Prader Willi/Angelman Syndrome Flowchart

- Request microarray and methylation studies concurrently if urgent (neonate/sick patient)

  - Request microarray (All but 15q11-13 del)
    - Negative result, or 15q11-13 del present
      - Request methylation studies (Specify if suspected PWS or AS)

      - Negative
        - PWS very unlikely (excludes >99% cases)
        - Excludes 80% AS cases

      - Positive
        - Maternal alleles only (Dx = PWS)
          - If 15q11-13 del present on array
            - Request FISH parent* to exclude rare inherited chrom rearrangement
              - *PWS: dad’s blood
              - *AS: mum’s blood
          - If negative on array
            - Request UPD studies (patient + parents)
              - Positive: No further work necessary
              - Negative: Consider further testing
                - Imprinting centre deletion, epigenetic variant

        - Paternal alleles only (Dx = AS)
          - If 15q11-13 del present on array
            - Request UBE3A sequencing
              - Positive: (Dx = AS)
                - Also test parents, ?inherited
              - Negative: AS unlikely (excludes 90% cases)