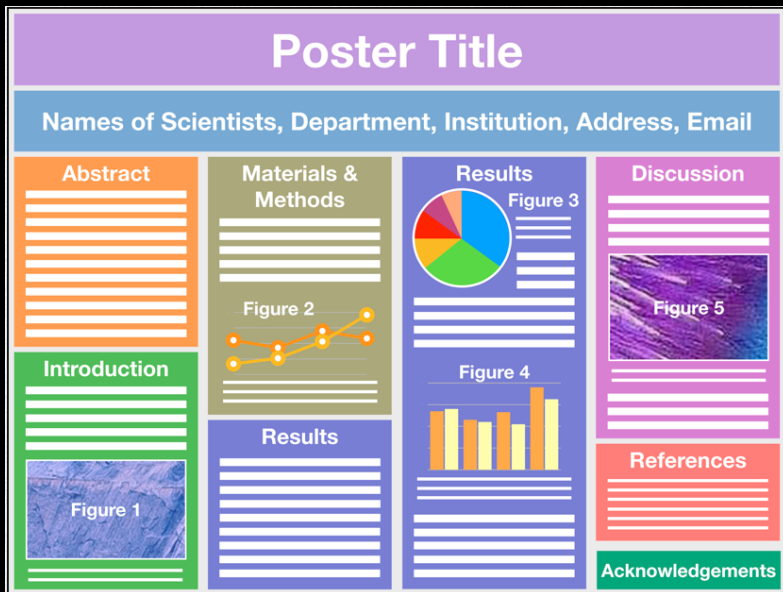


What Makes A Good Scientific Poster?

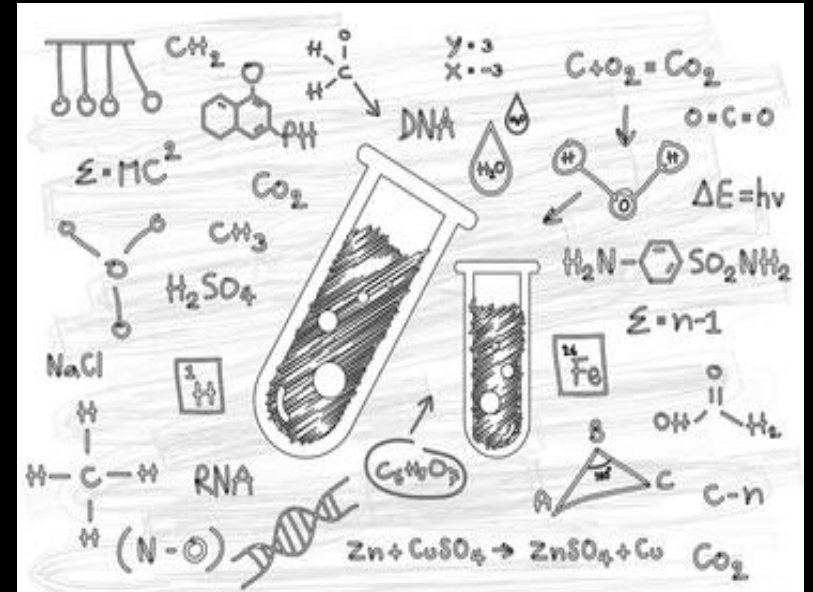


Ohio State University

Andrew La Croix

(Thanks to David Lowe)

Updated August 2026



Shutterstock

Acknowledgements

Presentation has evolved over many years, originating in the Earth and Ocean Sciences Dept.

Thanks Marcus Wilson and David Lowe

Why Scientific Posters?

Communicate key information (e.g., safety posters)

Venue for scientific dissemination (e.g., conference posters)

Online posters as part of blog posts

Graphical abstracts for scientific papers



The Conference Poster

Communication of scientific or engineering progress and advances

Written articles, conference proceedings, books, reports

Oral presentations at conferences

Poster presentations at conferences

Media and social media

Anyone in science or engineering **must develop this skill**, including scientists, engineers, planners, environmental officers, etc.

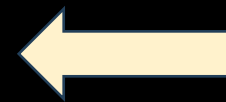
Busy poster hall –
posters typically changed every day
e.g. Conference in Dublin July 2019: 1476 posters in all,
= ~240 new posters every day for 6 days



~1000 of these posters ignored, not necessarily due to poor science,
rather poor presentation. **Make sure yours captures a reader's attention!**



David Lowe



Bad set-up: too crowded

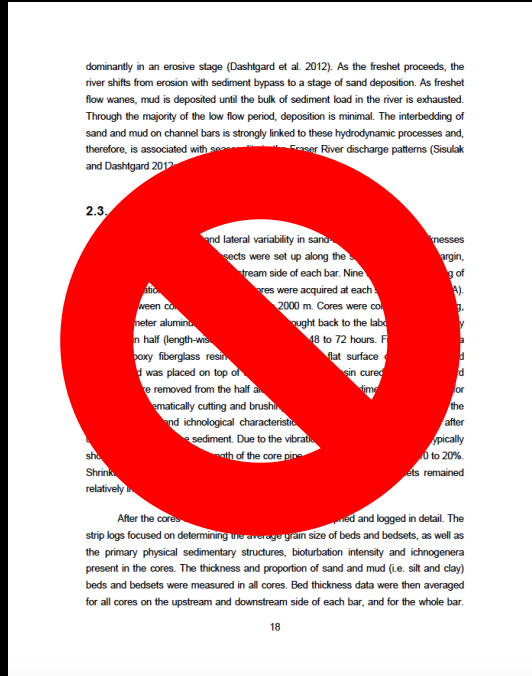
Good set-up: space to
gather and discuss



David Lowe

What a Poster Isn't

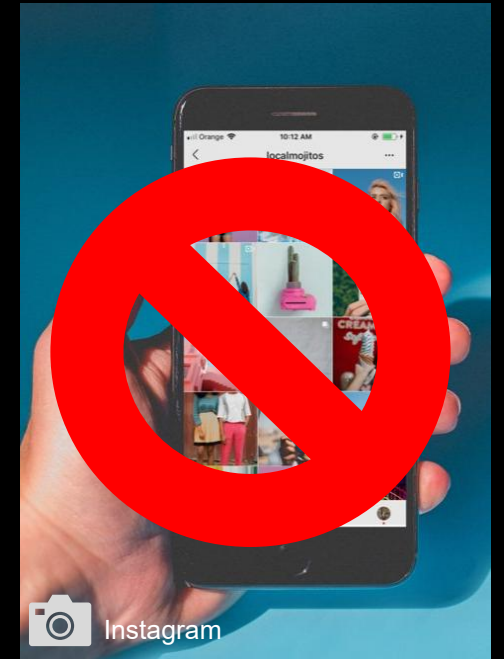
Thesis chapter



A novel



Social media post



Scientific posters may have long 'half-lives'. Check the hallways and corridors of any university department or PROs!

What a Poster Is (Elements of a Good Poster)

The three hallmarks of a good poster:

1) Focuses on a single message (only a few key points)

2) Uses images, graphs, and diagrams to effect

A talk is oral communication, with visual support (slides)

A poster is visual communication, with oral support (Q+A, poster pitch)

3) Has a clear and obvious sequence (tells a story)

Elements of a Good Poster

Some research projects generate lots of pretty photos. If yours doesn't, then take some time to find some good images

Photos of you working in the lab

Good Creative Commons images



Planning Your Poster

Determine the purpose of your poster

Audience? Key message? Response from reader?

First impressions

Short, sharp, and enticing title

Good graphics

Think carefully about layout and design

Logical flow (number sections)

Only key information

Limited text

Boring...



Common Mistakes

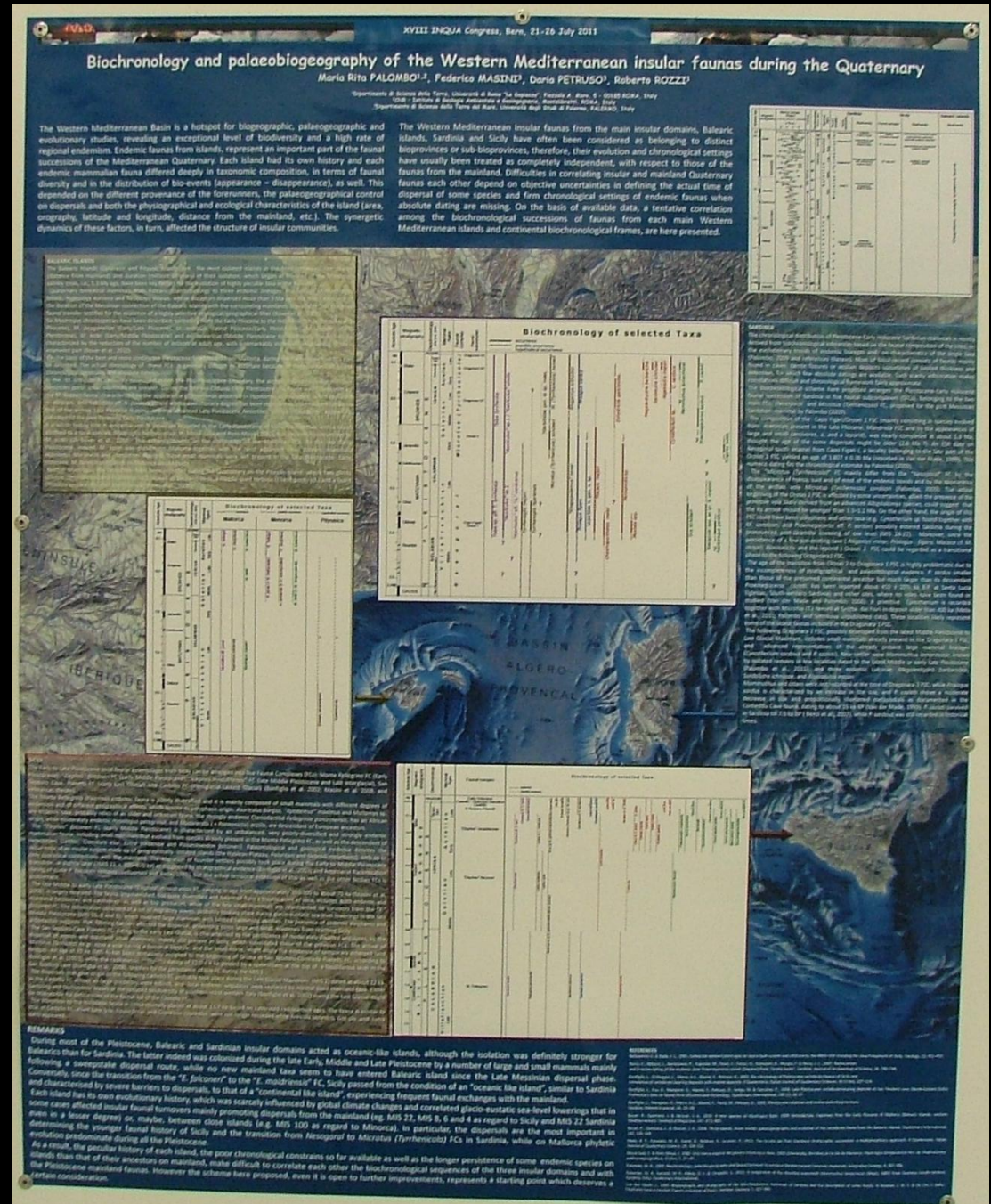
Lack visual appeal

Too much information

Font sizes (far) too small

Too much text

No obvious flow



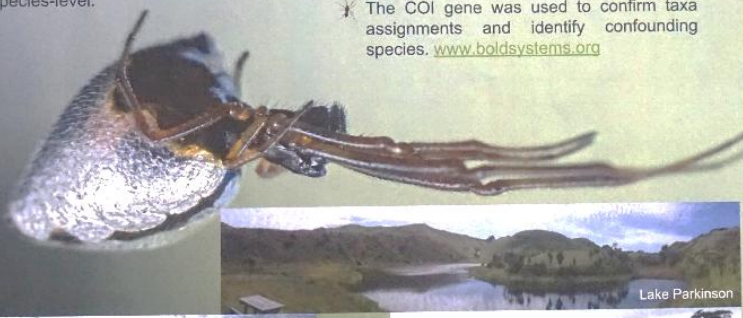
Some Past Postgraduate Posters




Determining spider communities of dune lakes using DNA Barcoding.

Nigel Binks

Research hypothesis	What I did	Results
- Marginal vegetation of pasture dominated lakes share internationally distributed species in common. - DNA barcoding is an effective means of determining spider communities at species-level.	- Collected spiders from the marginal vegetation (0-5m) of lakes using suction sampling and manual collection methods. - Sampling was undertaken after dark when most spiders are active. - The COI gene was used to confirm taxa assignments and identify confounding species. www.boldsystems.org	190 - Individual spider specimens 172 - COI sequences obtained 100 % grouped with representatives of the same species Sequence divergence <2% within species >2% among known species 37 species 17 species common to all study lakes 8 common introduced species
Conclusions - Pasture dominated lakes share many pasture dispersing species in common. - COI barcoding effectively clarifies species assignments regardless of appearance.		Works Cited Paquin P, Vink C.J, Dupont N. (2010) Spiders of New Zealand annotated family key and species list. Lincoln, New Zealand: Manaaki Whenua Press. Barnett RDN, Webster PDH. (2005). Identifying spiders through DNA barcodes. Canadian Journal of Zoology. 83: 481-491 Argyrodes antipodensis background photo: Bryce McQuillan, Photographing Nature.






Climate reconstruction of the Miocene by Geochemical ANALYSIS OF THE HINDON MAARS

Caitlin Murphy 1189694

BACKGROUND:

The climate is changing; by understanding the past we can better anticipate the future. This is why paleoclimate studies are important. Limited research has been undertaken on Miocene climates, particularly in the Southern Hemisphere. However, it is possible to reconstruct past climates through the use of varves. Varves are high resolution paleoclimate proxies resulting from the annual accumulation of biogenic, clastic, and endogenic sediments. These sediments can be found in maars (Fig. 1 & 2). Proposed research will be conducted in the The Hindon Maars (Fig 4 & 5). These maars are four infilled Miocene lakes with organic and diatomaceous sediments, forming varves (Fig 5).

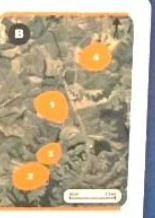


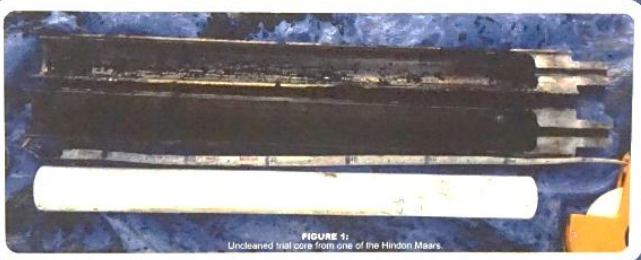

AIMS:

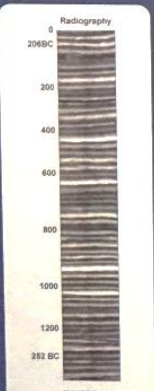
1. Reconstruct the Miocene climate of the Dunedin area.
2. Observe patterns of the Southern Oscillation.
3. Further understanding of Southern Hemisphere climates.

OBJECTIVE:

1. Extract geochemical data from the Hindon Maars location to determine climate.
2. Identify changes in temperature and precipitation reflecting that of the Southern Oscillation.





METHOD:

1. Take two (2) cores from each of the maars. Use a depth of 30m per core. total core: 240m.
2. Use the ITRAX machine to analyse the cores using X-Ray Fluorescence (XRF).
3. Analyse the ITRAX output to find element ratios that indicate specific climate conditions.

Barnett, E., & Cagney, M. (2011). An automated algorithm for dating annually laminated sediments using X-ray radiographic images, with applications to Lake Van (Turkey), Lake Neusagyr (Hungary) and Eijsden (Netherlands). Quaternary International, 25(1), 1-10.

Slope stability of Ngauruhoe:

A risk assessment for the Tongariro Alpine Crossing

1. INTRODUCTION

Volcanic edifice collapse is now recognised worldwide (Mt St Helens, Stromboli, White Island).

These failures form large landslides, flank scars and deposit debris or rock avalanches often with long run outs. Flank collapses may also precede or trigger an eruption as the conduit or magma chamber is depressurised.

Back-analysis and reconstruction of failed volcanic edifices is a common study focus. However there is little literature or strength data on fresh or slightly altered material on a young volcano that has not experienced collapse. Ngauruhoe meets these conditions hence presents a viable opportunity.



3. METHODS

- ▲ NZGS standard geotechnical field and laboratory methods to assess discontinuities
- ▲ Petrographic analysis to relate mineralogy to strength
- ▲ XRD, XRF and SEM analyses to further characterise the volcanic deposits
- ▲ 2D stability analyses (limit equilibrium and finite element methods)
- ▲ 3D modelling to determine likely failure direction

2. OBJECTIVES

- ▲ Complete a stability analysis of the whole Ngauruhoe edifice and summit cone
- ▲ Given the proximity, assess the hazard and risk to users on the Tongariro Alpine Crossing and surrounding ring plain

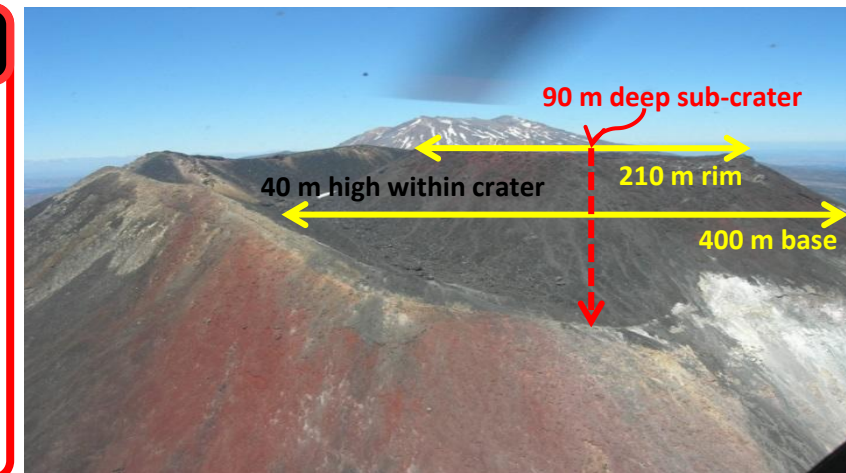


Fig 2. Summit cone dimensions (Pittari, 2011).



Fig 1. Relative size comparison of Ngauruhoe to surrounding craters.

Acknowledgements:

The Sir Hugh Kawharu Foundation for funding

Researcher: Kate Mauriohoo, Supervisors: Dr Vicki Moon and Dr Adrian Pittari

Useful Tips

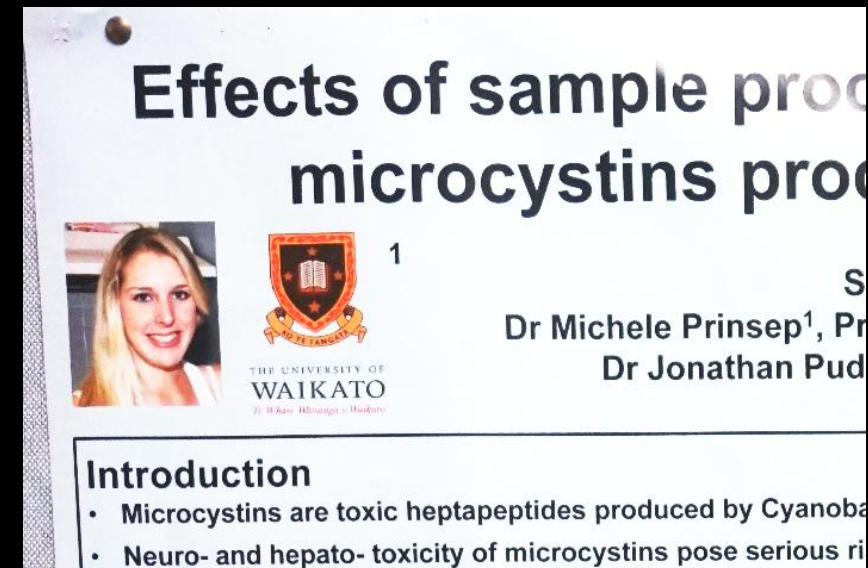
Use lowercase font – IT'S EASIER TO READ THAN UPPERCASE

Include your name(!) and acknowledge your supervisors

A photo of you can be good too

Make sure all images are sufficient resolution

Use a Waikato crest in high resolution



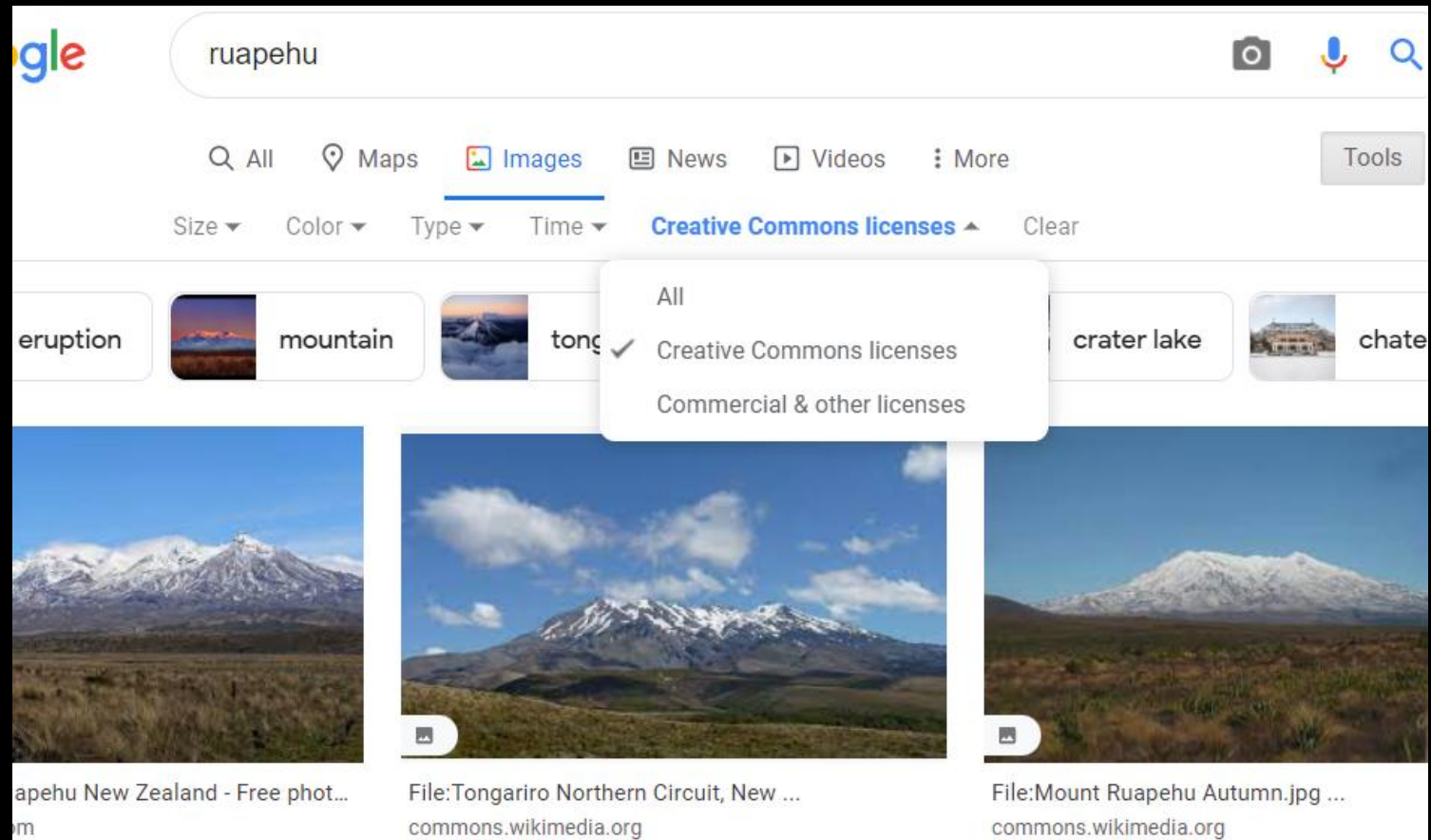
A Note About Copyright

If you use an image, make sure you have permission to do so

Just because it's online, doesn't mean you have permission to use it

Creative Commons images are useful

Google image search ->
Tools -> Creative Commons licences



Practical Aspects

A2 size

Not particularly large, think carefully about content

Poster can be Portrait or Landscape orientation

What works best in your case?

CorelDraw, Adobe Illustrator = good

Powerpoint = bad

Get your supervisors' input

Get feedback from other students (they are your audience!)

You will need to print the poster
Velcro or blue-tack will be provided

Please allow enough time for printing
Campus Print Shop, Warehouse
Stationery, other places

The Poster Pitch

Many conferences have poster presenters give very short oral presentation

(Strictly) 1 minute and 1 static slide

This isn't a short oral presentation

Don't use background, method, results, conclusions etc.

Use it solely to get people to come to your poster

Whatever works

Whacky photos, waiata, (appropriate) comedy, ...or...

Just simply say why your poster shows a really interesting bit of research

Useful Resources

<https://www.animateyour.science/post/best-examples-of-scientific-posters>

<https://mindthegraph.com/poster-maker>

Google Search!