

# Three Elements of The Ph.D. Research

Bozhi Tian

the University of Chicago

# Why Do You Want to Do Ph.D.?



**Adam Grant** ✓  
@AdamMGrant

Don't confuse experience with expertise. Having faced a problem doesn't guarantee that you've mastered the solution.

Don't mistake expertise for wisdom. Having deep knowledge doesn't guarantee that you know when it applies.

## My interpretation

- *Experience*



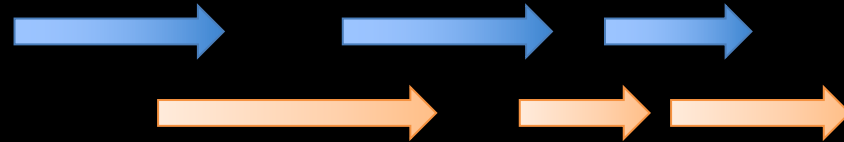
inward

- *Expertise*



outward

- *Wisdom*



Staggered mode

# Three Different Types From My Students

## TYPE I



Yuanwen Jiang  
(Postdoc, Stanford)

*Experience*



*Expertise*



*Wisdom*

## TYPE II



Ramya Parameswaran  
(Residency, UCSF)

Project A

*Experience*



*Expertise*



*Wisdom*

Project B

## TYPE III



Aleksander Prominski  
(Graduate student)

Previous  
Ph.D. lab

*Experience*



*Expertise*



*Wisdom*

Current  
Ph.D. lab

# The Fourth Type of Evolution of The Three Elements

During Ph.D.

*Experience 1*



*Expertise 1*

During Postdoc

*Experience 2*

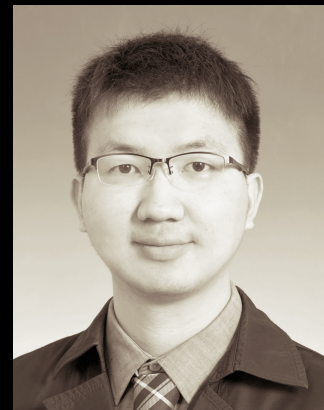
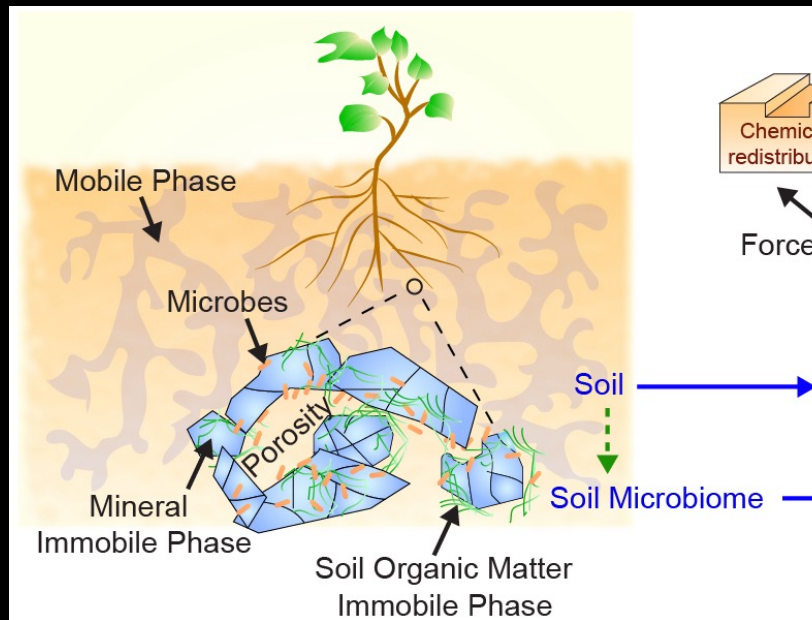


*Expertise 2*



*Wisdom*

**TYPE IV**



Yiliang Lin  
(Postdoc)