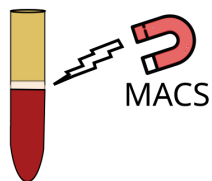
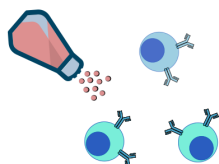
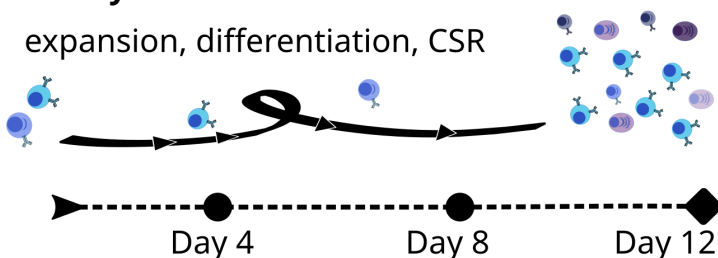
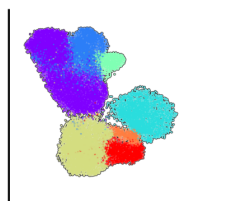


a.**1. purify B cells****2. analyze *in-vivo* samples**

input B cells: (Day 0)

long-lived
plasma cells: (BM CD138+)**3. stimulate input
w/ cytokines****4. analyze *in-vitro* time-course**

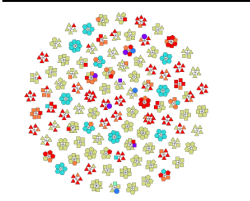
expansion, differentiation, CSR

**b****measurements**

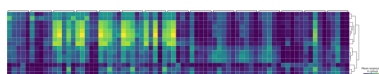
cell fates

VDJ

C

mutation status
isotype / class

clonal origin



gene expression

c