, such as the decreasing species in the ocean, the enormous loss in fishery and the harmful effects on humans' health who live around Britannia Mine. Therefore, our research was designed to investigate whether there is evidence of contamination in the water around Britannia Mine. The investigation was performed by comparing the pH values of seven locations near Britannia Mine in the upstream to downstream direction. The pH of river water was also used as the standard to analyze for the existence of pollutants from AMD in the ocean near Britannia Mine. This preliminary investigation suggests that there still exist contaminants after AMD clean-up since the pH value of seawater at Britannia Mine is lower than the surrounding seawater.

**Science** 

Poster location 23, 10 - 11 am and 11 am - 12 pm

#### **Grass Biomass Production of Lawns in UBC**

Presenter(s): Haodan Zheng and Sitian Yin

UBC has a beautiful campus with abundant plants. We are curious about if UBC is a pasture for horde, how many goats can be fed by all the grass in UBC. Thus, we want to calculate the total amount of grass in UBC by measuring the average biomass of grass per meter square and the total area of grass in UBC. We measured the biomass in a chosen lawn by choosing 5randomsample points in the chosen 1m2 lawn and cut, weighed the grass. After collecting the data, we calculated total amount of grass in UBC by estimate the total area of grass with the satellite map. We also did some research online to figure out how many grass should be fed to a goat per day. Finally, we calculated how many goats can be fed by all grass in UBC. After calculation and summarizing, we concluded that goats can be fed for one day by all the grass in UBC. Finally, we wrote the research report and made posters for the presentation to show our research result. Our research began on May 10thand the final presentation will be in the late July.

**Science** 

Poster location 35, 10 - 11 am and 11 am - 12 pm

### The type and causation of damaging landslide from 2015 to 2018 in BC

Presenter(s): Chang Wei and Xiao Shan Huang

Landslide is a general term which is used to describe the down-slope movement of soil, rock and mud under the influence of gravity. The landslides increase the risk of the death, properties damage and obstructing the traffic. This study mainly focused on studied the location and the type of the risked landslide and the causation of them. The information of the landslide is collected online, tabled in Excel, and drown into a map by using Google Earth as a helper. The result of this research indicated that dangerig landslides present as rock fall, rock slide and debris flow and usually happen near river and highway. The hypothesis is the causation of the damaging landslide were often freeze thaw, steep slope, heavy rain and snow, construction and complicated geology. This study contribute to be the warning of risked landslides for society and also interest geography researchers.

**Science** 

Poster location 41, 10 - 11 am and 11 am - 12 pm

# First-Year University Students' Math Performance as A Predictor of Their Math Performance in Second year

Presenter(s): Gengyao Liu

Mathematical background is very important to the learning of math. To enhance students' mathematical background, universities create math courses to help in first year of university. The math performance in first year of university may also be a good predictor of the academic performance in subsequent math courses. This study was employed to explore the relationship between the students' math performance in first year and second year at the University of British Columbia. The data for this study was artificially generated from statistics of students' performance of the courses, Math 100, Math 101, Math 200 and Math 215. The students' grades in these math courses was first analyzed by using descriptive statistics, comparison of mean, maximum and minimum. The relationship between students' first-year math grades and second-year math grades was first analyzed by using multiple regression. However, the model of multiple regression did not pass the t-test and Ftest, which indicated the model of multiple regression was not reliable to predict student's second-year math grades. In another word, students' average math grades in second year of university is not just linearly correlated to their grades of math 100 and math 101. The relationship between students' first-year math grades and second-year math grades was further determined by using logistic regression. The results of logistic regression showed that students' grades of math 101, compared to grades of math 100, was much more significant in predicting their second-year math grades. The hypothesis of this study was that the first-year performance of students in math 100 and math 200 both were positively correlated to their performance in second year. The hypothesis is partially correct. This study was hoped to help universities predict and analyze international students' math performance.

Science

Poster location 53, 10 - 11 am and 11 am - 12 pm

### Distribution of Different Sediments in Vancouver's Beaches and Rivers

Presenter(s): Yidan Yan and Jia Huang

The purpose of this research project was to determine distribution of different sediments sizes in beaches and rivers. The samples were collected from three different beaches and rivers in Vancouver: McDonald Beach (river), Jericho Beach and Kitsilano Beach. We measured the size of sediment for a certain distance from the water by grain scale card and tape measure. The size of sediments from river increased as distance increased. The sediments size on beaches did not varied a lot as distance increased.

Science

Poster location 65, 10 - 11 am and 11 am - 12 pm

### The Relationship Between Zooplankton Biomass and Water Temperature

Presenter(s): Xinyi Yuan and Haoyue Wang

Though planktons are in the bottom of the food chain, they have important commercial value in fishery industry. Also, plankton plays an extremely important role in balance of marine ecosystems. Generally, plankton can be divided into two categories: Zooplankton(animals) and Phytoplankton(plants) (Mauchline, 1998). Microscopic planktonic are belong to primary producers, which can be found over most of the world's oceans, lakes, rivers, and estuaries, and comprise the base of the food web. Our research is manly focused on the zooplankton live in the neritic zone, which are brought by mercy of tides, currents or waves. In this research, we will collect totally six samples of seawater from two different locations and do the next professional analysis. Our x-value is the temperature of the seawater and y-value is the biomass of zooplanktons. And throughout the project, we found that the amount of zooplankton is indeed influenced by the seawater temperature.

**Arts** 

Poster location 2, 10 - 11 am and 11 am - 12 pm

# How Important is Copyright?: Comparing Public Awareness of Music Copyright in China and the United States of America

Presenter(s): Zhanhao Zeng and Lin Zheng

Compared to other kinds of work, music copyright is easier to infringe, and the continuing trend of Internet usage has had a lasting impact on using others' ideas or work without payment. This presentation aims to promote a better understanding about the importance of copyright for people by doing a comparison between two countries. A discourse analysis of media reports about music copyrights from China and the United States was conducted in order to see how the most popular news websites in both countries introduce copyright infringement. One main finding shows that both countries have pros and cons when treating music infringement. The results may indicate important implications for musicians, customers and companies such as 1) enhancing supervision in order to control music copyright infringement; 2) changing the social atmosphere of devaluing other's work; 3) protecting musicians' ownership of their work.

**Arts** 

Poster location 5, 10 - 11 am and 11 am - 12 pm

Living Abroad: How International Students Balance their Emotions, and the Impact on their Social Lives

Presenter(s): Ed Li and Veronika Wang

Emotions account for a significant proportion of people's perceptions and opinions about the world around them, so managing emotions is very important in shaping one's thoughts and behaviors on a daily basis. Few studies have examined the emotion management strategies of first-year international students facing a new environment and culture, and the effect of these strategies on their lives beyond academic achievement. Therefore, this research aims to explore the emotion management strategies of international students and the impact on their social lives. In the study, interviews are conducted focusing on how participants managed their emotions when encountering conflicts with their classmates and professors, and the influence of this management on their lives. The results of this study could have significant social implications for future Vantage students to have the further awareness on emotion management.

**Arts** 

Poster location 8, 10 - 11 am and 11 am - 12 pm

"I never leave home without my lucky bracelet": Superstituous belief – does luck really matter?

Presenter(s): Tergel Naranbaatar

Superstitious belief refers to the individual's' belief in external abstraction which tends to influence in their life. It is not very odd and new concept for the human beings, it is the notion that exists in our everyday life. Thus, this research has studied the different types of superstitions in international undergraduate students, their beliefs' reasons and factors. Moreover, one of the research methods: an interview was done with four students with different nationalities at Vantage College. The major findings show us that there are various types of beliefs that exists among different nations and it usually unconsciously comes up in their mind whenever they face with the superstitious situation because of their culture and family which are the most significant factors in their belief as my study concludes. At last, an implication of this research is to discover the superstitious beliefs' influence in international undergraduate students' everyday life.

**Arts** 

Poster location 20, 10 - 11 am and 11 am - 12 pm

# To eat or not to eat? The relationship between nutrition knowledge and diet

Presenter(s): kanbei yan

"Freshman fifteen", a weight gain phenomenon during a student's first year at college, has been a significant problem for first-year college. In present studies, over a quarter of student's weight gained number over the baseline of average weight number, attend the baseline of overweight or obesity. Some studies indicate that student's weight gain has relationship with their poor nutritional knowledge and unhealthy diet. This presentation suggests that student's nutritional knowledge has a relationship with their daily diet. To analyze the impact of knowledge on dietary habit, a quantitative and qualitative survey was conducted with 30 participants from the Vantage program. The results of this research could have important implications for student weight control and their healthy diet management.

**Arts** 

Poster location 26, 10 - 11 am and 11 am - 12 pm

# The relationship between social media usage time and uniersity students' perception of academic review

Presenter(s): Kristy Liu and Stanny Chen

Nowadays, with the rapid development of technology, university students depend on the use of social media in many different ways. When technology plays an important role in education, the rising trend in social media usage has possibly influence on students' study behavior (reading behavior, motivation to study, etc.). The aim of this research is to investigate the relationship between time spent on social media platform out of class and university students progress of reviewing (reviewing materials discussed during class, studying for tests). The quantitative online survey was administered to twenty-five participants in Vantage College. The findings of this study may have important implications for educational practices: a) better time management on both social media usage and study b) the improvement of academic performance.

**Arts** 

Poster location 29, 10 - 11 am and 11 am - 12 pm

Does playing video games affect students' behaviour?

Presenter(s): Sophia Li and Shuyi Qiu

The increasing concern of playing video games has resulted in addictions and series of negative impacts on college students' behaviors and personality in their academic life. However, first-year international students should be focused on as well. Based on this, this study provides valuable insight about how playing video games change international students' behaviors as they face relatively more stressful academic life. A qualitative open-ended interview was conducted with 5 males and 5 female first-year international students. Results revealed that intentions drive international students play video games in academic life. More importantly, these findings could have noteworthy social and educational implication: a) feeling bored drives students to become addicted to video games, b) students are able to make the balance between study and playing video games and c) students' behaviors basically remain the same. However, this research is limited by the number of participants and assessing participants' personality traits after playing video games.

**Arts** 

Poster location 32, 10 - 11 am and 11 am - 12 pm

# Cultural Differences towards Bullying: How Different Countries Accept Bullying Societally

Presenter(s): Michelle Kim

Bullying has become a central educational issue in most countries over time. This rising trend in bullying has possibly led victims to suicide in the worst consequences. Research shows that eastern teenagers suicidal rates are higher than western. This study is going to explore whether or not the perception is different. The purpose of this study is to understand the differences between Western and Eastern cultural perceptions towards bullying, and how those differences affect the society's expectations toward the bullying. 4 different movies (2 Asian and 2 Western movies) will be analyzed using discourse analysis methods in order to determine blaming victims or assailants. The results of this research may show an implication for society, changing attitudes or perceptions surrounding and reduce the bullying. Society's proper attention is needed for victims, assailants, and bystanders of all kinds of bullying situations that is cyclically happening around the world.

**Arts** 

Poster location 38, 10 - 11 am and 11 am - 12 pm

# The contrasting portrayal of money laundering by different news agencies

Presenter(s): Dingfeng Xu and Tianyun Wang

It is interesting to find that a piece of news can be depicted by different news agencies in various ways and with each unique way of speaking, it attracts a reader's attention. Nowadays, many researchers' focus has turned to the characteristics and consequences of money laundering, including its threat to a country's national security and economic status. However, it remains unclear how different news providers analyze this social issue using a variety of language skills. Therefore, this paper aims to find out the different perspectives shown in articles written by two news providers. To carry out the research, 10 articles from BBC News and Global News were selected to be examined (5 articles from each). It is concluded that BBC News used more objective language skills to state the money laundering, Global News posed more radical thoughts on this social issue.

**Arts** 

Poster location 44, 10 - 11 am and 11 am - 12 pm

# How do individual athletes potential perceive boycotts in Olympic Games on their careers?

Presenter(s): Wencheng Liu and Weibin Xiao

Boycott, which is an important political strategy to gain the power from other states, has brought incredible and significant impact toward athletes. During the cold war, athletes had become the cost to pay for the competition between US and Soviet Union. There is some research about the boycotts during the cold war, however, all of them ignored how the boycotts influence athletes. This presentation will aim to analyze how the political actions taken by the government negatively impacted on athletes' careers. To examine the impact of boycotts on athletes, we conducted a discourse analysis. The findings of this study generally support the idea of going forward with limiting the effect of boycotts on athletes.

**Arts** 

Poster location 47, 10 - 11 am and 11 am - 12 pm

Personal information security issues: Students' awareness of personal information privacy following the Cambridge Analytic incident.

Presenter(s): Yuchen Song and Haozhou Ye

The social software security issues are becoming increasingly important and the Cambridge Analytica scandal which exposed tens of thousands of people's personal information has led to greater public attention to software security. Several studies have indicated that people are less aware when they are exposing their personal information online than in person. It's worth thinking if people's attitude towards social software will change after suffering exposure of personal data. Thus, this research aims to analyze the changes of Vantage arts students' attitudes towards social software and an individual's security setting (Facebook and Wechat) after the Cambridge Analytica incident. To analyze the impact of the Cambridge Analytica incident, a quantitative survey including 12 questions related with self-security setting, third-party software, attitude change and thought toward security issues was conducted. These preliminary results may suggest that: a) Students' alertness of disclosing their personal information has increased b) Students' dependence on social media after suffering personal information exposure has changed.

**Arts** 

Poster location 50, 10 - 11 am and 11 am - 12 pm

#### Childhood obesity and mother blaming

Presenter(s): Becky Sun and Siyi Zhao

Overweight and obesity are the biggest risks and affecting childhood overall development because overweight children are likely to suffer from illness. It is essential to help children to grow up healthy. Increasing attention may be contributing to childhood obesity among the public. The general public thinks that a family's eating styles can impact kids' weight, especially the mother overfeeding. However, childhood obesity may have some relationship with the influence of the social welfare system on the family. Therefore, this research seeks to explore the relationship between childhood obesity and mother blaming, and whether obesity is really due to the excessive mother caring. A discourse analysis of childhood obesity was conducted by comments on social media, which reflect most people think obesity is inseparable from mother care. The results of this study may indicate that more attention is needed in order to help children health development.

**Arts** 

Poster location 56, 10 - 11 am and 11 am - 12 pm

## Social Media platforms: Sina Weibo and Renren Censorship in China

Presenter(s): Shumeng Shi and Sihan Wang

Renren and Sina Weibo are typical Chinese social media platforms similar to Facebook. These social media are restricted due to the Chinese social media censorship. The service treaties follow the Chinese law and state that the government can monitor and delete user's posts. While little researches about the specific restriction have been done. The purpose of this research is to evaluate Chinese government's control over social media. In particular, a discourse analysis of Chinese social media censorship was conducted by comparing recent Sina Weibo and Renren service treaties. The results of this research could have important social and political implications for Chinese government officials to consider the promotion of Chinese citizens internet freedom.

**Arts** 

Poster location 59, 10 - 11 am and 11 am - 12 pm

# Choice or Connection: Survey based study of the Investigation of International Student's motives of moving to Canada

Presenter(s): View Chaiyapuck and Mark Wang

Nowadays, resourceful families may tend to support their children in a western education system because of the advanced education levels. The increase of studying abroad may solely due to the better educational system. However, the aim of this study is to investigate additional insights into International student's "initial reasons" moving to study in Canada. It is essential to explore this phenomenon because we may have overlook other important factors that causes student to make a big decision. In order to analyze this subject, a quantitative survey questions was conducted with thirty-five first year international Vantage Arts UBC students. The result have shown that the beauty of Vancouver is the main motives that motivates international students to study in Canada. The findings of this study may have important implication for social research for marketing purposes at UBC as they may able to use this information to further attract more international students.

**Arts** 

Poster location 62, 10 - 11 am and 11 am - 12 pm

Changes to first year undergraduate Chinese students' attitudes about relationships after their first year in Canada.

Presenter(s): Yuxin Deng

An increasing number of Chinese international students studying at UBC, the intercultural experience can impact lots of aspect of students, such as their own perspective toward social relationship. Although there is not enough research which confirm the correlation about them. The aim of this study is to explore whether and how going abroad experience may change the attitude toward relationship, especially the dating relationship, for first year Chinese international students. The semi-structured interviews were with 3 females and 3 males with the Chinese ethnic background, who had dating relationship before or are currently in a relationship. A discourse analysis of the interviewees' response was completed in order to analyze the change of attitude toward relationship for Chinese student. The results may reveal that the stable relationships are needed for Chinese international students when they go abroad and somewhat the attitudes toward dating relationship are more open than in China.

**Arts** 

Poster location 68, 10 - 11 am and 11 am - 12 pm

# Aggressive behaviour caused by violent video games: What is the most significant factor?

Presenter(s): Jiale Ding and Jinjia Ye

Recently, violent video games were found that it was likely the cause to adolescents' aggressive behavior and led to the increase of adolescents' aggression due to the elements in violent video games. Scholars have proposed that reward and punishment system, depressive symptoms caused by violent games and time that teenagers spend are the key factors causing this rise. This study aims to investigate the most decisive factor of the three mentioned factors that influence adolescents' aggressive behaviors. A survey was administered to students from the Vantage program in order to gather their thoughts about the problem. The results of this research would be helpful for other scholars to further investigate in deeper aspect for the factor that affect adolescents' aggression.

**Arts** 

Poster location 71, 10 - 11 am and 11 am - 12 pm

## How Do Media Campaigns Raise Awareness About Women's Body Confidence?

Presenter(s): Helin Ciftci

Social media plays an important role in shaping today's society as most people around the world have access to it. Despite its advantages, it can pose negative effects related to women's self-perceptions about their bodies. A lot of women around the world find this topic very sensitive and a very crucial one that needs to be discussed, which makes this research important and relevant. This study aims to explore how social media campaigns are used to raise awareness about women's body self-confidence. By using discourse analysis, this study will analyze the language used in Instagram posts that use hashtags to create larger campaigns from publicly available "influencers" accounts. Then, in order to understand if those campaigns are successful or not, the researcher will look at the number of people liking the posts and using the same hashtags that were created by influencers.

Science

Poster location 7, 10 - 11 am and 1 pm - 2 pm

### The Trends of a Water Drop's Movement on a High Temperature Surface

Presenter(s): Jiahui Li and Shuhong Cao

The state of a water drop on a high temperature surface can always be observed in daily life. A droplet on a heating pan beats and shakes until it gets totally boiled. An elaborate experiment may record and describe how is that happened. Here we reported that when water droplets collide with the surface, it will obviously shift in an area, then it will stay in that area until the evaporation is completed. Although that the droplet was lifted off the surface by the vapor was observed for all time during the evaporation, it was determined to do rarely nothing to the movement of the water drop by multiple trials. We also reported that the water drops are always tending to move from smooth area to the rough area, which gives an idea that the direction of drops' movement might caused by the difference of the smoothness of the surface.

**Science** 

Poster location 13, 10 - 11 am and 1 pm - 2 pm

#### **Students Waste Investigation for Educational Purposes**

Presenter(s): Siwei Ran and Junze Hao

This research aimed to investigate the total numbers of waste in Nest and what weight of different types of waste produced by students was highest on UBC campus. Two methods were applied to find out the level of waste severity. Firstly, observation was implying to find out what food waste students thrown in the trash can. The numbers of different types of waste were recorded. Secondly, surveys for food vendors were used to find out the accurate weights of each waste products. With the weights confirmed, total weights were assigned into four major kinds of waste. Data was collected and used in a mathematical way to resolve research question. Results were that food scraps took up the most of total waste. In the discussion section, results were used to make suggestion on lowering the consumption of food waste and creating a better environment

**Science** 

Poster location 16, 10 - 11 am and 1 pm - 2 pm

### How Does Salinity of The Ocean Vary Between Locations and Weather Condition in Vancouver

Presenter(s): Jidan Liang and Yuxin Tian

This aim of this experiment is to determine and compare the salinity from different areas in Vancouver to see how is affect by different locations and weather conditions. Because salinity affects the many marine plants and animals that can live in an aquatic habitat, it is important to study and measure the salinity. We measured and analyzed the salinity from Capilano Watershed and Wreck Beach in Vancouver to find out how is affect by different weather conditions. The salinity in the ocean is affected by many factors, such as temperature, wind, depth, tides and so on. To compare salinity, measured the density of different water samples by weighing the mass of 25ml water sample, and then calculate the density of water sample. In conclusion, firstly, the density of Wreck Beach is larger than the density of the Capilano Watershed on the same weather. Secondly, the density of the Capilano Watershed is larger than in deionized water. Finally, the density of Wreck Beach on sunny is higher than that on rainy day.

Science

Poster location 19, 10 - 11 am and 1 pm - 2 pm

### Investigating the Acid Precipitation Effects on the Growth Rate of Plants

Presenter(s): Qiushi Ye and Owen Tong

The use of fossil fuel emits a huge amount of nitrogen dioxide and sulfur dioxide. Those acidic gases react with water in the atmosphere could produce sulfuric acid and nitric acid. The acidic precipitation would change the pH condition in plants growing. Our project focused on the acidic precipitation effect on plants, and in this study, we used garlic as the model plant. The research question is: how does acid precipitation effect on the growth rate of plants in different parts of the plant received acid? We used diluted vinegar to simulate the acid rain. The effect of acid rain in plant's leaves and roots will be studied. From the result section, we know the acid rain can affect the growth rate of plants, and the roots of a plant may have the better ability to absorb ions from surrounding than leaves.

**Science** 

Poster location 31, 10 - 11 am and 1 pm - 2 pm

How does Stream Sinuosity Vary with Stream Type?

Presenter(s): Jiaxin Zhao and Xiaotong Liu

A stream is a body of water flow on the surface which can be seen in the nature all around and provides domestic water for humans in some areas. It was important to consider how streams flow and move because it is helpful of where villages should be built near streams (Candel, Makaske, Storms & Wallinga, 2017). The interesting point was that the majority of streams are curved instead of straight. Some research has found streams sinuosity related to stream type (Snow, 1989). The purpose of this paper was to answer the question: how does stream sinuosity vary with stream type? It was claimed that stream sinuosity may related to elevations. The project tested fourteen streams' sinuosity and elevations. The main finding was that streams located at low elevations tend to have large sinuosity.

Science

Poster location 52, 10 - 11 am and 1 pm - 2 pm

#### Relationship between Lightening and Volcanic Eruption

Presenter(s): Siwen Peng and Seungki Hong

The goal of this study is to explore a better understanding on volcanic lightning during volcanic eruption. In this project, the length of volcanic lighting was measured, and the strength of the bolts was estimated so that the amount of static electricity could be predicted by the length. We were focusing on 2 cases of volcanic lightning happened in three volcanos, including Volcán de Colima and Calbuco volcano. The length of volcanic lighting was estimated through the scale comparison of recorded pictures and the size of volcanos shown in Google earth. The result of the lighting length was compared with the height of eruptive volume, frequency of strike and the impact range for determining if the volcanic lightning exists direct relationship with volcanic activities.

**Science** 

Poster location 61, 10 - 11 am and 1 pm - 2 pm

### What is the relationship between humidity and mold growth rate?

Presenter(s): Zhe Wang and Zhentian Yuan

Mold growth is a phenomenon that exists in many places especially on food. Molds can easily grow on bread, and is related to many factors, like air, light, temperature, and humidity. However, humidity is more important than other factors, since it can affect the mold growth rate. That could be controlled by humidifier, and humidity meter could get the approximate range of humidity. Four groups of bread which contains 12 trails were observed for 20 days in 4 different humidity conditions. The area of moldy growth is recorded every day. After 20 days, we found the crust of bread could be important for mold to growth, which was confirmed in this experiment. The green and white mold grew more on the breads, when humidity was higher in the boxes.

Science

Poster location 64, 10 - 11 am and 1 pm - 2 pm

#### Volcanic hazard due to Pyroclastic projectile in Vancouver

Presenter(s): Shuhao Liu

This study is aiming to determine the volcanic hazard in Vancouver. In this study, several famous volcanos are used to analyze the distance, time, launch angles, and initial velocity of the pyroclastic projectile of volcano eruptions which are near Vancouver. The data is analyzed using Microsoft Excel and use formulas to calculate the variables needed. In conclusion, this study shows that there will probably no volcanic hazard caused by the pyroclastic projectile from known volcanos takes place in Vancouver.

**Arts** 

Poster location 1, 10 - 11 am and 1 pm - 2 pm

Chinese teenagers attitude towards inheritance of China culture heritage, with a focus on the traditional music area.

Presenter(s): Shihe Zhang and Tianyang Du

Young people play an important role in cultural heritage protection processes like Chinese traditional music because it is related to future development. Many argued that the current laws and policies cannot afford the heavy burden of traditional Chinese music's continued development, however, encouragement for young people's involvement has not received enough attention. The aim of this research is to explore young people's willingness to take part in the protection and inheritance process. A qualitative and quantitative online survey which aimed to find out whether these Chinese young adults are interested in the traditional music protection process was conducted with 32 Chinese international students. Findings suggested that most of the participants have a willingness and passion for participating in traditional music protection processes. Educational implication for Chinese young people's participation may include more encouragement and guidance for future generation's education in traditional music area.

Arts

Poster location 4, 10 - 11 am and 1pm - 2pm

# Examining the degree of international students' knowledge of and access to mental health support services

Presenter(s): Ying Wang and Zhiyi Li

Many international students adapting to a new environment while learning often suffer from multiple psychological changes and would benefit from mental health services. However, there is little attention on whether students know about them. This research seeks to examine how well first-year international students know about the mental health services in UBC and to advocate for the increased publicity of these services. To evaluate the degree of knowledge of mental health services held by students, a survey questionnaire based on an imaginary situation was administered to 15 Vantage students. The preliminary results show that the knowledge held by students seems to be low. This research could have significant educational implications for both the students and school officials as it would help provide insights into how much students are aware of the services provided on campus and help the school officials increase the publicity of those services.

**Arts** 

Poster location 22, 10 - 11 am and 1 pm - 2 pm

# Analyzing the relationship between expectations and experiences: Voices of university freshman

Presenter(s): Meiheng Lin and LuQi Liu

Students usually enter university with expectations about their academic and social experiences. In this regard, previous research has verified that the student's expectations for university are linked to their follow-up academic performance. However, little is known about whether students' assessment of university life will be affected by social expectations. Thus this research examines how Vantage students' social expectation of the overall campus life relates to their satisfaction of their first-year university life. Structured interviews were conducted in Orchard Commons with eight participants who discussed their experience with accommodation, sociality and their initial impression of the university. The findings indicate that three-quarters of participants had high expectations of the university, whereas, some participants found that the university life diverges from their previous expectations. These findings have educational implications that highlight the role of explicit expectations on subsequent enjoyment that would provide beneficial references to future freshmen.

**Arts** 

Poster location 25, 10 - 11 am and 1 pm - 2 pm

Shouldn't have missed China: How Chinese-made social media platforms have made China the biggest consumer market for K-POP

Presenter(s): Yuzhen Han and Xinyi Guo

China, with its great enthusiasm about the global phenomenon of KPOP, has become the top market for Hallyu (Korean Wave) outside of South Korea. Top K-POP idols like BIGBANG, gained large acceptance through social media and have nearly a million followers on the Chinese Social media site, Weibo (Chinese Twitter). However, there are only a few studies that investigate the Chinese market due to the excluded Western social media accessibility. Therefore, the focus of this presentation will be analyzing the contribution of social media in promoting Hallyu within China. A discourse analysis of posted articles on Weibo was conducted to analyze how it encourage the consume of KPOP and its production. Based on this study, the audiences are able to understand better how Hallyu is promoted by social media within China.

**Arts** 

Poster location 28, 10 - 11 am and 1 pm - 2 pm

#### Social media and individual cognition

Presenter(s): Yuxi Liu and Zhe Su

Over the last decade, social media have been integrated into teenagers' daily life deeply. Therefore, if social media has some negative influences on individuals, the consequence would be serious. The purpose of our project is to test whether the use of social media negatively influences individuals' short-term memory. In order to collect precise data, the experiment research method was utilized. Firstly, the participants were divided into two groups and all participants were asked to remember specific numbers. Then, only one group of participants watched a short video. The memory of respondents from each group was compared in the final test. After results are analyzing, we anticipate being able to discuss whether social media should be used by young people. The use of social media may have negative influence on their studying through disturbance of short-term memory.

**Arts** 

Poster location 34, 10 - 11 am and 1 pm - 2 pm

# Construction of sexuality and purchasing power: Analysis of the impact of the North American culture

Presenter(s): Kary Ontaneda

Fashion and sexuality have a strong impact on the mainstream culture that surrounds international students. Moreover, cultural diffusion (diffusion of beliefs from one culture to another one) impacts the way we interact with different cultures. The objective of this research is to try to analyze whether different cultures are aware of the social construction of sexuality in the North American culture through their decisions when purchasing clothes. To analyze this, structured interviews were conducted with 5 Vantage College females about their purchasing habits and opinions about sexuality and clothing. This research may lead to a better understanding of how cultural diffusion is affecting new generations by changing their views about topics related to their own culture.

**Arts** 

Poster location 37, 10 - 11 am and 1 pm - 2 pm

# Unequal Pay in Work Place Generated by Women's Family Responsibility

Presenter(s): Blanche Chen

The inequality of gender has existed and expressed in many aspects especially in income. It is argued that woman with high education do not get the salary that matches their achievement. The social pressure of what role women should play in family somehow may limit their opportunities at work. This research aims to analyze the family responsibilities of women affecting their salary by using discourse analysis. I will choose some public posts or news involving the attitude towards professional woman. Also some employees' point of view to married woman will be analyzed. The result will contribute to further study of gender inequality.

**Arts** 

Poster location 40, 10 - 11 am and 1 pm - 2 pm

### Chinese Students' Obstacle of Self-expression in Englishspeaking Classes

Presenter(s): Jianxin Hong and Yaxuan Lu

The continuing trend of low student participation in the classroom has had a lasting impact on Chinese students. According to scholars' research, the possible reasons could be shyness, culture differences, and teacher's inappropriate classroom management. The purpose of this study is to explore what strategy would first-year Chinese students choose to overcome the difficulty of less participation in Canadian universities. To analyze the possible solutions which would be taken to increase the participation in class, semi-structured interviews were conducted with 10 participants from the Vantage College. This study may provide insight into the importance of academic conversation in class; it could also have significant implication for educational practices impacting on the benefit of active class participation such as critical thinking.

**Arts** 

Poster location 46, 10 - 11 am and 1 pm - 2 pm

### The Correlation between Conscientiousness and Short-Term Memory Capacity of New University Students in Canada

Presenter(s): Junyi Zhang and Ziying Han

In psychology, developing one's level of conscientiousness (one of the most typical personalities) benefits in one's spiritual life and social contact. However, how conscientiousness might influence one's short-term memory capacity, the strength of collecting instant perception and sensation and storing these materials correctly in long-term, is under research. The purpose of this research is to explore the correlation between the level of conscientiousness and short-term memory capacity. Through survey-based research, students at a large Canadian university completed a personality questionnaire, followed by a memory test. This study will provide a more profound explanation of how conscientiousness relates to short-term memory capacity, and illustrates how to improve short-term memory by adjusting the personality.

**Arts** 

Poster location 49, 10 - 11 am and 1 pm - 2 pm

#### **Sports' Impact on Modern World Politics**

Presenter(s): Zexing Hao

In this day, the large sports events and the increasing number of countries participating make sports have more and more abilities to influence politics; some events related to sports also have this ability like the Ping-Pong Diplomacy China had in 1970s. The purpose of this research is to understand the relationships between different levels of sports events and politics. To explore the relationships between sports and politics, a quantitative survey was conducted with participants inside Vantage College. This study may have social implications for sports communities and contributes to the current research on the relationships between sports and politics.

**Arts** 

Poster location 55, 10 - 11 am and 1 pm - 2 pm

# How do people talk about poverty? An analysis of poverty in Vancouver through posts on social media

Presenter(s): Hao Yang and Guannan Shen

Vancouver has a severe problem with economic inequality, so finding of which degree people are perceiving and reacting with poverty may show the contribution of solving the issue of poverty. Researchers have been examining the cause and effect of poverty in a number of disciplines. Unlike other scholars, this research aims to create awareness of poverty to the public. The data used in this research are mainly collected from social media in a selective way and used discourse analysis on the posts to find out how people are reacting to poverty. Our findings suggest that the most viewed poverty related articles are all written by organizations and tend to create hashtag, such as #BCpovertyreduction to attract attention from the public. This finding is significant because it reveals the fact that people are conerned about poverty and are taking actions to create awareness.

**Arts** 

Poster location 58, 10 - 11 am and 1 pm - 2 pm

## "I just want to sleep five more minutes!"- A Study of Sleep and Academic Performance

Presenter(s): Thea Yang and Sieun Lee

Sleep plays an important role in enabling people to work in optimal conditions but, unfortunately, many people do not meet average sleep times. Many researchers have investigated the importance of sleep on academic performance in college students, however, the relationship between low sleep quality and academic performance, especially for international students, was not addressed. Therefore, this study was designed to investigate the relationship between academic commitments and sleep effects of international students. A quantitative survey was conducted with 26 international university students, seeking information about their sleeping habits and academic performance. The results of this study could have important implications for educational practices impacting: the awareness of bad sleep quality could have led to decreased concentration, capacity and efficiency of work performance, and better managing sleeping habit will have a better academic performance.

**Arts** 

Poster location 67, 10 - 11 am and 1 pm - 2 pm

#### Sexual abuse against women

Presenter(s): Ying Zhang

Historically, women have been victims of sexual assault. The advent of ride-sharing services such as UBER puts them at new risk. These technological innovations have resulted in new situations for sexual abuse. The aim of this paper is to learn about how two different online publications talk about sexual assault against women in ride-share services in the US, such as UBER, in recent years. A discourse analysis of two different online publications was conducted to compare the tones used by news outlets and women's rights organizations when reporting about sexual abuse by UBER drivers. The results show that sexual abuse is highly publicized by different publications, but newspapers tend to use a neutral and objective tone, while a women rights organization appears to use an evaluative tone. In the future research implication for students, they can further investigate the type of articles that get more attention, objective or evaluative.

**Arts** 

Poster location 70, 10 - 11 am and 1pm - 2pm

### Different Classifications of Indirect Bullying in Education Systems in Chinese and American Newspapers

Presenter(s): Yirou Liu and Wentao Huang

Among all types of bullying, the most difficult one to address is indirect bullying, which is done by isolation, psychological violence, and micro-aggressions. Throughout the decades, various studies have been performed to study the patterns of bullying in schools; however, little research explores different styles of how cultures classify indirect bullying in their educational systems. This study aims to raise awareness of what different cultures can do in order to prevent indirect bullying. A content analysis was conducted to explore different patterns of the ways Chinese and American newspaper reports conceptualize indirect school bullying over the past ten years. The findings may have educational implications for students and educators to improve current educational environments, and implications for future researchers to extend the study to a wider range of distinct cultures and social issues other than school bullying.

**Science** 

Poster location 27, 11 am - 12 pm and 1 pm - 2 pm

### Influence of different pH on brittleness of human hair

Presenter(s): Feng Yuekun and Hou Ruijie

Hair health concerns lots of people. Brittle hair is one of the most common hair problems. Choosing different hair products can have different effect on hair. This research aims to investigate how the effects of shampoos on hair quality differ with the change of pH value. In this project, hairs were submerged in five different solutions of different pH, from acidic to basic. The hair quality, visualized as the physical strength of the hair, was measured and compared. It was concluded that the hair submerged in solution at pH 4 is was hardest to break among all five pHs, closed followed by pH of 7

Science

Poster location 33, 11am - 12pm and 1 pm - 2 pm

# The Relationship between the Volume of a Balloon and its Fragmentation When Bursting

Presenter(s): Luke Yang and Winston Yang

The property of balloons has been widely studied in physics. It is a useful model that illustrates how surface tension and pressure function together in a near-sphere shape. This study aims to answer the following research question: What is the relationship between a balloon's volume and its fragmentation after it is popped? To answer the research question, an experiment was performed to examine the fragmentation of balloons of different volumes after bursting. The volumes of the balloons were quantitatively collected from the water level difference before and after immersing in a water tank; the fragmentations of the balloon were described by the numbers of major and minor splits. Two trials were also executed by filling balloons with air and water to demonstrate the relationship of balloon fragmentation with different fillings under similar volume conditions. The results indicate that an increase in balloon volumes results in a more severe balloon fragmentation, and water as a filling causes more aggressive fragmentation than air does.

Science

Poster location 42, 11 am - 12 pm and 1 pm - 2 pm

# How the Effectiveness of different types of Sunscreen on Blocking UV Light Change Over Time

Presenter(s): Shengyu Jia and Sijia Huang

Sunscreens has become a necessity for people to protect their skin from ultraviolet light especially in summer. Testing the effectiveness of sunscreen on blocking UV light over time seems important. It can help people know the best time to use the sunscreen. In this project, we compared the efficacy of physical and chemical sunscreen, which has been exposed to the air for one day, three days, two weeks and a brand new one. The effectiveness was represented by the glow of quinine in tonic water under UV light that separated by a piece of ballistic gel to simulate human skin with sunscreen. The stronger the glow, the less effectiveness of the sunscreen. The result shows that the effective of chemical sunscreen decreases faster than physical sunscreen.

**Science** 

Poster location 45, 11am – 12pm and 1 pm - 2 pm

### Similarities among ten most deadly volcanoes in the last onehundred years

Presenter(s): Yuheng (Cici) Wu and Hehan (Zoe) Zhang

The study of volcanoes is very important because millions of people worldwide live in the shadows of dangerous volcanoes. Dangerous volcanoes can kill humans, destroy constructions and impact the environment. The similarities among the 10 most deadly volcanoes in the last 100 years were analyzed in this project by comparing volcanoes' basic information includes, location, country, latitude, longitude, elevation and type; the eruption information includes volcanic explosivity index (VEI) and agent; and the volcano effects information includes deaths, injuries, damage and houses. All the information was collected from the website of NOAA (National Oceanic and Atmospheric Administration). The Microsoft Excel was mainly used to analyze the data in this project. Certain similarities between 10 most deadly volcanoes were found, such as, most of deadly volcanoes belong to stratovolcanoes and M (Mudflows/Lahars) was the most popular agent to cause the fatalities among deadly volcanoes. The similarities provided people a better understanding of volcanoes. Furthermore, it provided tips on predicting the future volcanoes. Also, it gave information on how humans can protect themselves from deadly volcanoes in the future.

Science

Poster location 51, 11 am - 12 pm and 1 pm - 2 pm

## Investigating The Safe Zone from the Cliff at the University Of British Columbia

Presenter(s): YueJiao Xiao and HuiLin Pan

Landslides have become a common and noteworthy problem at the University Of British Columbia in the last decades. The landslide risk assessment of the cliff at the northwest edge of University Of British Columbia is very important to the safety of the whole university. In this study, online research of previous studies was found and a field study along the northwest cliff at the University Of British Columbia was done to assess the landslide risk. Sediment samples from different parts of the slide were collected in the field study. Baseing on the samples and the previous studies, the acceptable landslide risk of the cliff was considered. A 35° slope angle from the bottom of the cliff was found as a reasonable criteria for house building. According to this reasonable criteria, the safety distance from the cliff for house building was calculated: 460 m away from the north cliff and 250 m away from the west cliff. A damage assessment map was produced to provide information on the safe zone of the University Of British Columbia.

**Science** 

Poster location 57, 11 am - 12 pm and 1 pm - 2 pm

# Features of Earthquakes around Juan de Fuca Plate and Potential Impacts on UBC Buildings

Presenter(s): Luhong Lu and Yinliang Zhang

The features of earthquakes around Juan de Fuca Plate are very important for earthquakes preventions in Vancouver. In this project, we will divide the earthquakes with magnitude greater than 6 into different types by looking at magnitude, location, depth, first motion and time. The aim of this project is to determine the possible impacts of an large earthquake on UBC buildings along Main Mall by looking at literatures on anti-seismic constructions. The result showed that most of the earthquakes near Juan de Fuca Plate are caused by strike-slip faults. The depth of most earthquakes are less than 20 km. The buildings constructed after 2000 were safer in a large earthquake.

**Science** 

Poster location 63, 11 am - 12 pm and 1 pm - 2 pm

#### **Measuring Heat Loss of Different Type of Rocks**

Presenter(s): Alireza Gazor and Tugce Ozaydin

Thermodynamic properties of rocks vary. It depends on many variables such as volume, composition, and porosity. In this study, the heat loss in five different rocks (Dunite, Obsidian, Basalt, Granite, and Pumice) was measured by heating the rocks to 500 °C and recording the temperature change over certain period of time. It was concluded that the rock with highest porosity (Pumice) has highest rate of heat loss. Also, it was found that porosity has more effect on the heat loss than the composition characteristics of rocks.

**Science** 

Poster location 69, 11am – 12pm and 1 pm - 2 pm

# Heating up Coquitlam: A geological map about hazards of a hypothetical volcano in Coquitlam

Presenter(s): Yuhao Deng and Jiaqi Wang

Volcanoes are awesome, terrifying but attractive geologic features, there are some volcanoes in British Columbia. To understand the effects of volcanic hazards, better we looked at the possible effects of a hypothetical volcano in the North Mountains of Coquitlam. So we assumed that there is a volcano which may erupts in the north of Coquitlam. In this project we analyzed a hypothetical volcano in the mountains to the north of Coquitlam which may erupt, the topography and resident status around the volcano. We looked for what would cause by the volcanic eruption. There are various hazards such as lava, ash cloud and pyroclastic flow. We created a thought model to represent and analysis the hazards.

#### **Science**

Poster location 72, 11 am - 12 pm and 1 pm - 2 pm

## The relationship between pendulum period and string length in the water

Presenter(s): Ruoyin Li and Zhangfeifan Yang

When increasing the pendulum length, it would result the increase of period. In other words, when pendulum holding the longer string, it would take more time. Because it has a longer way from the beginning to endpoints. Also, it's known that the equation  $T=2\pi\sqrt{\frac{L}{g}}$  thus, the relationship between pendulum length and period can obviously be observed. This claim was proved in the regular environment. However,

obviously be observed. This claim was proved in the regular environment. However, what will happen if the experiment environment is changed? This experiment system was put in the water and tested whether when increasing the pendulum length, the period still increased with the friction of water. The data was collected by recording time and string length in a spreadsheet. The data was analyzed by creating a graph to show the relationship between period and string length.

**Arts** 

Poster location 3, 11 am - 12 pm and 1 pm - 2 pm

#### The influence of sleep deprivation on Vantage students

Presenter(s): Junyi Cheng

Currently, university students are suffering higher stress than ever before. This study will examine the influence of sleep deprivation on Vantage College students' mental health status. To explore causal factors of sleep deprivation and their connection with mental stress, a quantitative survey was conducted with multiple choice and Likert-type questions. The survey was given to 25 Vantage College students who were divided into two different groups: sleep-deprived and non-sleep-deprived. The result of this study might have significant implications for education by drawing attention to international university students' mental health and by highlighting the importance of the relationship between sleep quality and stress among international students.

**Arts** 

Poster location 6, 11 am - 12 pm and 1 pm - 2 pm

#### Personal Characteristics Of Students And Class Size

Presenter(s): Xiran Cui and Yuheng Liu

Educational environments may appeal to students with contrasting personal characteristics differently. Thoughts of introverted students occurred primarily, while extroverts feel satisfied by expressing their ideas aloud. Different sizes of classes and types of in-class activities have different effects on the performance of each students. The purpose of the study is to investigate the differences between students with introverted and extroverted personal characteristic and their perceived success in large or small classes. Semi-structured interviews were conducted with five students with contrasting personal characteristics in Vantage College. They chose the activities they thought were more or less useful according to their experiences in both sizes of classes and the reasons were also provided. Surprisingly, most of the students think that group discussion is not a helpful tool for learning. By consulting from the findings, educational implications for instructors as well as future vantage students may lead to an improvement.

**Arts** 

Poster location 9, 11 am - 12 pm and 1 pm - 2 pm

#### Vantage College students' attitudes and opinions on crime

Presenter(s): Jianwei Kang

Crime is a big issue in society and is associated with people's safety and economy security. Crime affects everyone once it happens; it is significant to find out the attitude towards social issues of students as they will become the mainstay of society in the future. There are many surveys focus on college students' attitude on some controversial political issues, but data of students' attitude of crime is still lacking. My purpose of this project is to find out the most dangerous crime that students think, and the best solution they think can reduce the rate of crime in the most effective way. I created my survey to collect the data of students' opinion towards crime policy, and crime events. Data will be analyzed in order to find the best solution to solve crime.

**Arts** 

Poster location 12, 11 am - 12 pm and 1 pm - 2 pm

## How team sports and individual sports affect international students' attitudes and social skills?

Presenter(s): Yuning Zhang and Silu Chen

Increasing the participation in individual and team sports can build social skills and communication among diverse groups. Hence, for international students, engaging in the activities may be the best way to develop positive relationships, better adopt the values, beliefs, and attitudes corresponding with their new social contacts. This study aims to identify the link between both individual and team sports, and their influence on strengthening interpersonal relationships among international students. To analyze the role of team sports and individual sports in building attitudes and social skills of international students, semi-structured interviews were conducted with 10 vantage students. This study may have social implications for future Vantage College students to encourage more participation in team sports, hence expanding their social contacts and appreciation for the behavioural values of new social circles.

**Arts** 

Poster location 15, 11 am - 12 pm and 1 pm - 2 pm

# Impacts of Chinese aging population on social pension system

Presenter(s): Anya Paiboonsirijit and Steven Tse

The aging population has always been a severe issue to solve in China, which has brought specific impacts and burdens to China's economy. As a result, this presentation will explain how the government can formulate or reform policies to equitably and efficiently maximize the benefits for the aging population while reducing the economic burden brought by the government social welfare system. To analyze the economic burden faced by the Chinese government, an open interview was conducted with several students who lived with their grandparents. This research may lead to a better understanding of the serious social phenomenon happnign in China, which may make people and governments aware of the importance of equitable pensions and allow for a better change in the future.

**Arts** 

Poster location 18, 11 am - 12 pm and 1 pm - 2 pm

# The contribution of food delivery applications on eliminating gender inequality by reducing hours on housework

Presenter(s): Zhihan Qi and Zihan Liu

Scholars' existing studies focus on gender inequality challenges and seek to advance equality at the macro-level (i.e. national, religious and political policies), but little research focuses on the effects of technological development. Therefore, this study examines whether phone applications (i.e. modern technology) have a positive contribution to the gender division of housework. For this study, we used discourse analysis as the method for data collection and analysis. We collected annual reports from the official websites of Eleme company and Meituan company and interpreted them in relation to secondary statistics about total housework hours.

**Arts** 

Poster location 21, 11 am - 12 pm and 1 pm - 2 pm

## Research on Vantage College Students' Awareness of the Environmental Problems in China

Presenter(s): Guantong Lin and Sicheng Li

China has been experiencing serious environmental problems in recent years. Researchers have identified and analyzed those problems, but what citizens think about the issues are not clear. In this study, we will conduct interviews for ten Vantage College students from different parts of China to ask for their opinions about the environmental problems in their home cities. The purpose of this study is to find out the students' awareness of the environmental problems and to encourage them to participate in the movement of improving our environment. Questions such as "What are the environmental problems that you have observed in your home city?", "What do you think that you could do to improve the situation?", and "When did you start to be aware of those environmental problems?" will be conducted in our interview aiming at helping us to analyze students' awareness of this issue.

**Arts** 

Poster location 24, 11 am - 12 pm and 1 pm - 2 pm

# The difficulties faced by international Chinese students in Western higher education systems

Presenter(s): Yanhua Guo and Minge (Gracy) Wang

Currently, there is an increasing number of Chinese students studying abroad. These students face some cultural difficulties such as differences in language and differences in education systems. This study aims to investigate the biggest cultural difficulties faced by first year Chinese students and the coping strategies they use to deal with the problems. In order to explore these major cultural difficulties on study among the first year international Chinese students, an online survey was administered to 8 Chinese students from the Vantage College arts program. This study intends to help Chinese international students who are experiencing cultural difficulties, in order to help them adapt to western education system and society.

**Arts** 

Poster location 30, 11 am - 12 pm and 1 pm - 2 pm

#### Does technology influences first year vantage's students?

Presenter(s): Ryan Ren

Does technology influence the first year Vantage College students?". It is a very interesting topic about how technology influence the first year Vantage College students, especially in a negative way. Technology is used by everyone in their daily lives, and it becomes more and more important, therefore this research will mainly focus on finding how technology influence peoples. Many researchers argued the impacts in one or two ways, and only a few of researcher mention about how technology influences teenagers in society. This research purpose is figuring out how technology influence people and informs Vantage College students about these impacts. This study used a survey method to get data.

**Arts** 

Poster location 36, 11 am - 12 pm and 1 pm - 2 pm

#### Factors that cause college students to stay up late

Presenter(s): Chuhan Zhang

Staying up late makes students sleep or unable to concentrate at a morning class, and some students even skip classes since they cannot get up at morning. While some research has shown reasons that adolescents' stay up late and the negative effects, research does not address which is/are the main cause(s) that make college students stay up or have insomnia. Therefore, this research focuses on finding which are the main reasons of college students' staying up and having insomnia. A quantitative survey was conducted to collect data from 30 Vantage Arts students by asking about their sleep habits including their sleep time, what they do before bed, and what causes them to stay up. The results suggest that many students have habit of staying up and most of them rank using social media such as Facebook and Instagram as first reason. This study may have helpful implications for future Vantage students and contributes to the current research on insomnia.

**Arts** 

Poster location 39, 11 am - 12 pm and 1 pm - 2 pm

#### The role of social media in shaping political opinion

Presenter(s): Peixuan Tian

Social media has become a great topic in many fields of the academic research, and talked a lot in many ways which is influence people's daily life, however, research is not paying much attention to the relationship between social media and politics. Overall, the purpose of this research is to investigate how social media helps people to shape their political opinion. The experiment was conducted in which Vant 149 students read the negative or positive post in Twitter about Hillary Clinton, in order to whether they change their opinion in politics. The findings show that people are easily be influenced their judgement of politics when they read the posts in social media. This study may have politics implication for students and contributes to the current research on the relationship between social media and politics, and may verify the power of social media to influence people's political opinions

**Arts** 

Poster location 48, 11 am - 12 pm and 1 pm - 2 pm

#### The effect of peer pressure on adolescents' behavior

Presenter(s): Zixin Cai and Hua Dong

Peer pressure brings a psychological stress to humans, because they fear to destroy peer relationships. While many researchers have addressed that peer pressure has play an important role as a stimulus to change individual's attitude, values or behaviors to comply with group standards, they do not consider what if a person does not approve the ideas of peers, will he bear the pressure to insist on his own idea or follow other's behavior. Our research therefore investigates how peer pressure has influence on behaviors of adolescents who are resisting peer pressure. Data were collected through interviews with 5 undergraduate students in UBC. Based on the data, the results suggested that educators use peer pressure as a way to encourage undergraduate students in their academic or social life.

**Arts** 

Poster location 54, 11 am - 12 pm and 1 pm - 2 pm

## Examining Female Politician's Representation in Canadian Media

Presenter(s): Sana Sheikhi

Studies on females and politics in Canada shed light on the ways in which female politicians are represented and treated by analyzing social constructions that are impacting females' political life. The question remains whether Canadian media representation has changed currently or not, based on the changes in some social constructions. Is there a relation between language used in media and social constructions in society? This study will be based on both discourse and content analysis based on newspaper articles that focus on female politicians and compare them with male politicians from newspapers and TV channels like Vancouver Sun, Metro Vancouver or CBC website. To be more specific articles will be coded into two main categories: gender biased or not biased on the usage of adjectives to determine whether there is a difference in the language used for males and females. This research is likely to illustrate the power of language used by media and influence of social constructions on language and political atmosphere in current time on it. This atmosphere might be one of the critical reasons for not having same number of women in politics as men even in democratic governments.

**Arts** 

Poster location 60, 11 am - 12 pm and 1 pm - 2 pm

# Young Adults' Perspectives on the Concerns of Chinese Elderly Mental Health

Presenter(s): Evelyn Yin and Yolanda He

According to Chinese traditional family values, younger generations may have the responsibility to take care of older generations. However, the one-child policy may impact future generations' ability to do so, due to increases in economic pressures. This research seeks to explore Chinese young adults' opinions about elderly people, including their parents and grandparents and the aging society as a whole. It focusses on young people's opinion concerning factors that may contribute to elderly people's unhappiness. Structured interview were conducted with 8 participants. The results of this study could have important implications for the future Chinese human demographics: a) the future Chinese living structure b) the different attitudes of Chinese young adults and seniors about life styles c) the possible population growth rates.

**Arts** 

Poster location 66, 11 am - 12 pm and 1 pm - 2 pm

Analyzing Facebook's influence on Vantage students' social circles and connections.

Presenter(s): Yuyun (Lavender) Shen and Jingting Tang

Many students prefer to use different social media platforms, such as Facebook, to keep in touch and to make deeper connections with their friends. Facebook is not only a new form of technical tool which has been researched in previous study. The target of this research is to determine the Facebook's influence on Vantage international students' communications, around their social circle. The data was collected among UBC Vantage students in the Arts stream through conducting structured interviews with 18 international vantage students. Through recoding their responses, one of the most useful feature on Facebook is knowing current community events, which could help international students to get involved in some social groups, to meet new friends, expand their social circle. Moreover, Facebook help them to adapt new, different environmental surrounding.

ORCH Vantage Commons, 10 am - 12 pm

#### **Energy Recovery Clothes Dryer**

Presenters: Danny Zhao, Hongrong Zhang, Chuxin Xiao, Zhijie Liu, and Huarui Hu (Team 1)

An energy recovery clothes dryer has been designed by our team for VANT151 project. It is a scaled-down prototype clothes dryer that has a 0.5L capacity and is powered by 24VAC 40VA. An alphanumeric LCD on its top panel is used to display the user interface, which provides several options to set the desired drying time, temperature and dryness with 5-button navigation pad beside the LCD screen. The fan and heater inside the dryer prototype were taken from a hair dryer. Other inner components such as the air duct and heat exchange outlet were all made by the 3D printing machine.

ORCH Vantage Commons, 10 am - 12 pm

### Energy Recovery Clothes Dryer with Heat Exchanger Outlet Presenters: Christina Huang, George Song, Steven Yang, Justin Wang, Mint Jin, and Hyun Lee (Team 2)

The Energy Recovery Clothes Dryer (ERCD), differs from traditional clothes dryers which completely rely on electricity for power supply, is designed to be able to recover the energy produced by the heater and reuse this part of energy to dry the clothes, thereby saves energy and reduces electricity consumption.

The ERCD is not a realistic 1:1 scale machine. Instead, the ERCD we designed is a scaled-down prototype. The capacity is only set to be 0.5L with 24VAC 40VA power supply. Many designed features are worth mentioning. To set the drying time, inner temperature and degree of dryness, an LCD screen is installed on the top of the prototype. The screen is able to display a convenient user interface, operated by 5 buttons beside the screen. To simulate a real dryer with an adequate size, the fan and heater are disassembled from a hair dryer. 3D printing technique is used to fabricate the air duct, heat exchanger outlet, etc., and other parts to produce suitable components for the inner mechanism.

ORCH Vantage Commons, 10 am - 12 pm

#### **Energy Recovery Clothes Dryer**

Presenters: Sohaib Qureshi, Yulin Shen, Hao Wang, Pengyu Cao, and Robbie Yang (Team 3)

The purpose of our project is to design an energy recovery dryer that can dry a small cotton handkerchief. Our main goal is to make a dryer that has high efficiency and low power consumption. However, there were certain constraints to the project. The dryer needs to be limited to the size  $250 \times 220 \times 300$  mm, power consumption cannot exceed 40 VA and the drum capacity should be at least 500 mL.

In order to achieve the goals within the provided constraints, many alternative designs were considered for the drum size, the user interface and the menu options. For the drum size, 3 different sizes were considered but after carefully examining all sizes the drum with a height of 10.3 cm and a diameter of 10 cm was chosen. To select the user interface, a pairwise chart was built to compare between the automatic, customized, last run and the specialised mode. The chart showed automatic and the customized mode as the best option.

Different menu options were also considered for the users such as temperature, dryness, strength, time and material. Accordingly, all the options were ranked which showed temperature, dryness and strength as the most suitable option for our design. In conclusion, our design for the dryer includes two options for the user interface, automatic and customized mode along with 3 options for the users to choose from which is the temperature, dryness and strength. Certain things still need to be designed like the tray for the condensed water and the heat sensor needs to be placed before the final working prototype can be built.

ORCH Vantage Commons, 10 am - 12 pm

## Energy Recovery Clothes Dryer with High Efficiency of Heat Cycle

Presenters: Bill Zhu, Shang Gao, Aris Liu, Derrick Luo, and Yuyang Liu (Team 4)

Our team has designed and fabricated a scaled-down prototype of an Energy Recovery Clothes Dryer. This dryer is able to re-use the energy of exhausted air by making them flow through copper tubes, so the fresh cold air from outside will be warmed up by the exhausted air. The dryer has an LCD panel with five push buttons, and users can select auto-dry function or modify the various control settings. The entire size of the dryer is  $250 \times 220 \times 300 \, \text{mm}$ , and it includes a half-litre-sized drum.

ORCH Vantage Commons, 10 am - 12 pm

#### **Energy Recovery Clothes Dryer**

Presenters: Runchao Yin, Gower Wang, Lucca Caputo, Omar Binfahad, and Hatem Baqi (Team 5)

The goal of the Enerec Dryer is to be a user friendly, practical, and most importantly, a sustainable dryer. To achieve that, a LCD screen is installed on the top of the dryer to let the user select the rotation speed of the drum, the target humidity and the temperature they want the dryer to reach. Then, when the dryer starts to operate, the fan in the dryer would turn on and air will flow through the heater then into the drum. After drying the clothes in the drum, the air will leave from the copper tubes. To make the dryer more energy efficient, the heater would turn off when the temperature reaches the pre-set value from the user. Then when the air leaves the dryer from the copper tubes, there would be an exchange of heat between the incoming air and the copper tubes. There are two major benefits due to this heat transfer. The first one is that the air that just got sucked in by the dryer would be heated up by the copper tubes and that would reduce the energy that it takes for the heater to heat up the air. The second benefit is to cool down the humid air in the tubes to condense the water in the air. Then, the dryer would collect that water for the user to utilize in other occasions and the air could be reused by the dryer. These features allow the dryer to be energy efficient and user friendly.

ORCH Vantage Commons, 10 am - 12 pm

#### **Energy Recovery Clothes Dryer with Easy Operation**

Presenter(s): Yenong (Leo) Sun, Ziang (Oliver) Qiu, Huan (Bruce) Bian, Shuming (Barry) Xu, Jiawei (Kyle) Lin, Zicen (Jason) Yin (Team 6)

The project is to create an energy recovery clothes dryer in a period of two months. It involves several tasks from electrical wiring, Arduino coding and 3D mechanical design to physical assembling. The electrical wiring includes connecting different parts together such as power supply, LCD, fan, motor and heater on the breadboard. The coding is the core to achieve multi-functions: time, motor speed, temperature and humidity display on LCD and controlling mode and settings. The 3D design relies on a software - Solidworks where the drawing of components and the overall prototype of dryer are produced. Sometimes to fit the actual size, the actual assembling may be modified and adjusted from the preliminary design. One important feature of this dryer is its sustainability. It recycles the moist air after drying and condenses it to liquid phase. The heat released during condensation is used to warm the incoming air to continue the drying cycle. It saves both water resources and energy at the same time compared with traditional clothes dryer.

ORCH Vantage Commons, 10 am - 12 pm

## Energy Recovery Clothes Dryer With Variable Drum Speed Presenters: Libo Yu, Zhengjie Hu, Yangtian Zhang, Zhuofei Lin, and Han Xu (Team 7)

The purpose for designing such an energy recovery clothes dryer is because of the high usage of electricity. Unlike the washing machine that does not have many features that could be improved, the dryer can use less energy once we recycle the air inside the chamber. This will make the dryer more electrically efficient, which lowers the cost for families and helps sustainable development.

During this project, our team's goal is to design and build up a prototype of a energy recovery clothes dryer (EneRec Dryer). This clothes dryer recovers part of the energy in the air that exits the drum while the water carried by air will be collected in a water tray inside the dryer. This dryer is only a prototype that is scaled down, which is approximate 0.5L in volume.

This dryer equipped a liquid crystal display screen to allow the user access to the control menu and customise the drying duration and temperature. In addition, five buttons allow the user to choose different items under control menu.

The frame of the dryer is mainly aluminium sheets and extrusions, but the top panel would be plastic. The metal frame ensures the dryer have a longer life span although this is only a prototype design. In addition, the heater and wind blower are obtained from a hair dryer. The main part of the dryer is the drum, which can rotate during drying by connecting with a motor via a chain.

ORCH Vantage Commons, 10 am - 12 pm

#### **Energy Recovery Clothes Dryer with Audible Warning**

Presenters: Yicong Ma, Simeng Li, Xiaojuan Mu, Hanyuan Zhou, and Vladimir Shevlyakov (Team 8)

The objective of this project is to design and fabricate the components and assemble a prototype of energy recovery dryer suitable for household use by July 11, 2018 with the materials provided by the instructor. The current energy efficiency of the dryer is low so this project will try to make a prototype of the clothes dryer that can improve the current energy efficiency. We considered alternative designs for drum size, user interface, water collection, placement of temperature and humidity sensor, the way to support the drum and the way to rotate the drum. Our final drum is 6.8 cm in height and its radius is 5 cm. The user interface includes 5 buttons and one liquid crystal display, which are at the left side of the top panel. The dryer has auto and manual operating modes. For the manual mode, the user can set desired drying time, temperature, the speed of rotation of the drum and dryness. When the drum starts to rotate and stops rotating, warning sound will be made. Our final design of the water collection is a tray with a semicircular handle. The sensor is placed on the air duct, where the hot humid air comes out from the drum. Four rollers will support the drum, and the belt will be used to rotate the drum.

ORCH Vantage Commons, 10 am - 12 pm

Energy Recovery Clothes Dryer With Modular Design
Presenters: Charlie Lan, Colin Jin, David Zhao, and Jerry Feng (Team 9)

In this project, a clothes dryer prototype is built. The special feature of this prototype is a heating-cooling energy recovery element with no power-driven cooling component. Other features include a user interface made by 1 LCD screen and 5 buttons and a front-opening dryer door. Constraints of the project includes 40 VA maximum power usage, 1-hour maximum drying time, and a limited size of  $250 \times 220 \times 300$  mm. Project group consists of 4 members contributing mechanical, electronic, electrical, and documentation work. Alternative designs are discussed and the final design is chosen and built.

ORCH Vantage Commons, 10 am - 12 pm

#### **Energy Recovery Clothes Dryer with Remote Control**

Presenters: Eric Ngo, Dudu Wu, Jianhong He, Luca Lu, and Tiffany Li (Team 10)

Recently, various types of clothes dryers with their own distinct attractive features have appeared on the market. In contrast, there are not many dryers that are particularly used for small size fabrics like handkerchiefs or cloths. As a part of VANT 151 project, our group would like to introduce a mini convenience dryer that is mobile and can be utilised everywhere.

The dryer can be divided into two parts: hardware and software. The basic hardware parts include a fan, a heater, a motor, a LCD display, 5 interface buttons and a remote sensor in which they are connected into a circuit with 2 Arduinos, 2 channel relay module by electronic components like wires, resistors, transistors, etc. The fan blows the heat into the drum while the motor rotates the drum forming a heating system. The role of the fan is also to pump the moist air outside the dryer. A program is loaded and executed on the Arduino to operate the heat - drum system in which it creates different dry modes. The dry modes comprise automatic and manual are displayed on the LCD screen so that users can either select their preference using the interface buttons or the remote sensor. The dryer has several special features such as remote control, fast input processing (button de-bounce), bidirectional drum rotation and cooling systems to smoothen fabrics.

ORCH Vantage Commons, 10 am - 12 pm

**Energy Recovery Clothes Dryer with Heart** 

Presenters: Alan Ni, Sally Song, Harvey Bai, Betty Wang, and Jorden Lou (Team 11)

ORCH Vantage Commons, 10 am - 12 pm

#### **Energy Recovery Clothes Dryer**

Presenters: Wangxuejuan Yang, Mingjun Wang, Chunqi Zhan, Mingxia Yao, and Jingyi Xu (Team 12)

We have designed a scaled-down prototype of an Energy Recovery Clothes Dryer. The drum with the height of 70mm and diameter of 100mm were chosen. A thin tray with the height of 8mm was designed to collect condensed water from copper tube. The internal end of the tray is a semicircle with diameter of 40mm to make sure no leakage of water. To connect the motor with the drum, two pulleys are used to fasten the belt or the rubber band in order to effectively drive the drum. To fix the drum on the Air Duct, six rollers were installed on the Air Duct by screws to ensure the drum was fixed exactly and rotate freely. To fix Air Duct on the bottom panel, six foot-mounting brackets with two holes on each side of the right triangle were designed and installed on both sides of the Air Duct to stabilize it. The breadboard was placed on the bottom panel. The humidity sensor and temperature sensor, covered with protective plastic with breather holes, were fixed to the inner wall of the drum.

ORCH Vantage Commons, 10 am - 12 pm

Energy Recovery Clothes Dryer with Emergency Reset System
Presenters: James Li, Joey Chan, Kay Wang, and Rose Xia (Team 13)

The purpose of the project is to build a scaled-down prototype of an energy recovery (EneRec Dryer) clothes dryer with size not exceeding  $250 \times 220 \times 300$  mm and at least 0.5L capacity. The requirement of this dryer is that the dryer should be able to dry a cotton handkerchief within an hour, and the maximum allowable power consumption should be 24 VAC, 40 VA. In our design, there is an emergency reset button on the top panel of the dryer. The function of this button is to reset the control system and stop the dryer when the dryer is in operation. The reason why this design was used is that safety is critical for the dryer. If the dryer is not working properly, the user can easily stop/reset the system without disconnecting the power source of the dryer.

ORCH Vantage Commons, 10 am - 12 pm

## **Energy Recovery Clothes Dryer with Large Capacity Water Tray**

Presenters: Yizhou (Harry) Shen, Jianyu (Bruce) Gu, Shuangyu (Saki) Wang, and Tiansheng (Tony) Gu (Team 14)

We aim to build a sustainable, portable, and cost-efficient dryer. To develop the electronic part of the dryer, Arduino board was used as the controlling system, an AC adaptor was used to change high voltage from the household electrical receptacle to a safer low voltage of 24 V AC, and soldering tools were used to fix the electronic components on the board. Then, Solidworks was used to design the prototype and build the 3D model. We used 3D printing to produce the parts we need.

ORCH Vantage Commons, 10 am - 12 pm

## Energy Recovery Clothes Dryer With 2 Smart Working Modes And Functional User Interface

Presenters: Yingrui Yang, Pedro Petraglia, Zhibo Zhao, Bike Zhang, and Daniel Lee (Team 15)

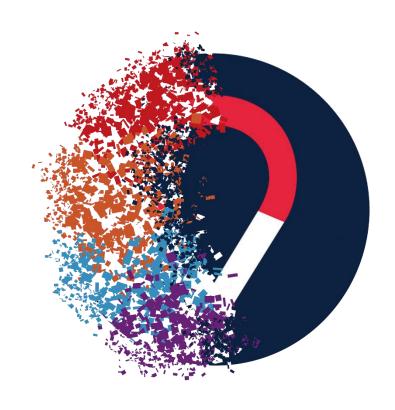
The topic of this project is Energy Recovery Dryer. The objective is to design and assemble the components of a scaled-down prototype of a energy recovery clothes dryer with auto and manual modes with in given budget and materials. The heater of dryer should stop and restart when temperature in the drum reaches the target temperature. Moreover, there should be a functional user interface to let users set up the dryer as their wishes. There are several constraints including time limit and the size of the dryer etc. During the design process, the team encountered many alternatives, such as the sizes of the drum, the ways users communicate to the dryer, the water tray designs and several other Solidworks and mechanical designs. All alternatives are valued using certain criteria and the final decision can be made. The final design includes a dryer body, a fan for the air intake, a heater to heat the air up, a drum which stores the clothes, an LCD screen as a user interface, 5 buttons for the input of the UI and other mechanical components.

ORCH Vantage Commons, 10 am - 12 pm

#### **Energy Recovery Clothes Dryer With Spiked Pulley**

Presenters: Yvette Li, Allen Wang, Tung Kha Le, Nadira Djafri, and Shunsuke Watanabe (Team 16)

The objective of this project is to design an environment-friendly and sustainable heat recovery dryer, which is capable of drying a cotton handkerchief within an hour with 24 VAC power supply. The final design of the dryer uses a drum with the diameter of 9.71cm and the height of 6.9cm. The user interface will be programmed to have three modes: Manual, Auto, and Personalize, and it will guide the user via LCD screen by displaying each steps user has to take and the temperature and humidity inside the dryer. Also, in order to increase the efficiency, the heat exchange outlet is designed to trap the moisture and let the dry air escape into the drum again, creating a recycle-air-flow inside the dryer. This will be achieved by creating a vertical space, so the humid water will condense, and hot air will rise to join the air flow. Furthermore, the effectiveness of the motor will be enhanced by creating spikes on both the motor pulley and the drum. The spikes will be placed so they will match the holes on the headband (used as a belt) when rotating, thus prevent the belt from slipping on the drum surface. After gathering each part and assembling them, the team's design will be tested and evaluated.



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