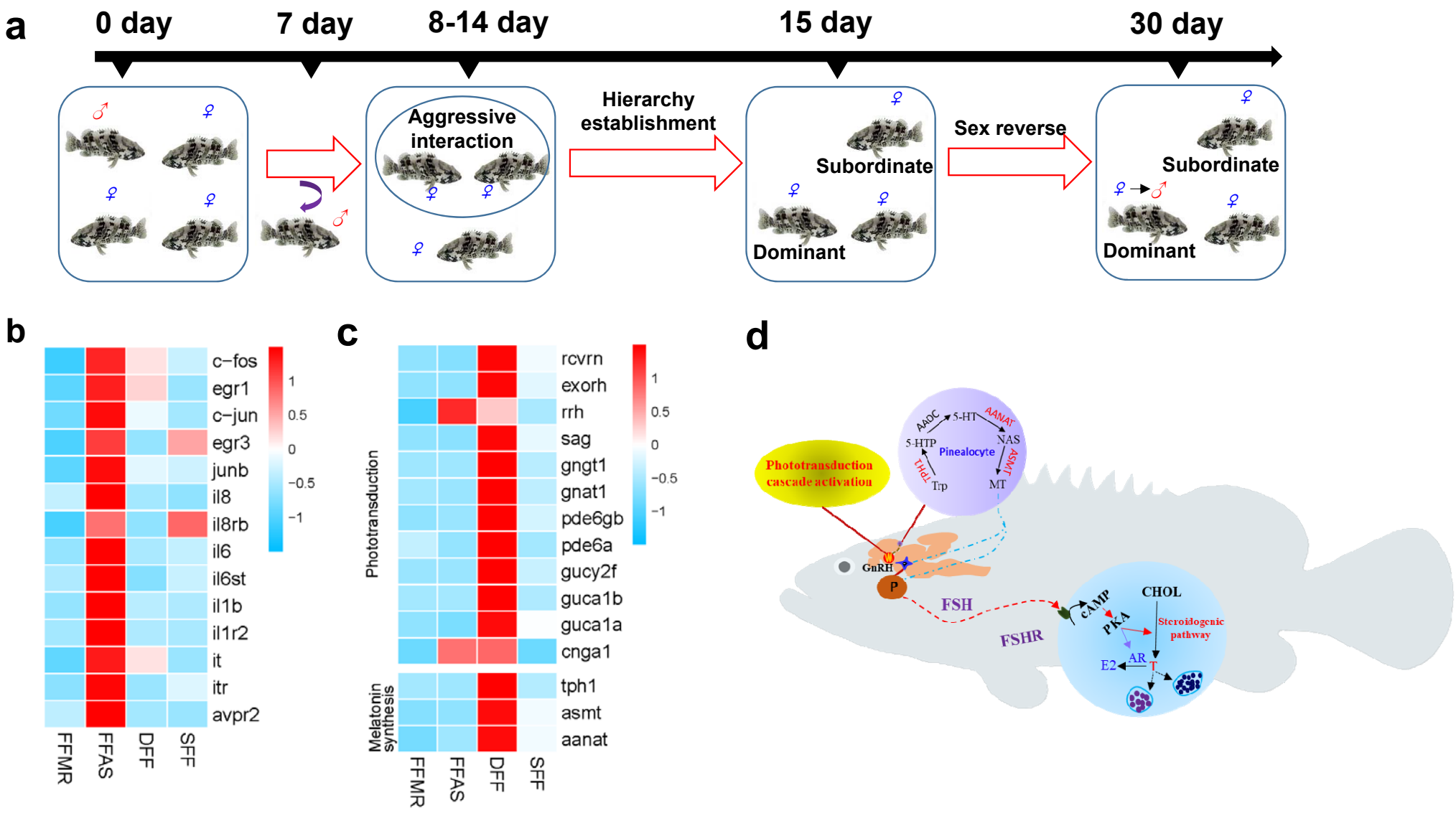
a
0 day
7 day
8-14 day
15 day
30 day
Aggressive interaction
Hierarchy establishment
Subordinate
Dominant
Sex reverse
Subordinate
Dominant
b
c-fos
egr1
c-jun
egr3
junb
il8
il8rb
il6
il6st
il1b
il1r2
it
itr
avpr2
FFMR
FFAS
DFF
SFF
c
Phototransduction
Melatonin synthesis
rcvrn
exorh
rrh
sag
gngt1
gnat1
pde6gb
pde6a
gucy2f
guca1b
guca1a
cnga1
tph1
asmt
aanat
d
Phototransduction cascade activation
AADC
5-HT
AANAT
5-HTP
Pinealocyte
NAS
TPH1
Trp
ASMT
MT
GnRH
P
FSH
FSHR
cAMP
PKA
CHOL
Steroidogenic pathway
E2
AR
T

Figure 4