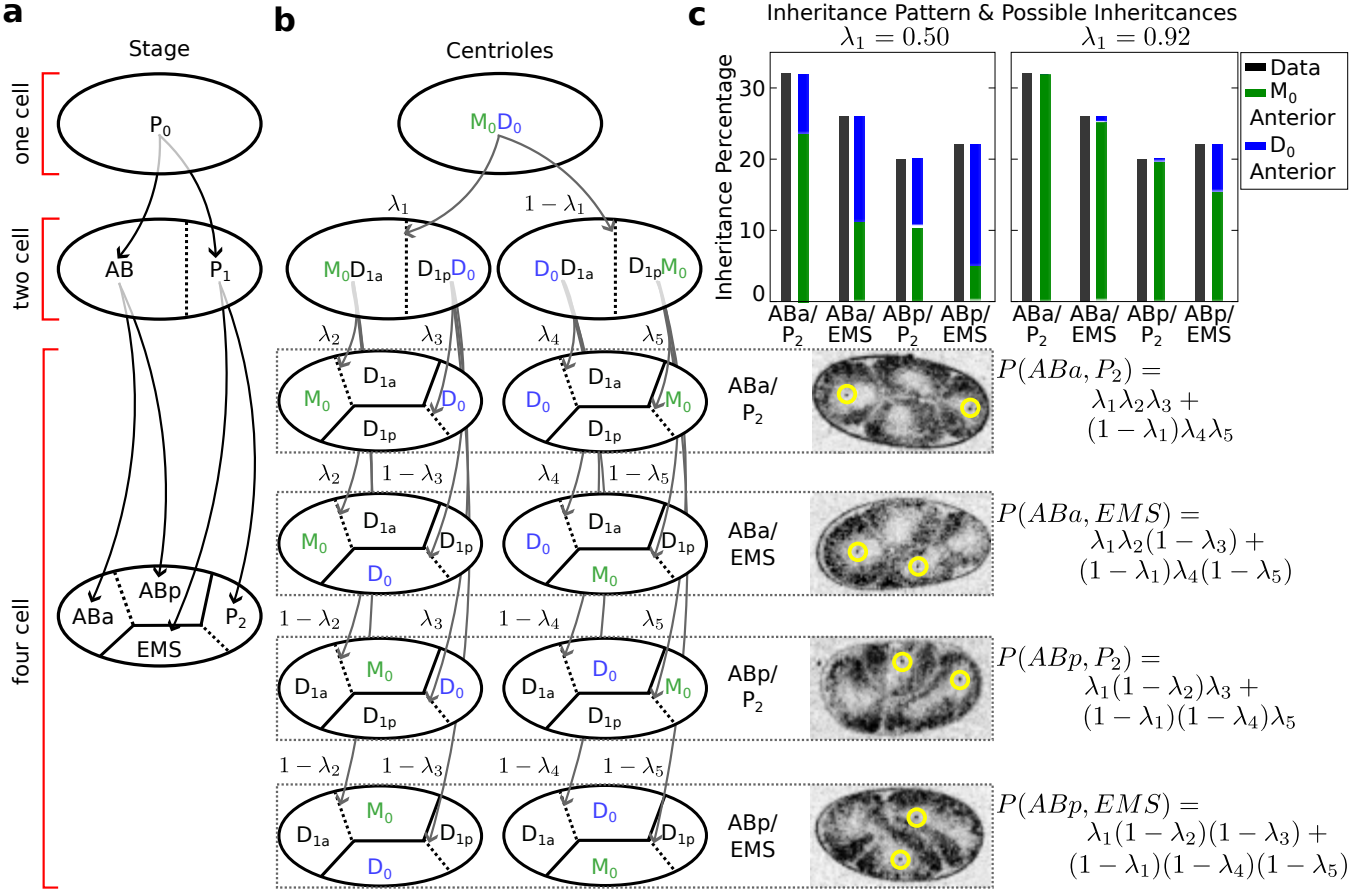
a
Stage
one cell
two cell
four cell
P0
AB
P1
ABa
ABp
EMS
P2
b
Centrioles
M0D0
λ1
1 − λ1
M0D1a
D1pD0
D0D1a
D1pM0
λ2
λ3
λ4
λ5
1 − λ2
1 − λ3
1 − λ4
1 − λ5
D1a
D1p
M0
D0
ABa/ P2
ABa/ EMS
ABp/ P2
ABp/ EMS
c
Inheritance Pattern & Possible Inheritcances
λ1 = 0.50
λ1 = 0.92
Inheritance Percentage
0
10
20
30
Data
M0 Anterior
D0 Anterior
ABa/ P2
ABa/ EMS
ABp/ P2
ABp/ EMS
P(ABa, P2) = λ1λ2λ3 + (1 − λ1)λ4λ5
P(ABa, EMS) = λ1λ2(1 − λ3) + (1 − λ1)λ4(1 − λ5)
P(ABp, P2) = λ1(1 − λ2)λ3 + (1 − λ1)(1 − λ4)λ5
P(ABp, EMS) = λ1(1 − λ2)(1 − λ3) + (1 − λ1)(1 − λ4)(1 − λ5)