

# Student Handout

## *In Vitro* Lecture and Luncheon for Students



Making New Approach Methods Work  
for Regulation: Linking Validation and  
Biological Relevance Through Adverse  
Outcome Pathways

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## Exercise 1

Match one of the six items on the right to each gap (a-f) in the three AOPs.

Apoptosis/ cell death	Binding to enzyme in the mitochondria	Cancer
Decreased neuronal function	Impaired learning and memory	Reduced calcium influx

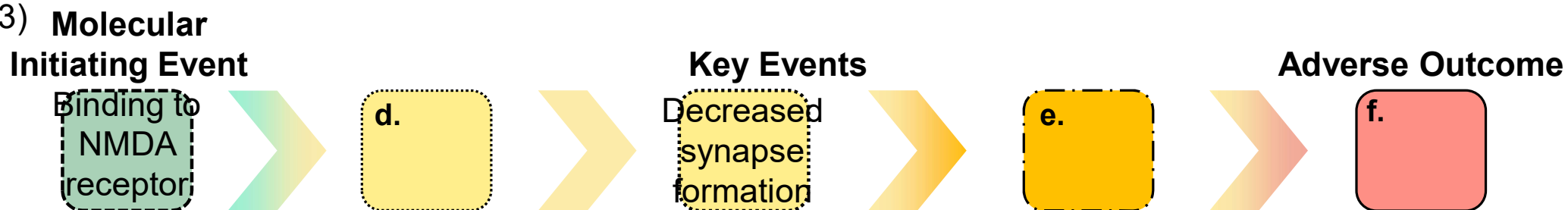
1)



2)



3)



## Exercise 2

Select one of the three AOPs in exercise 1, discuss and suggest types of NAMs (computational approaches, high throughput cell assays, 3D cell models, organs on chips, small model organisms), and what you could measure for the different events.

