



# ARF/RHD

## What we know we don't know

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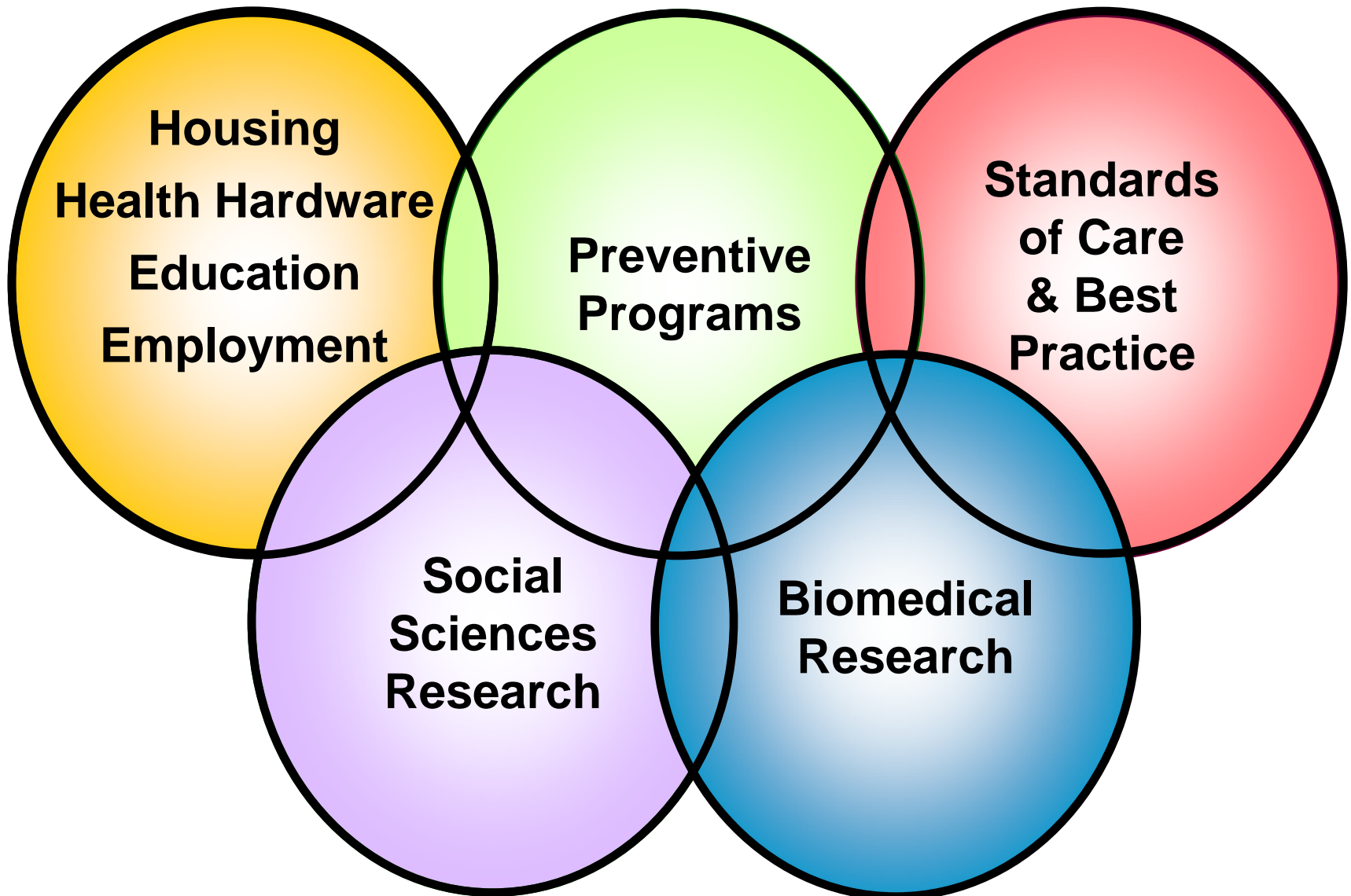
Global and Tropical Health Division, Menzies

Northern Territory Medical Program, Flinders & CDU

**Socio-economic**

**Public Health**

**Clinical**





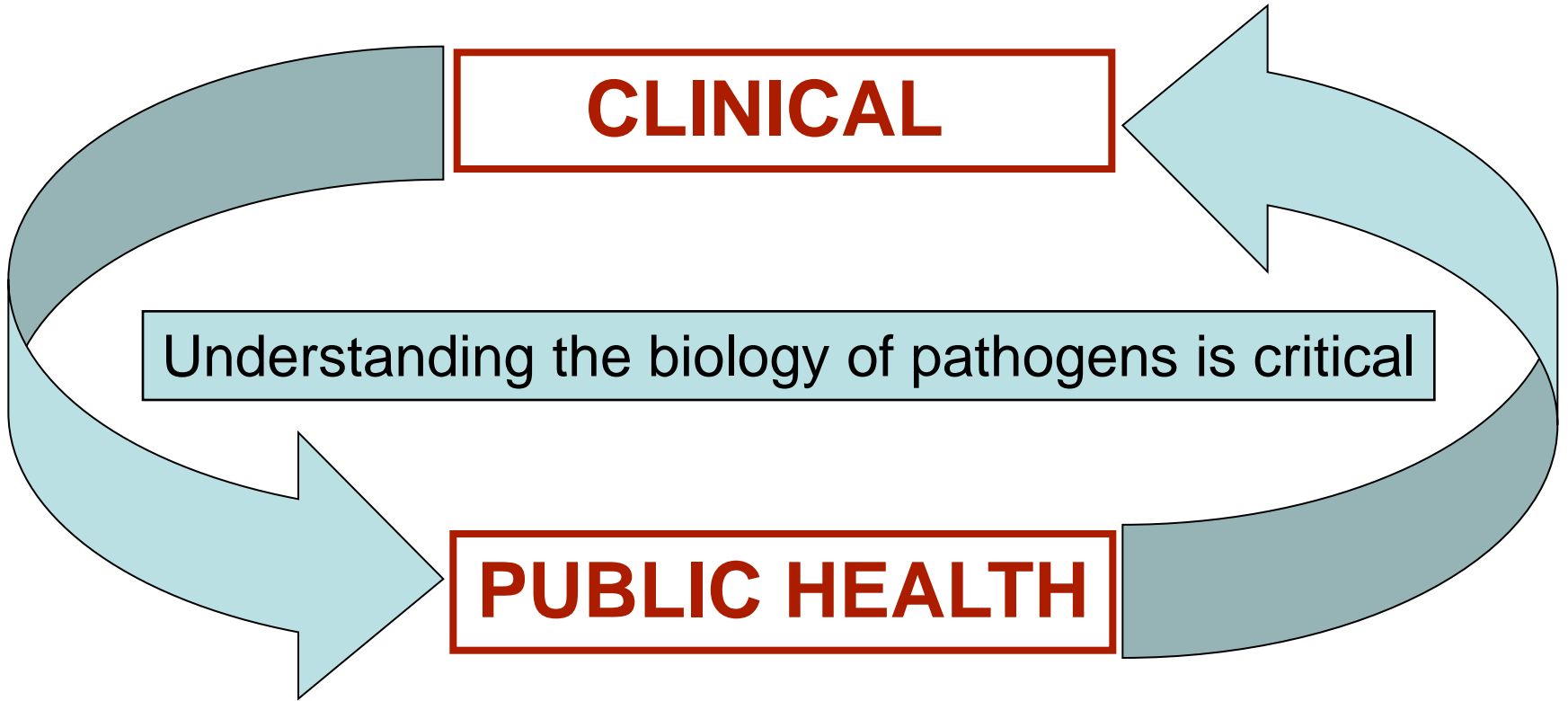
Infectious diseases are still important

**CLINICAL**

Understanding the biology of pathogens is critical

**PUBLIC HEALTH**

Understanding the sociology of families, communities, society and health staff and health services is critical



# Pathogenesis of Acute Rheumatic Fever

Organism factor(s)  
("Rheumatogenicity")

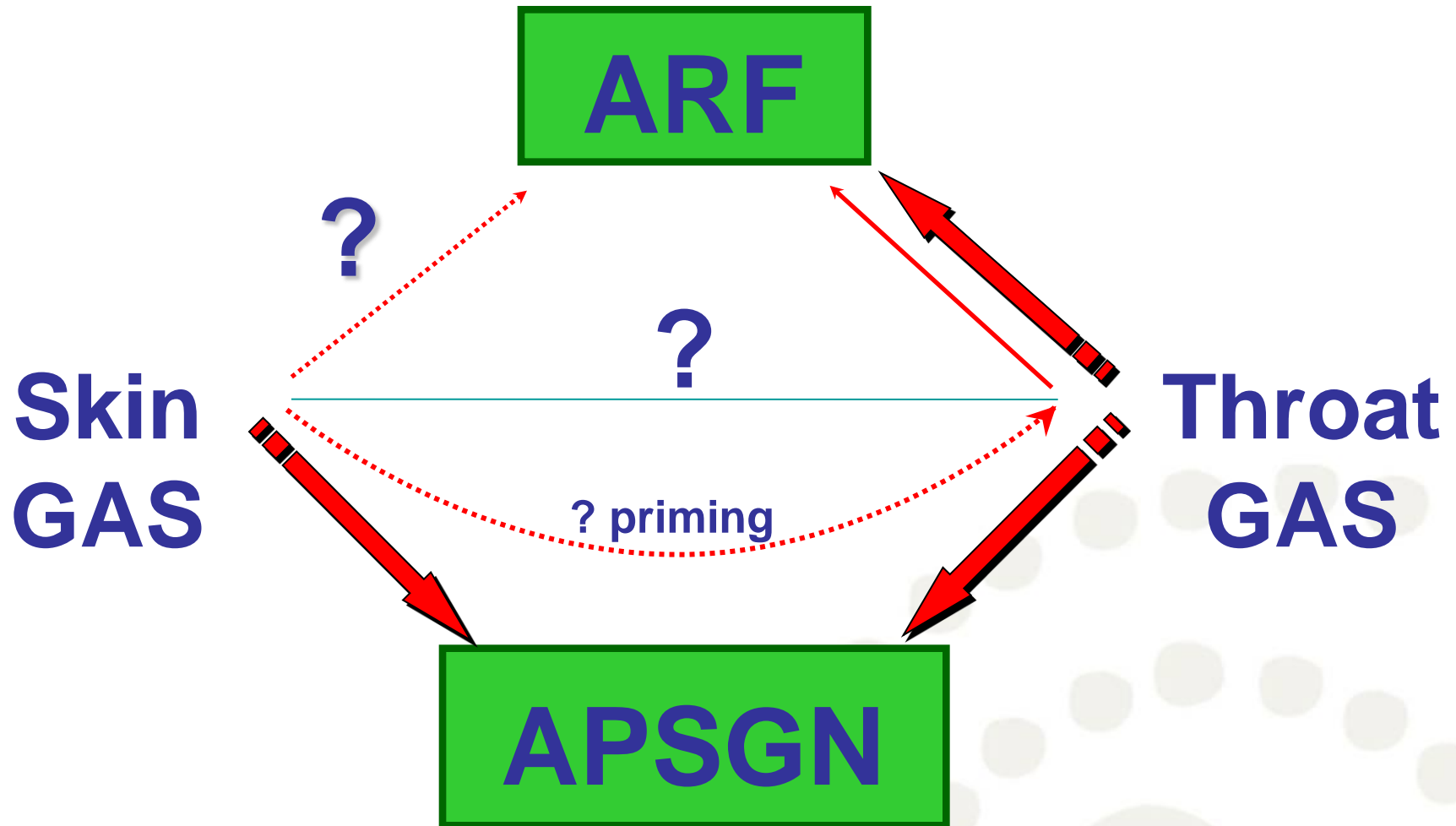
Host factor(s)  
(Genetic susceptibility)



Abnormal immune response

Acute rheumatic fever

# Throat and skin and ARF and APSGN



## What we know we don't know

- Who are the “3-6%” susceptible?
  - what is the genetic basis of this?
- What is the immunopathogenetic process?
  - we need a diagnostic blood test for ARF
- Which Gp A strep *emm* types – how restricted?
  - what about GCS and GGS (horiz gene transfer)?
- What have skin GAS got to do with it?

# Primordial prevention of ARF/RHD

- Housing
- Education
- Employment
- Communications
- Transport & access to services





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- How do we optimise secondary prophylaxis?
  - dosing, intervals, adherence, pain, site, i-fat?

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