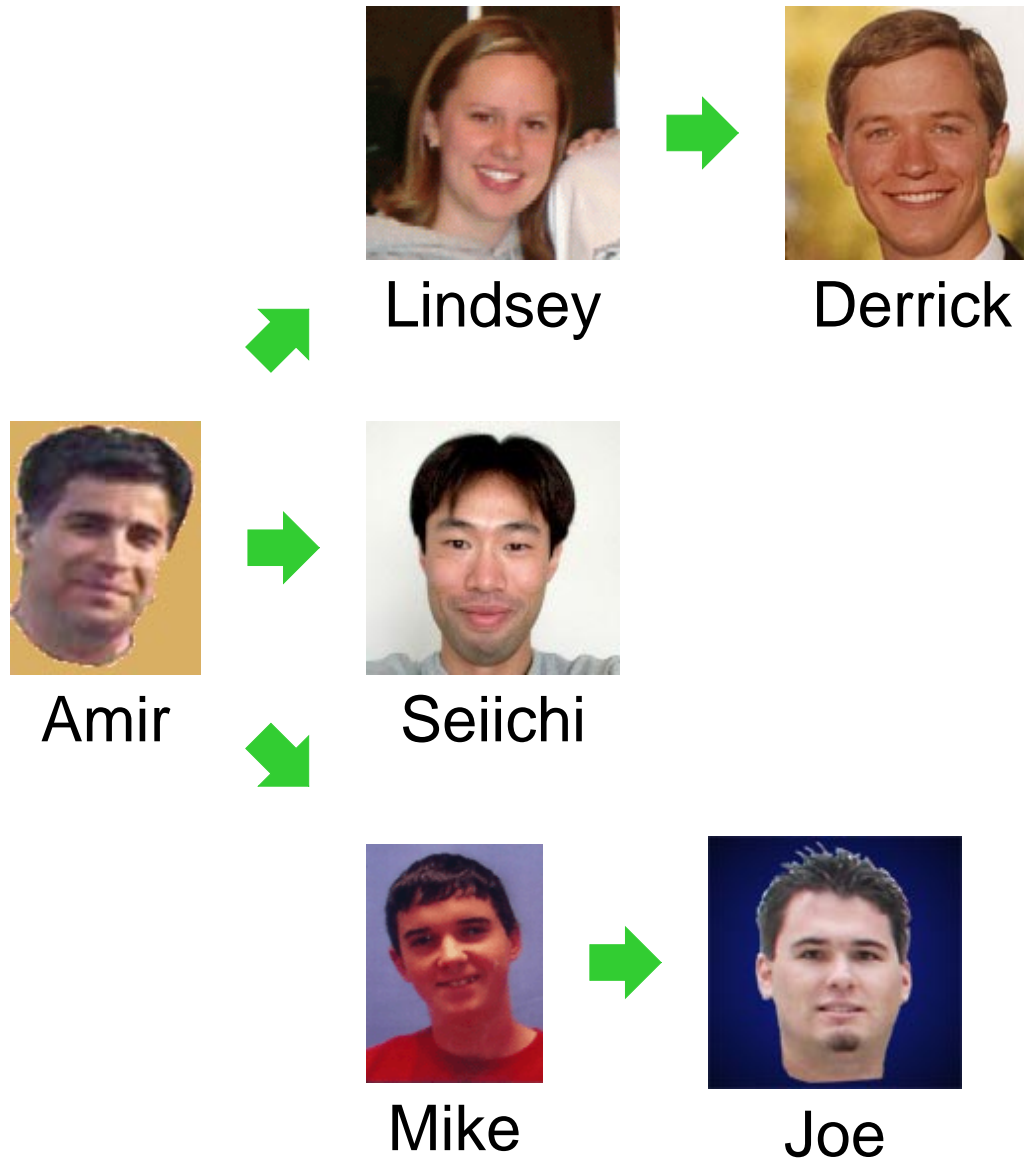
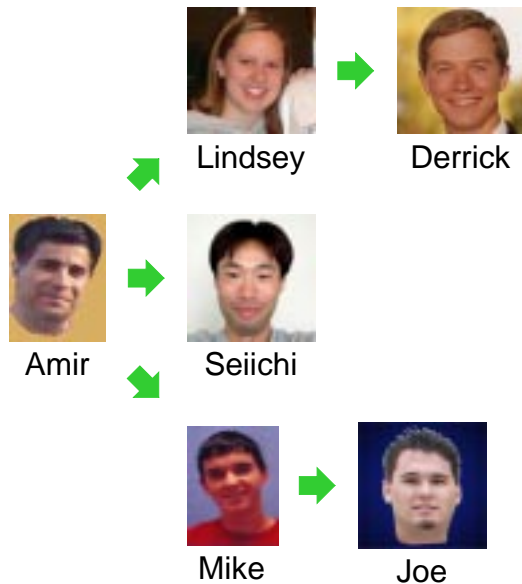


# More Realistic Rumor Mill

Let each gossip talk to any number of people:



# Representing Revised Rumor Mills



How do we represent an arbitrary number of gossip connections?

```
; A list-of-gossip is either  
; - empty  
; - (cons gossip list-of-gossip)  
  
; A gossip is  
; (make-gossip image list-of-gossip)  
(define-struct gossip (who nexts))
```

# Programming with Revised Rumor Mills

```
; A list-of-gossip is either
;   - empty
;   - (cons gossip list-of-gossip)

; A gossip is
;   (make-gossip image list-of-gossip)
```

A diagram consisting of two yellow arrows. The first arrow starts at the end of the line "; - (cons gossip list-of-gossip)" and points to the beginning of the line "; A gossip is". The second arrow starts at the end of the line "; (make-gossip image list-of-gossip)" and points to the beginning of the line "; A gossip is".

```
(define (func-for-log l)
  (cond
    [(empty? l) ...]
    [(cons? l)
     ... (func-for-gossip (first l))
     ... (func-for-log (rest l))]))
```

```
(define (func-for-gossip g)
  ... (gossip-who g)
  ... (func-for-log (gossip-nexts g)) ...)
```

## Examples for Revised Rumor Mills

- Implement **count-people**, which takes a gossip and returns the number of people informed by the gossip (including the starting person)
- Implement the function **informed?** which takes a person image and a gossip and determines whether the person is part of the rumor mill
- Implement **remove-person**, which takes a person image and a gossip and returns a gossip where the given person is uninformed

... and any other function for the old rumor mills