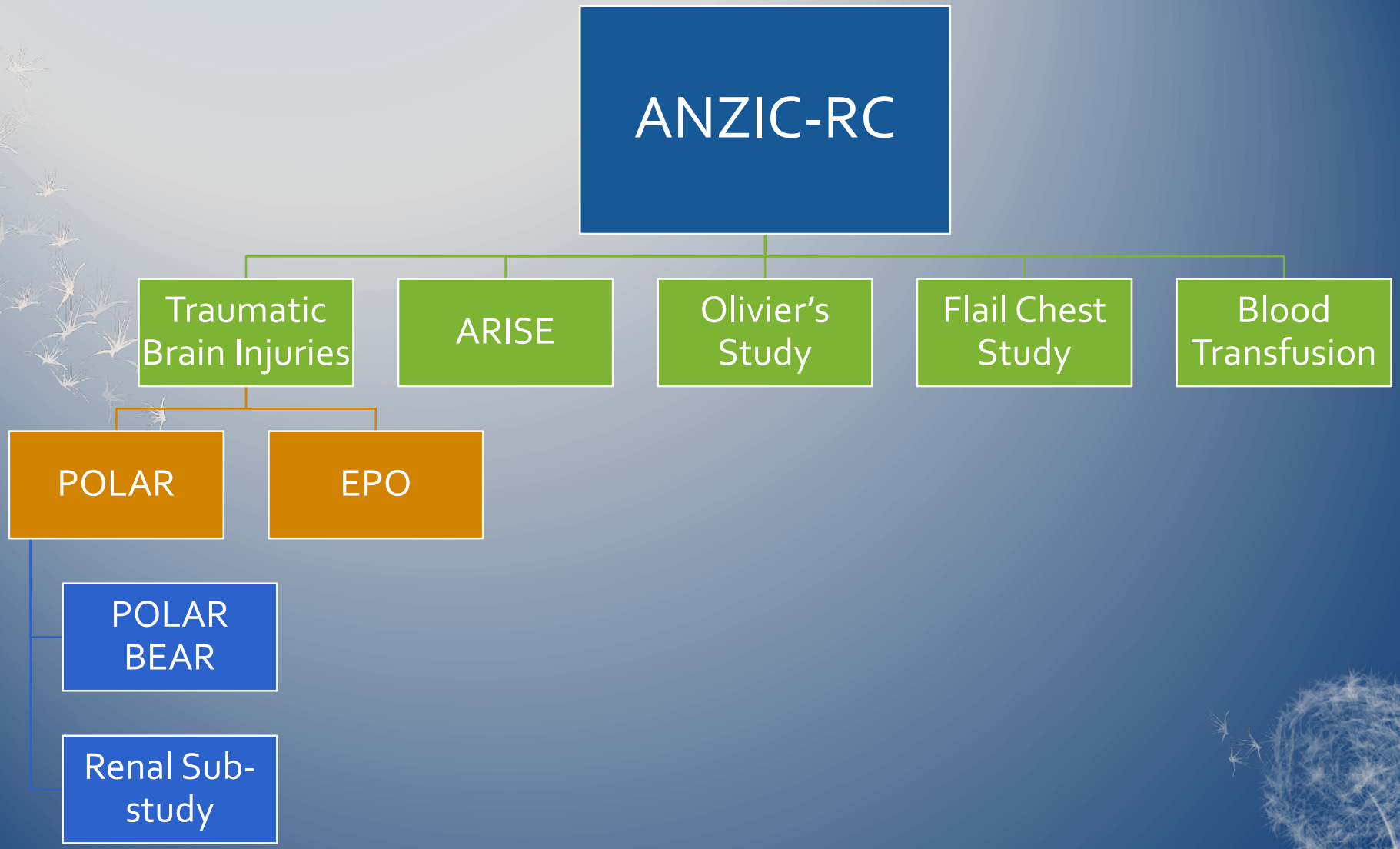
Summer Vacation Research Scholarship

Lulu Liang




ANZIC-RC
Traumatic Brain Injuries
ARISE
Olivier's Study
Flail Chest Study
Blood Transfusion
POLAR
EPO
POLAR BEAR
Renal Sub-study

The Prophylactic hypOthermia trial to Lessen trAumatic bRain injury – Randomised Controlled Trial (POLAR-RCT)

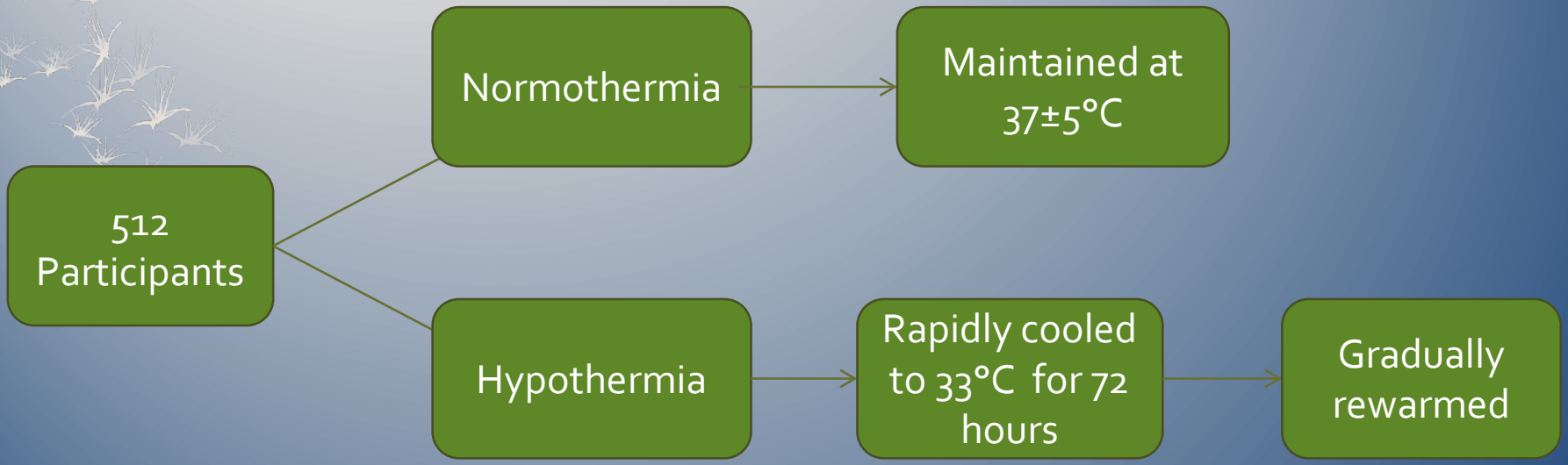
- To investigate whether prophylactic hypothermia has better neurological outcomes over standard management (normothermia) 6 months post TBI

Background

Why is this being done?

- Affects 1000 Australians every year
- Health issues:
  - Disability and death
- Economical issues
- Societal issues
- Previous studies
  - Lab and clinical trials show hypothermia to be neuroprotective
  - Previous methodological limitations
  - First-of-its-kind in Australia

Method



End result: Neurological outcome at 6 months follow-up (GOSE)

Results/Discussion

What I observed over a 5 week period:

- 15 patients were followed
- Mortality and survival rates at ICU-discharge were similar
- Challenges
  - Hypothermia: bleeding, infection, logistics with timing
  - Normothermia: infection
- Is hypothermia beneficial in TBI?

Conclusion

Cannot be drawn as study still in progress. However, the results may potentially change clinical practice on the current management of TBI in an ICU setting.

Reflections

