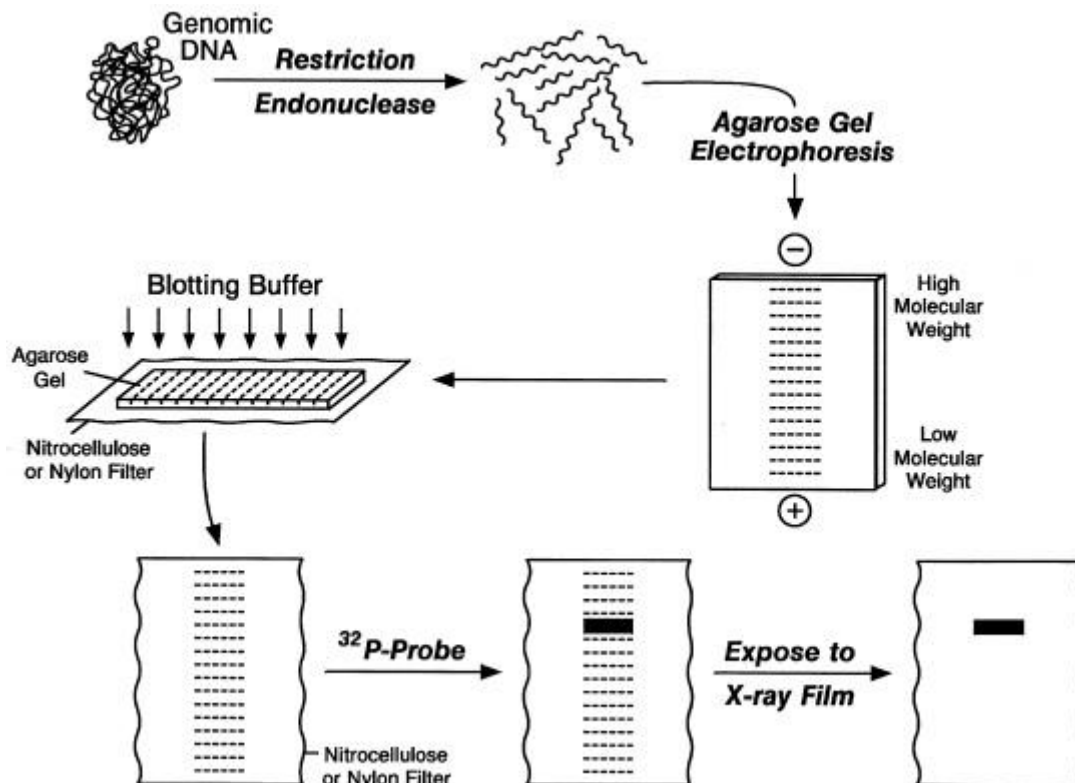


FM-20

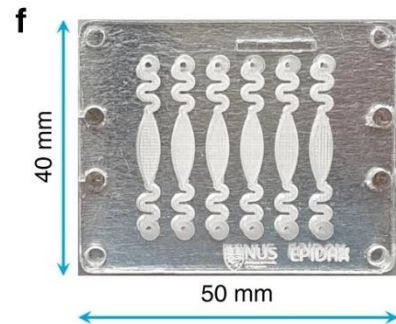
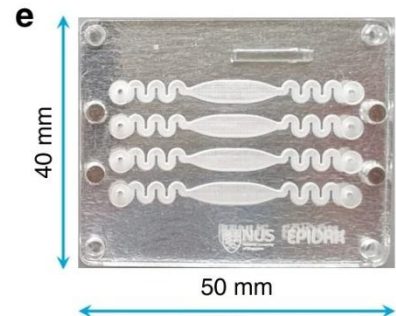
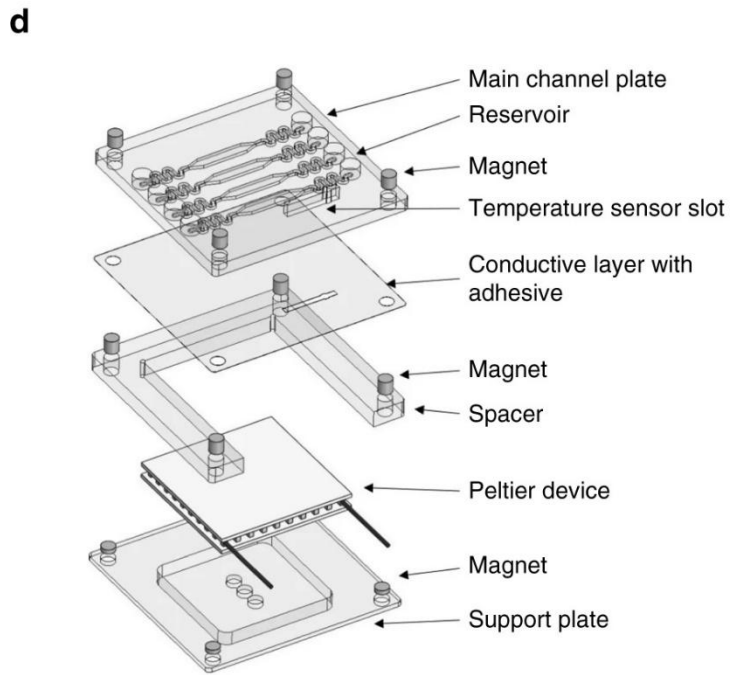
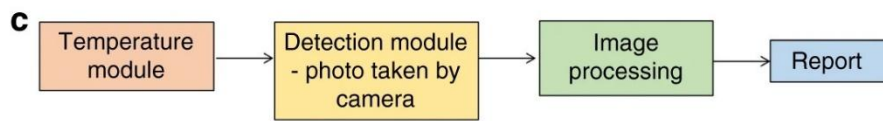
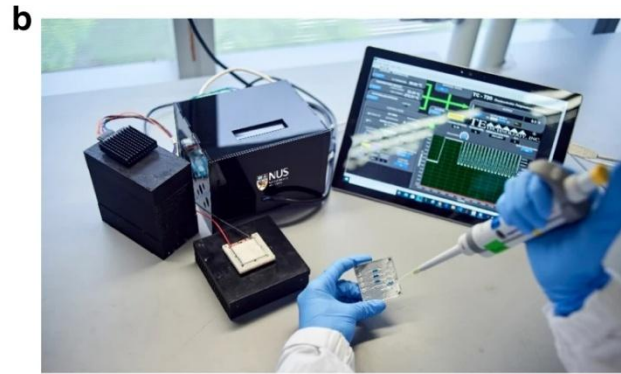
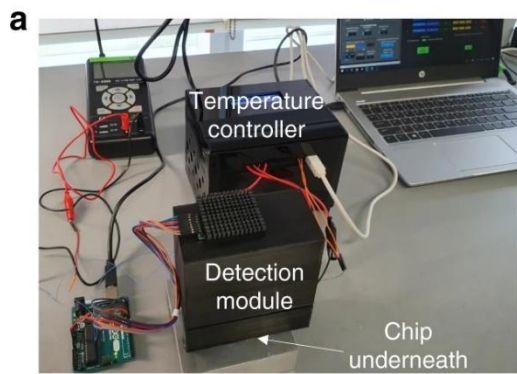
Time: 2 Hours

1. Construct linear restriction map from the data provided: 6
A DNA molecule of 44kb when digested with HaeIII restriction endonuclease produces 20 kb, 14 kb and 10 kb fragments; the same DNA when treated with EcoRI produces 7 kb, 13 kb, 14 kb, 10 kb fragments. Design a restriction map of HaeIII and EcoRI.
2. Calculate transformation efficiency from the data provided: 6
A bacterium strain of *Staphylococcus* has 5×10^{-21} mg of DNA per cell. You have isolated a pool of 10^{-7} mg of DNA which can be used to transform 14×10^9 bacteria. Calculate transformation efficiency of *Staphylococcus* strain.
3. Identify following techniques through photographs 3A, 3B. 4

3A.



3B.



4. Submit Project report on animal cell culture

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5. Laboratory Note Book

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