# Medical Geography

## Course Intro.

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# Outline

- About CCH
- Course Intro
- Grading Policy
- Why do you need to take this course?
- What will you learn from this course?
- Question Time

# About CCH

**現職:**
國立臺灣師範大學地理系 助理教授

**主要經歷:**
中原大學智慧運算與大數據學士班/碩士學位學程 助理教授
台灣資安鑄造股份有限公司 人工智慧分析顧問
臺北醫學大學醫學系放射線學科 博士後研究員
臺北市立萬芳醫院影像醫學部 博士後研究員
中央研究院社會學研究所 兼任資料分析師
資訊工業策進會資安科技研究所 工程師
國家災害防救科技中心坡地組 實習生

**最高學歷:**
國立臺灣大學地理環境資源學系 博士

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# Research Interests

# Previous Projects

Global

Global Airline Alliance Airport Network

Timely Exposure Risk Estimation

Spatiotemporal Religious Dissemination

COVID-19 Disease Transmission

Social Media Marketing


Urban

# Other Projects

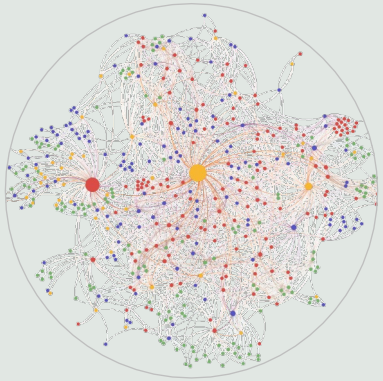
## Disaster Warning AI


DATARGET

行政法人 國家災害防救科技中心
National Science and Technology Center for Disaster Reduction

## Heatwave Events

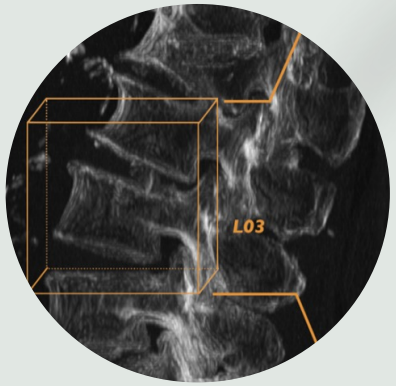
## Cybersecurity AI



CYFOUNDRY 台灣資安鑄造公司

ASUS WNC Wistron NeWeb Corp.

## Osteoporosis AI




TAIPEI MEDICAL UNIVERSITY 1960

廣達電腦 Quanta Computer

## CPR AI

台大醫院 NTUH

# Other Interests

## Русский | Español | 日本語


My first Russian Book | Published in Nov. 2021


Exhibition Staff | Moscow, 2015


Exhibition Staff | St. Petersburg, 2015

Exhibition Staff | República Dominicana, 2015


Exhibition Staff | Colombia, 2015


Host | NTU Russian Night, 2017


ABC news | Paraguay, 2015
Exhibition Staff | Paraguay, 2015

# Course Intro.

- We will introduce two parts:
  - How can we leverage spatial analysis to characterize the disease transmission?
  - How can we employ spatial analysis in the medical research field?

# Course Intro.

| Week | Date | Content |
|---|---|---|
| 1 | Sep. 4 | Course Introduction |
| 2 | Sep. 11 | Introduction to Medical Geography |
| 3 | Sep. 18 | Contagious Disease |
| 4 | Sep. 25 | PBL 1: COVID-19 Pandemic |
| 5 | Oct. 2 | PBL 1: COVID-19 Pandemic |
| 6 | Oct. 9 | National Day (no class) |
| 7 | Oct. 16 | Emergency Medical Service (EMS) |
| 8 | Oct. 23 | Midterm Report |
| 9 | Oct. 30 | EMS Resource Allocation |
| 10 | Nov. 6 | Osteoporosis |

| Week | Date | Content |
|---|---|---|
| 11 | Nov. 13 | Clinical Practice with Spatial Analysis |
| 12 | Nov. 20 | PBL 2: Medical Image Processing |
| 13 | Nov. 27 | Air Pollution and Its Application (PBL 3: Spatiotemporal Analysis) |
| 14 | Dec. 4 | Artificial Intelligence and AIoT Challenge in Medical Geography (Open Discussion Forum) |
| 15 | Dec. 11 | Final Report Presentation |
| 16 | Dec. 18 | Final Exam Week (no class) |

# Grading Policy

- All you have to do is study hard and feel free to ask question when you do not understand.
- I believe that if you fulfill all required items, and then you will pass this course / get a high GPA.
- Do mot worry about the grade! The most important things is what you learn from this course.

| | | | |
|---|---|---|---|
| Attendence | 10% | Discussion | 15% |
| Assignment | 45% | Midterm & Final | 30% |

# Why do you need to take this course?

- As the development of air transportation, people are suffered from infectious disease much severe than ever.
- But how can we help the global public health system from a geographic approach?

# What will you learn from this course?

- In the undergraduate courses, you have already understood various spatial analysis methods; however, you seldom apply these methods into your projects or dissertations.
- Here, we will use three examples to demonstrate the spatiotemporal disease transmission and the applications of spatial analysis in the clinical medicine.

# The End

Thank you for your attention!

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