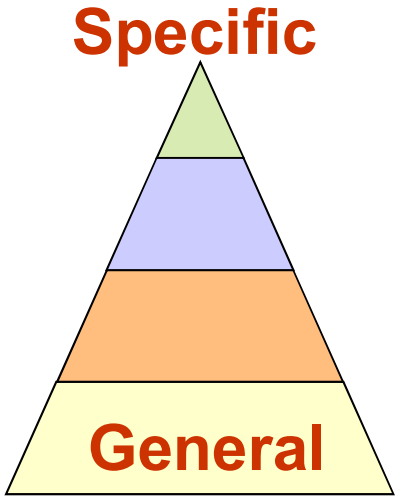
Discussion
This is YOUR Opportunity to:

- Put your data into perspective
  - How does it fit into the field?
- Propose a model
- Propose new experiments
- Make your readers think

Style

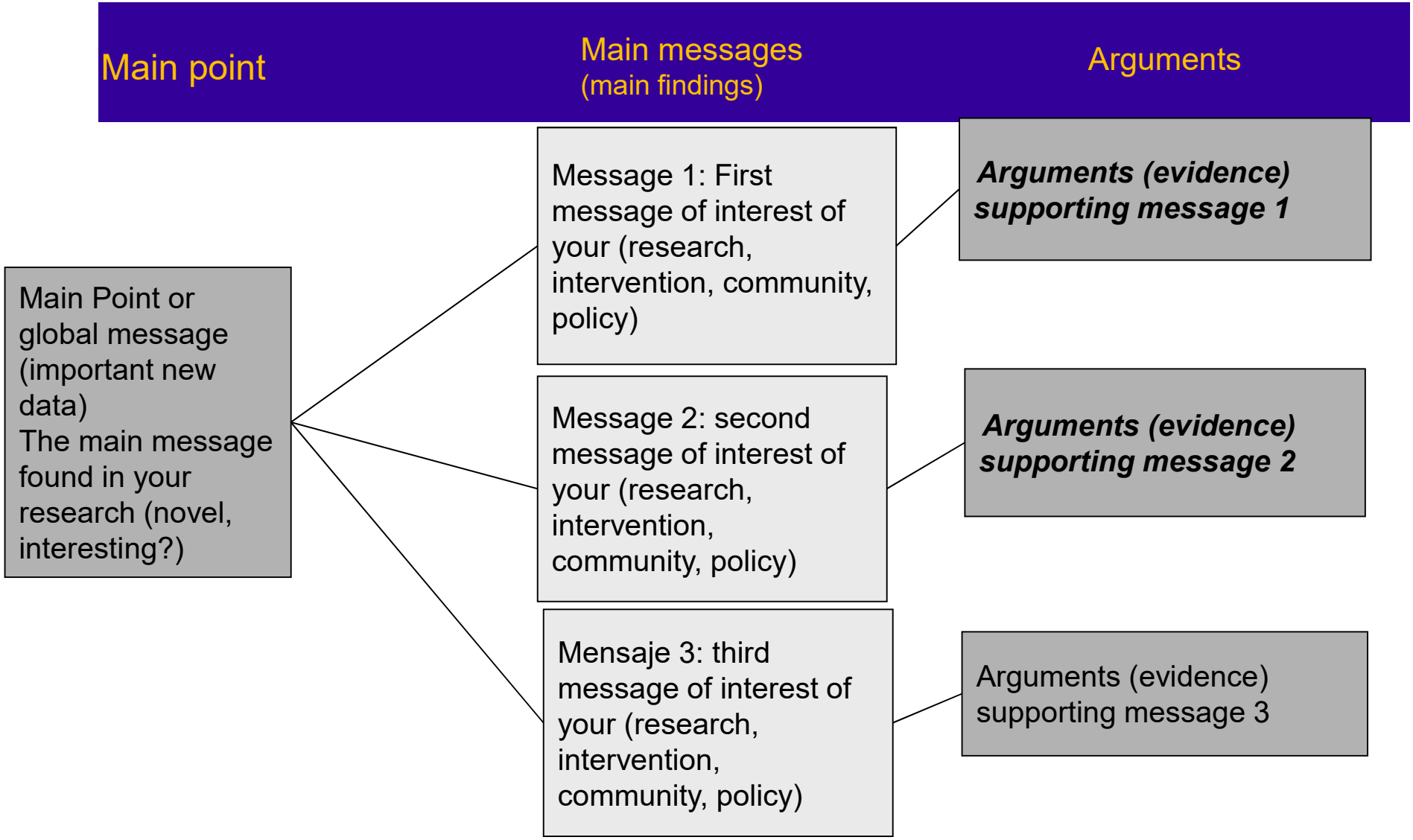
Remember Introduction was
general → specific

Discussion is the opposite
specific findings → general implications



Construction of the tree of arguments: outline of the manuscript

(Story outlined in three parts)



First Paragraph of Discussion

State the main point in the first sentence.
(or last sentence).

Power position!

Summarize only your major findings in terms of how they support your main point.

Discussion points

-Discuss subsequent points in the order of importance

  Main point first followed by other points in order of importance.

-Summarize how each point or result supports your hypothesis or conclusion

Content of Discussion

- -Implications/Significance
  - Put in context of previous research
- Limitations
- Future directions

Tips for writing a discussion

Clearly distinguish between

what you have shown vs. what you imagine

Discussions of interesting side issues should be limited: it detracts from your main point.

BE VERY CLEAR WHEN REFERRING TO YOUR DATA versus DATA OTHER GROUPS

Content: Conclusions

- Effects observed
- Magnitude of results
- Stronger verbs…..when discussing results

"**In this study**, we demonstrated that c-Src **was necessary** for antiviral gene expression by IRF-3 and that **the critical interaction** between c-Src and TLR3 **was** found to occur in endosomes."

Content: Implications

- In many cases, your data is not the definitive answer but the findings from the samples or patients you were able to examine.
- Normally you only have a subset of the study group and can only suggest that your findings apply to the entire group.

Weaker verbs

"Given the extensive genetic diversity of SIVcpz now recognized, and the vast areas of west Africa not yet sampled, it is quite possible that other SIVcpz lineages exist that could pose risks of human infection and prove problematic for HIV diagnostics and vaccines." (Science 28 July 2006)

Content: Implications

- How does your data relate to other studies
  - similarities and differences to previous data from similar studies
  - are your data consistent or inconsistent with other studies?

- Language expressing similarity

"we found that exogenous NS1 resulted in an increased viral burden *in vivo*, which could also exacerbate disease. This is consistent with previous data showing increased viral output in DENV-infected cells exposed to exogenous NS1 (*32*)"

Implications/Interpretations

Do not be absolute

- "A plausible explanation is that…"
- "One explanation is that the incidence of HIV is increasing because of……but other explanations are possible"
- "It appears that……"
- "These data suggest……."
- "These results may indicate that….."

End of the Discussion

Admit limitations

(but do not focus on the limitations)

"Although the specificity of both primers for the *M. tuberculosis* genome has been demonstrated, some of the sequence also bound to *Salmonella*. Thus, the use of this assay must be interpreted with caution, unless confirmed by Southern blot hybridization."

End of the Discussion

Next Steps

1. Remaining questions and new directions
2. Suggestions and/or recommendations

"Further studies characterizing the distribution of the Delhi subtypes of Hepatitis B virus by geographical region may reveal whether this family of strains are emerging"

Ending the discussion
The last sentences

- Reinforce your message and be conclusive

You can use, “In conclusion,…..”

- As part of the conclusion DO NOT end with the cliché: “This problem needs further studies.”

- Be specific

“Further studies on more strains of bacteria will clarify if this new drug compound has broad antimicrobial effects.“