

Production of Polyclonal Antibody against Mycoplasma ovipneumoniae in Rabbits



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Introduction



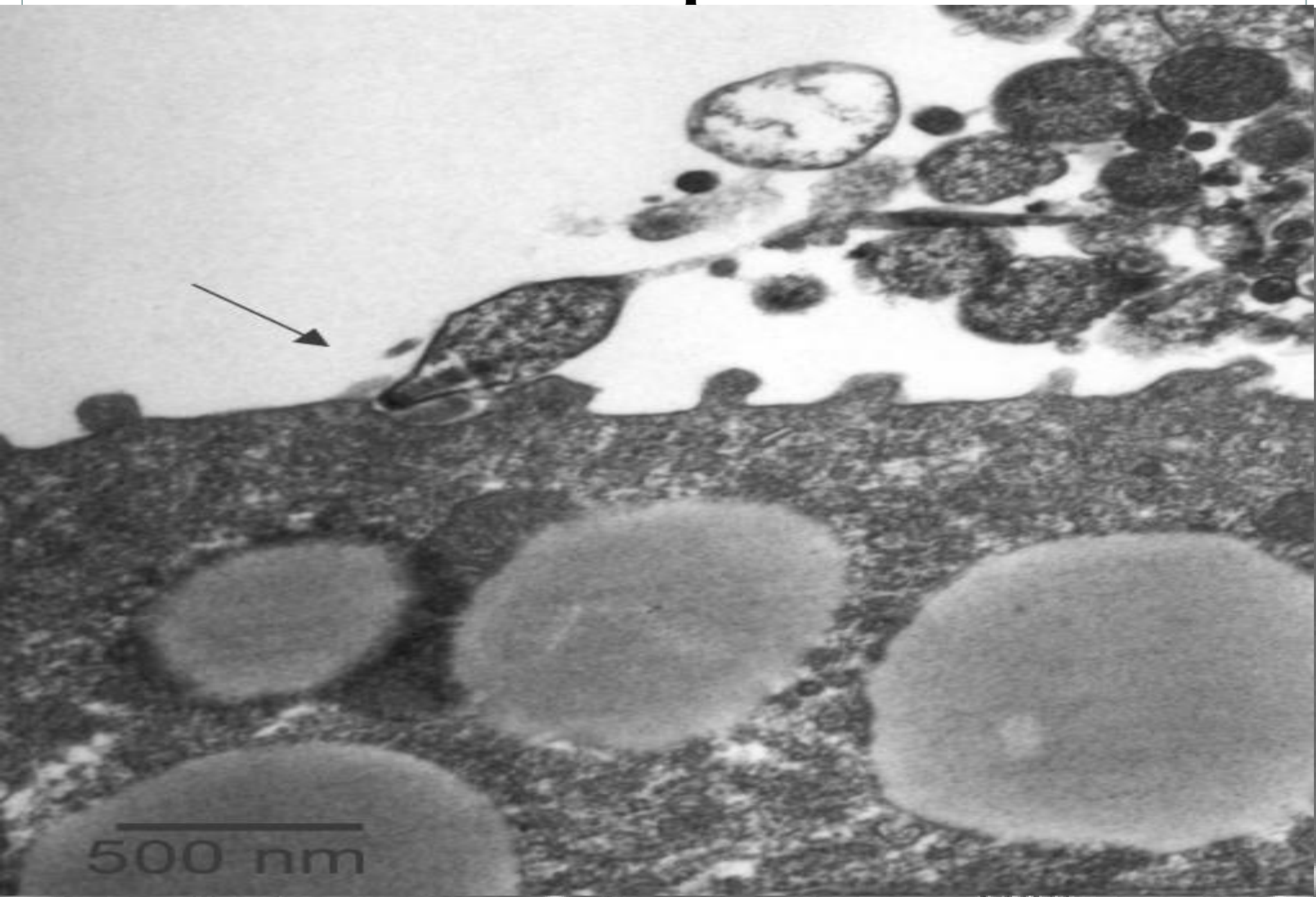
- o Big Horn Sheep
- o Polyclonal antibodies in rabbits
- o Diagnostic assay

Overview



- **Protein extraction**
 - Swabs or pure culture
- **Immunization**
- **ELISA**
- **Affinity chromatography**

Close Association of epithelial cells

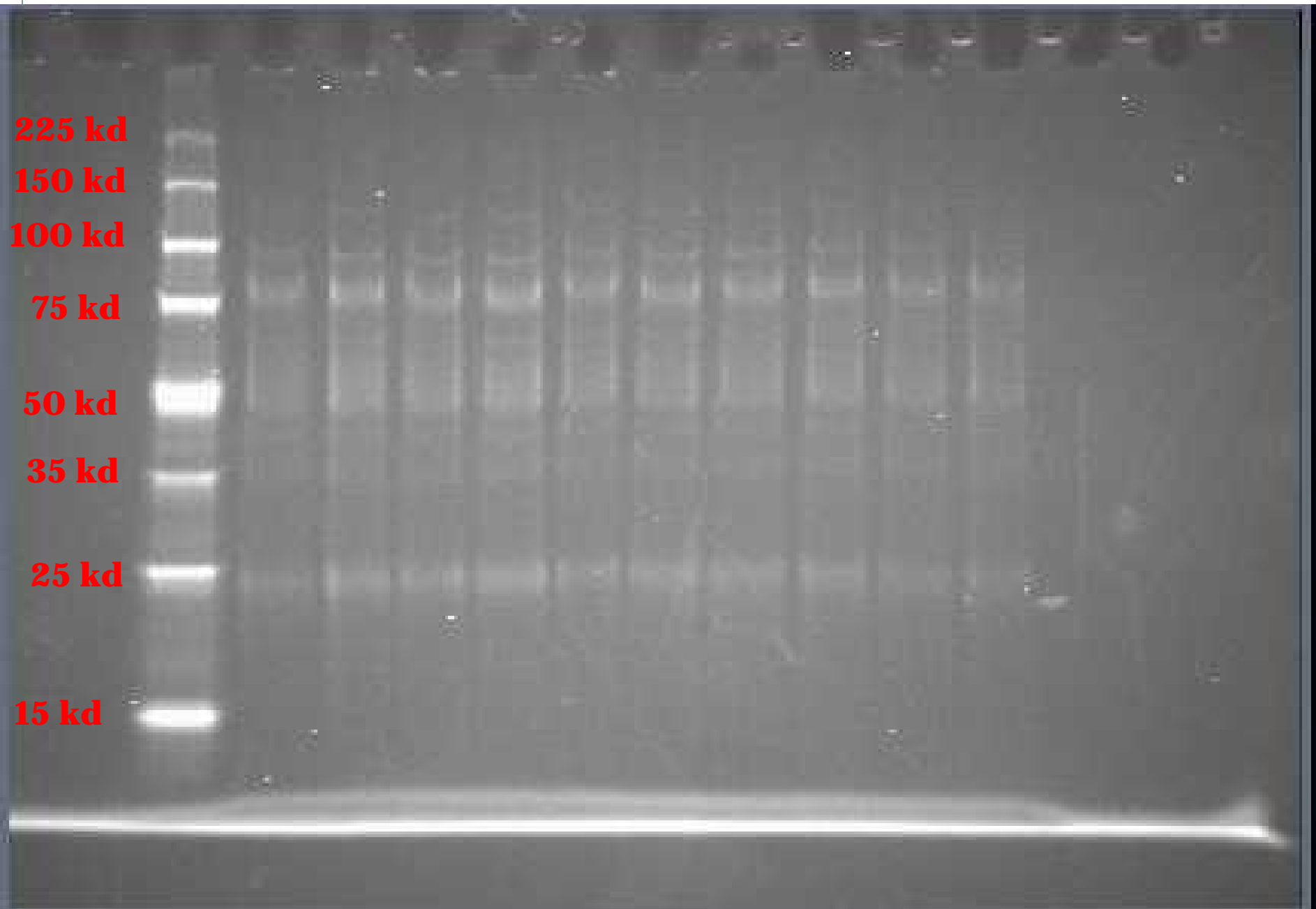


Protein Extraction

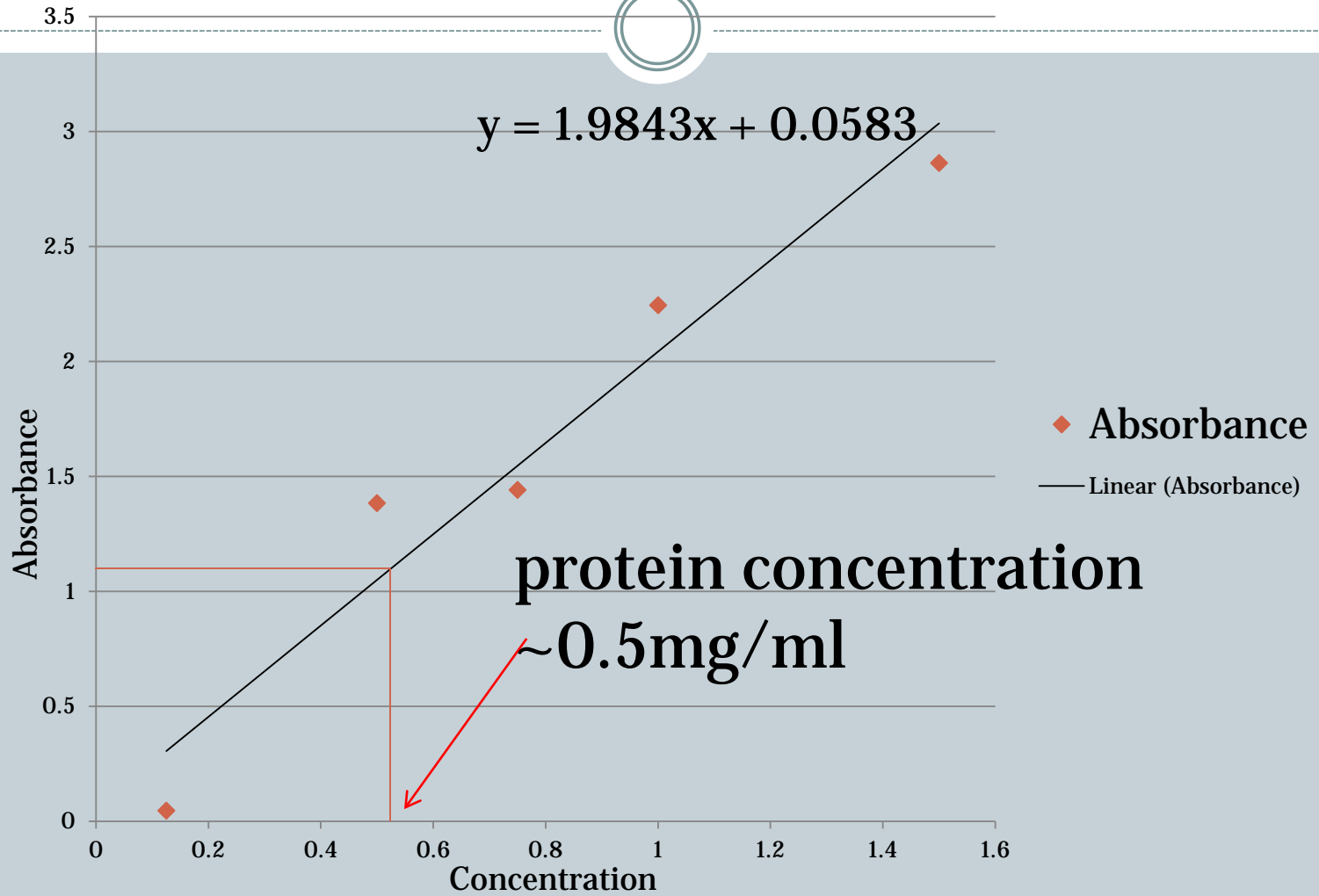


- **Specific protein from the pathogen**
- **or**
- **Membrane protein fractionation**
- **SDS Page**
- **BCA Lowry absorbance test**

Membrane Protein Prep



Absorbance @562 nm

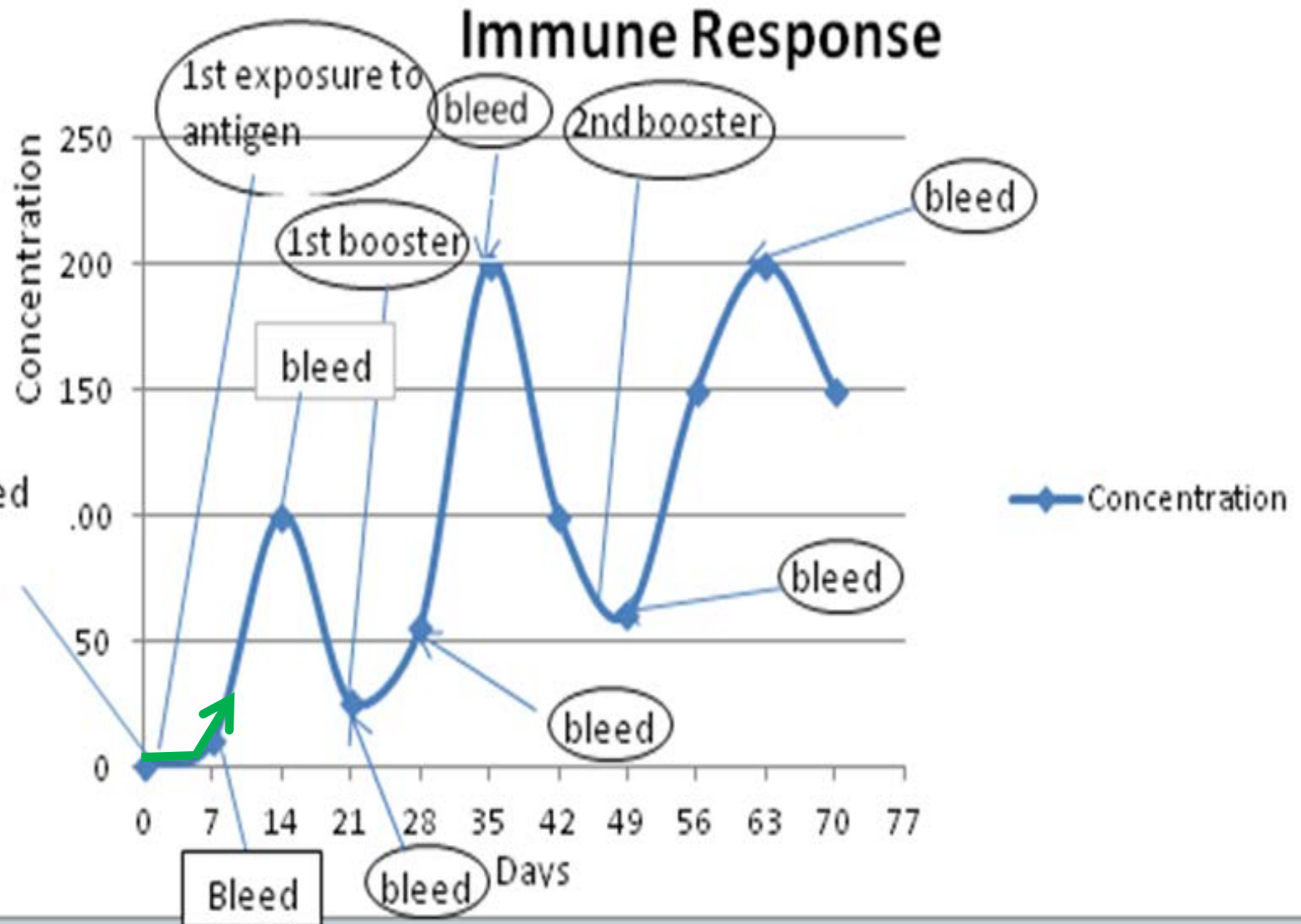


Immunization



- **Adaptation**
- **Pre-bleed & Immunize**
- **Booster**

Predicted chart for bleeding and immune response



ELISA



- **Indirect Elisa**
 - **Primary antibody – rabbit antibody**
 - **Secondary antibody – Goat anti-rabbit antibody**
 - **TMB substrate**

Affinity Chromatography



- **Protein A chromatography**
- **Sepharose 4B chromatography**

Conclusion



- **Animal protocol**
- **Lab protocol**
- **Protein Membrane fractionation**
- **Bled Rabbits**
- **Immunized**

Acknowledgements



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- **Dr. Gerard P. Andrews and his lab members.**
- **Jake Berg**

Supplements

M. Pneumonia on Blood Agar Plate

