

# Personnel Management

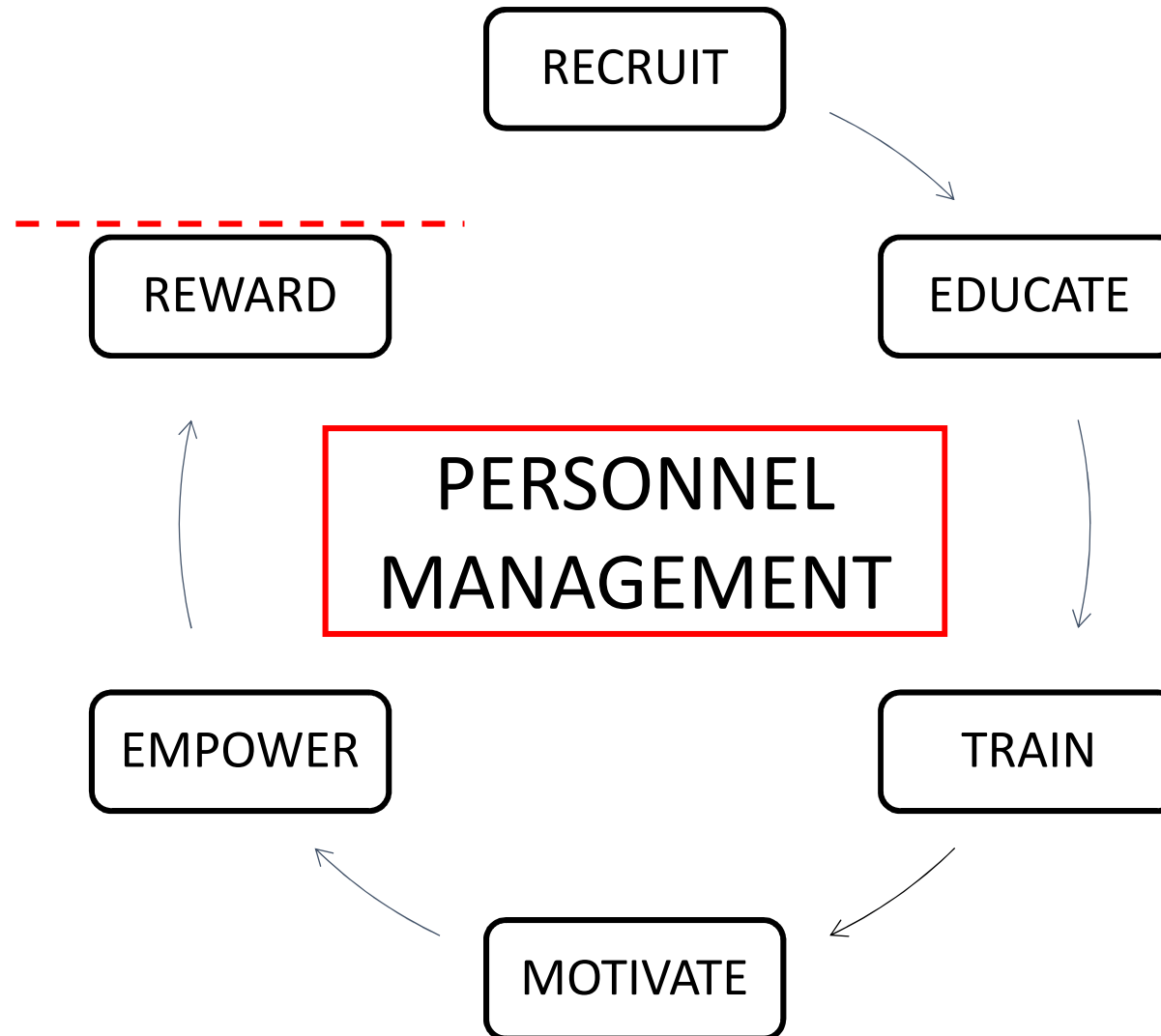
Carrie Barton

Sinnhuber Aquatic Research Laboratory

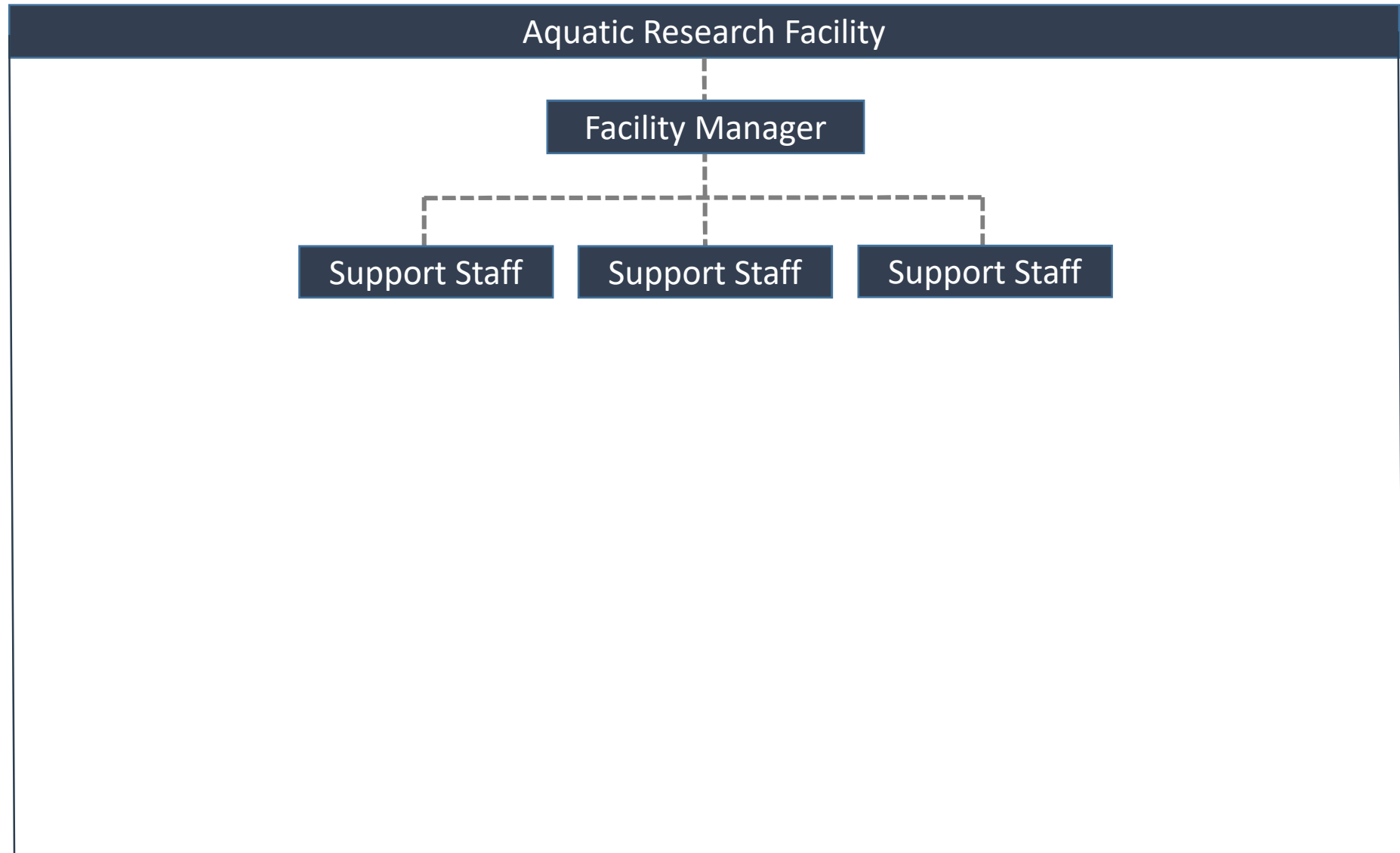


7<sup>th</sup> Annual International Zebrafish Husbandry Course  
Buguggiate, Italy 2018

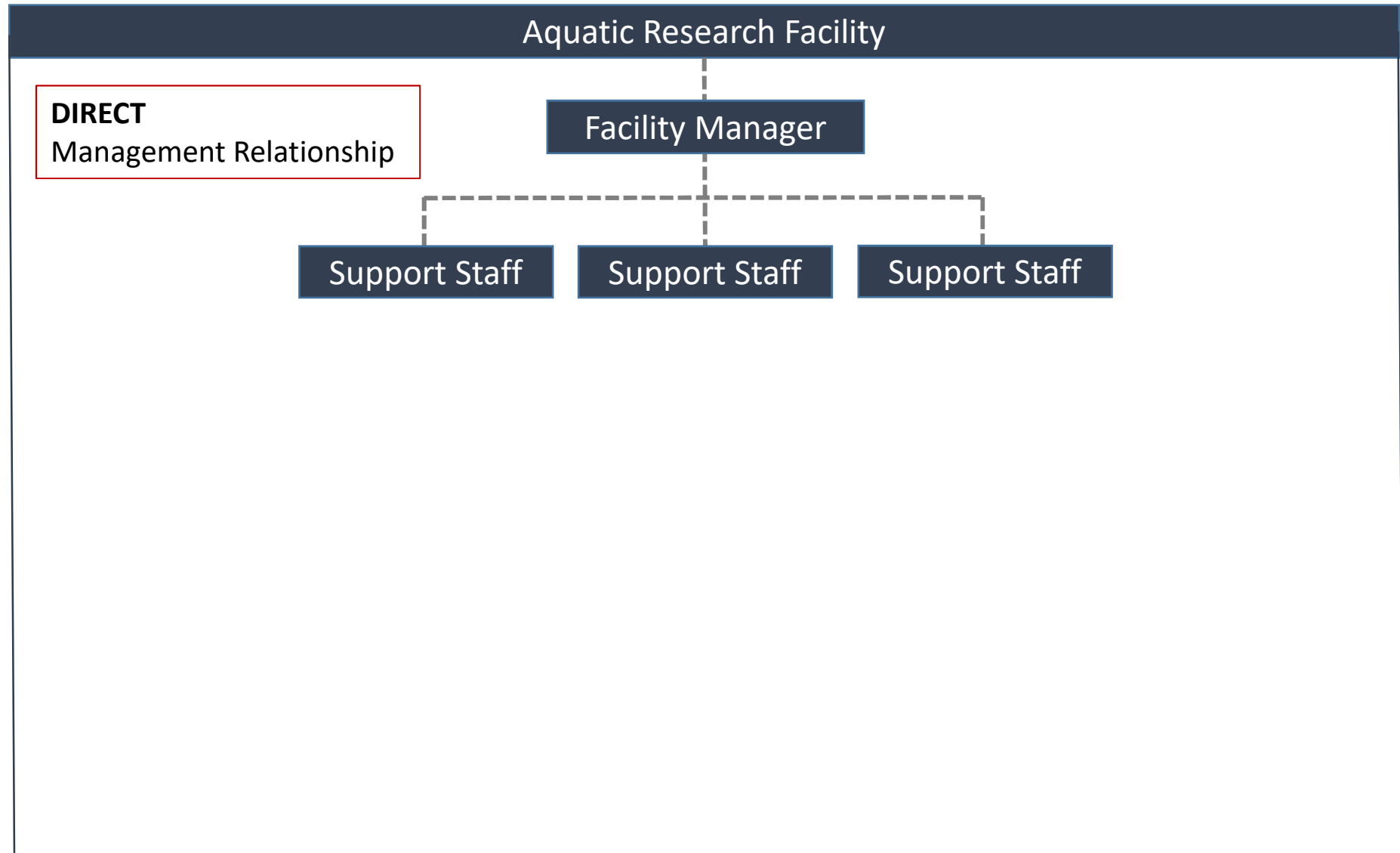
## Management Responsibilities and Goals



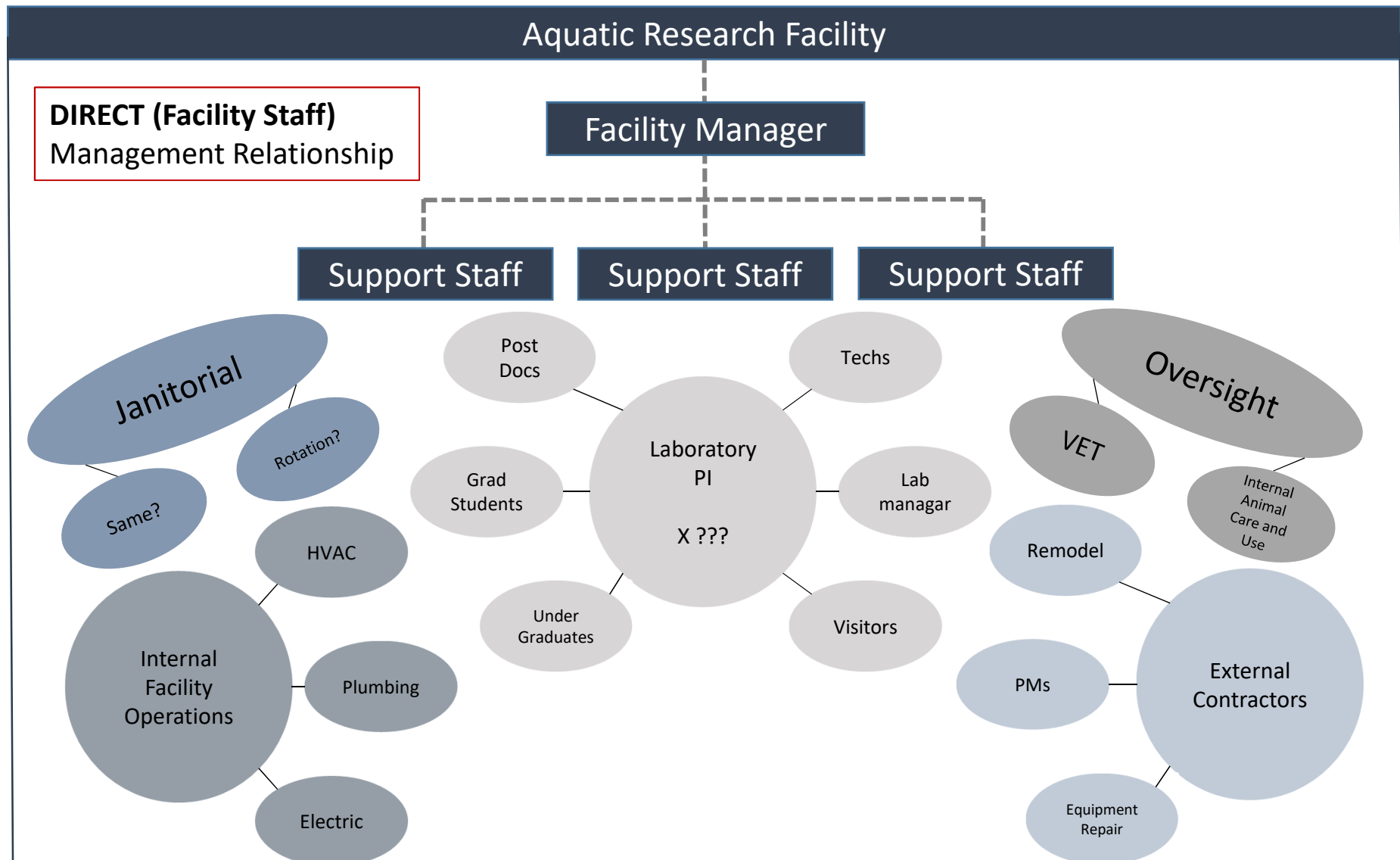
## Management Structure



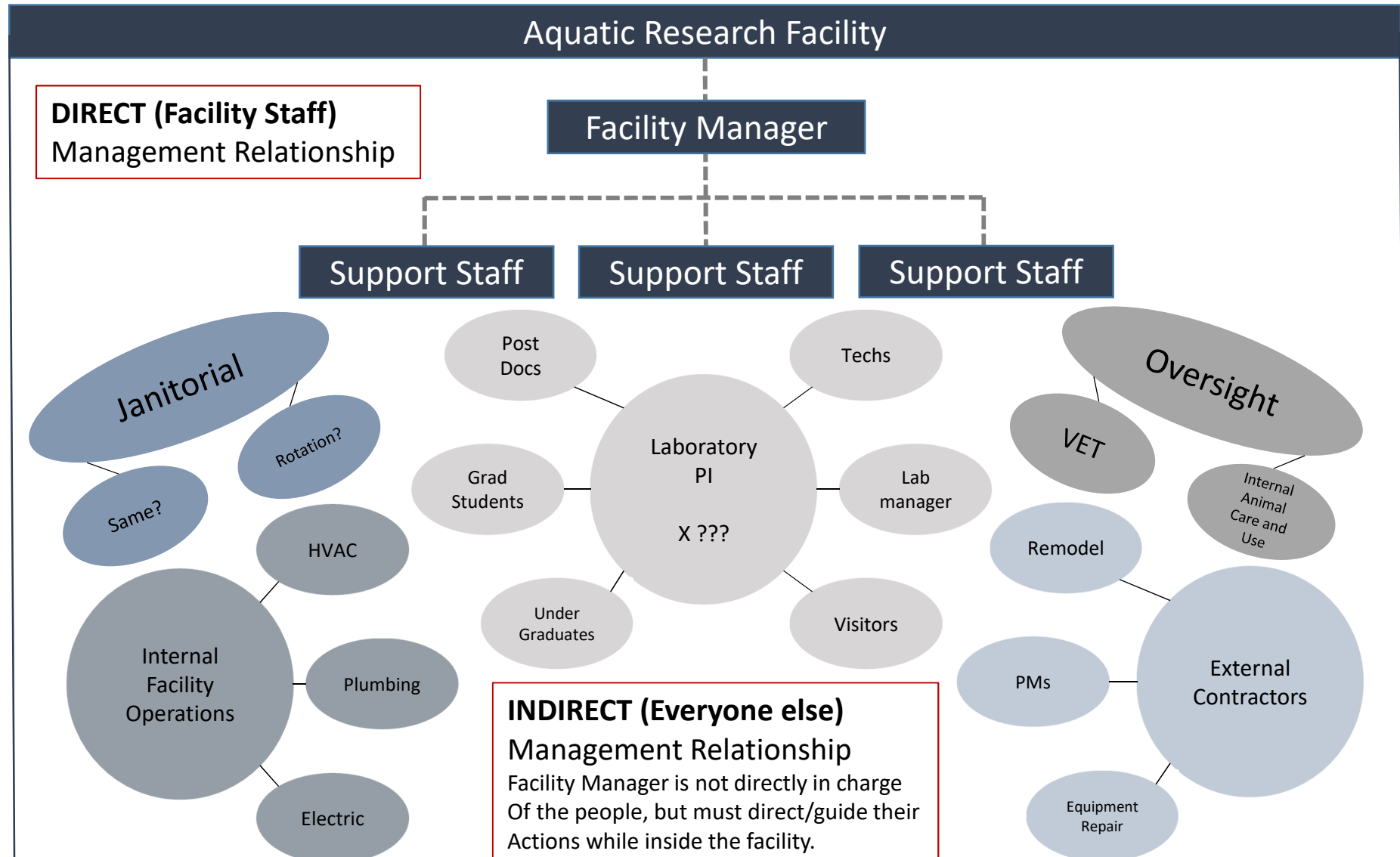
## Management Structure



# Management Structure



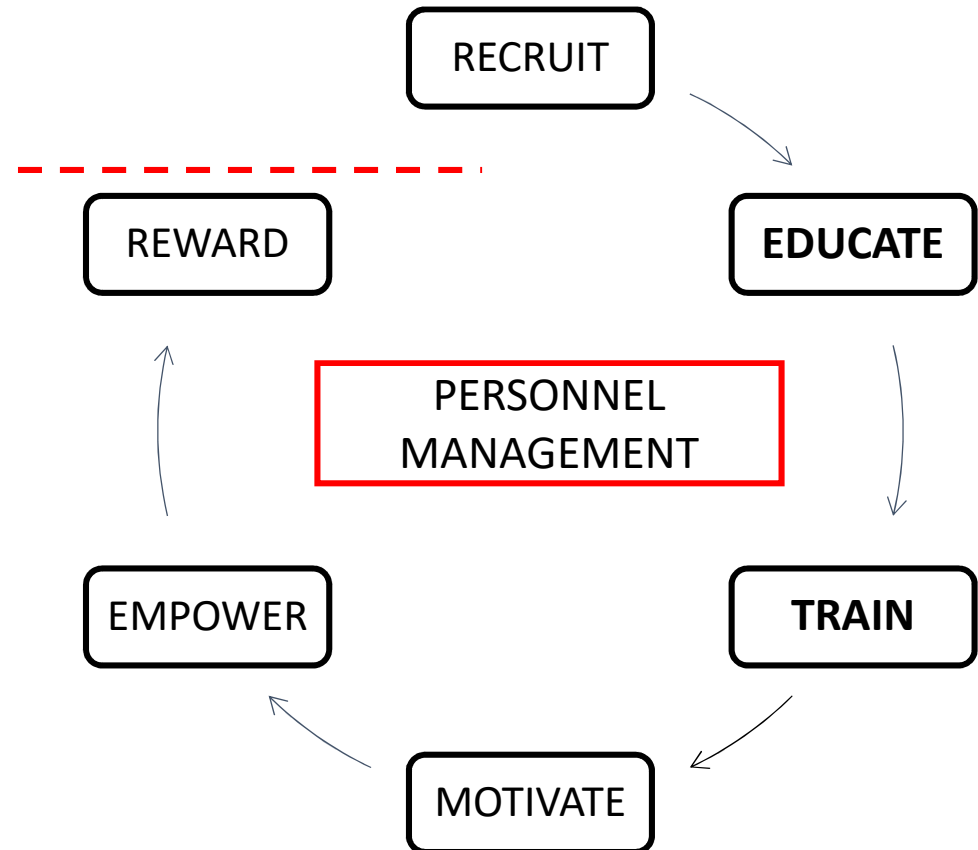
# Management Structure



## Education and Training – Facility Staff

Each group can impact the health,  
welfare,  
and function of the facility

Provide each user group with the  
tools necessary to function within  
the facility in the most appropriate  
manner



## Education and Training – Facility Staff

### Training is required for addition to Animal Care and Use Protocols

#### Theoretical

Animal handler training, lab safety, Zoonosis  
(classes, quizzes, videos)

*\*Institutional*

#### Practical *Onsite*

Hands on training for specific techniques, SOP's  
(real world exposure and training)

*\*Facility Managers and lead techs*

*\*\*PI's and Lab Managers*

#### **Facility Staff**

- Animal Technicians
- Faculty Research Assistants

#### **Researchers**

- PIs
- Grads
- Post Docs
- Lab staff

#### **External Contractors**

- Service
- Repair
- New Const.

#### **Internal Facility Operations**



## Education and Training – Facility Staff



Specific training is usually not required to perform maintenance in animal rooms

### Proactive Approach

Facility manager and technicians must educate all maintenance personnel on all important aspects of being in a fish room

- environmental condition
- entry policies
- back up needs

#### Facility Staff

- Animal Technicians
- Faculty Research Assistants

#### Researchers

- PIs
- Grads
- Post Docs
- Lab staff

#### External Contractors

- Service
- Repair
- New Const.

#### Internal Facility Operations

## SOP binders are available at facility entry point

*-Check in sheets can help track entry in the event of a problem*

### **Facility Staff**

- Animal Technicians
- Faculty Research Assistants

### **Researchers**

- PIs
- Grads
- Post Docs
- Lab staff

### **External Contractors**

- Service
- Repair
- New Const.

### **Internal Facility Operations**

- Facility entry guidelines
  - All animal care SOP's
  - Emergency contacts
  - ACUP's
- Facility entry guidelines
    - what tools can come in?
  - Facility maps
  - Environmental conditions
  - Emergency contacts

# Education and Training – Facility Staff

## Facility Staff

-Animal Technicians  
-Faculty Research Assistants

## Researchers

-PIs  
-Grads  
-Post Docs  
-Lab staff

## Individual Training Records

- Log sheet with all tasks
- Trainer initials
- SOP reference
- Date of initial training
- Date of scheduled follow up
- Trainee initials

Employee: \_\_\_\_\_  
Initial Training Date: \_\_\_\_\_

All employees are trained on the job. A task is marked complete when the employee shows sufficient competence to complete the task unsupervised. Employees may or may not be trained to complete all tasks listed below.

Initial Basic Training			
PROTOCOL	TRAINER(s)	Date	Initials
Biosecurity and Facility Access			
Zebrafish Euthanasia (Juvenile and Adult) and Carcass Disposal			
Facility Feeding Schedule and Instructions			
Fish Housing/Stocking Densities			
Tank Identification			
Room Sanitation			
Fish Room Daily Check and appropriate responses			
Daily Health Check and Tank Survey			
Quarantine Entrance Policy			
Quarantine Feeding, Health Checks, Sanitation			
PPE – Personal Protective Equipment			
Sharps Use and Disposal			
Potential Zoonotic Diseases			
Location of Safety Equipment			
Supplemental Training – Provided as Needed			
PROTOCOL	TRAINER (s)	Date	Initials
Food Production: Adult Flake and Juvenile Powder			
Food Production: Artemia (Brine Shrimp)			
Food Production: Artemia Decapsulation			
Food Inventory			
Zebrafish Line Maintenance			
Fish Spawning			
Tank and Equipment Sanitation			
Embryo Bleaching			
Zebrafish Anesthesia			
Monitoring Infectious Diseases (SPF testing) - Histology			
Monitoring Infectious Diseases (SPF testing) - PCR			
Shipping: Adult fish, Juvenile Fish, and Embryos			
3X Buffered Tricaine Solution Production			
Embryo Medium Production			
Anesthetized Procedure: Fin Clipping for Genotyping			
Water Quality Testing			
Water System Maintenance - All			
Water System Maintenance - FSI Filter change only			

# Education – It's not a one time event!

## Provide opportunities for continuing education and growth

Some employee classifications require continuing education credits while others do not.

It is important for all employees to experience growth within their position.

The screenshot shows the UAB Professional Studies website. The header includes the UAB logo and the tagline "Knowledge that will change your world". Below the header, there are navigation links for "COURSES", "SCHOOLS AND DEPARTMENTS", and "INFORMATION REQUEST". The main content area features the course title "OVPRED 500 - Zebrafish Husbandry Education Online Course" and a description: "This is an online course developed by The Zebrafish Husbandry Education Team of the Zebrafish Husbandry Association (ZHA) to teach state-of-the-art husbandry for zebrafish used in research. The 5 week course is delivered via a combination of..." There is an "Enroll Now - Select a section to enroll in" button and a table showing the course details: "OVPRED 500 - 005", "Calendar Year", "Totally online, Instructor-led", and "Full".

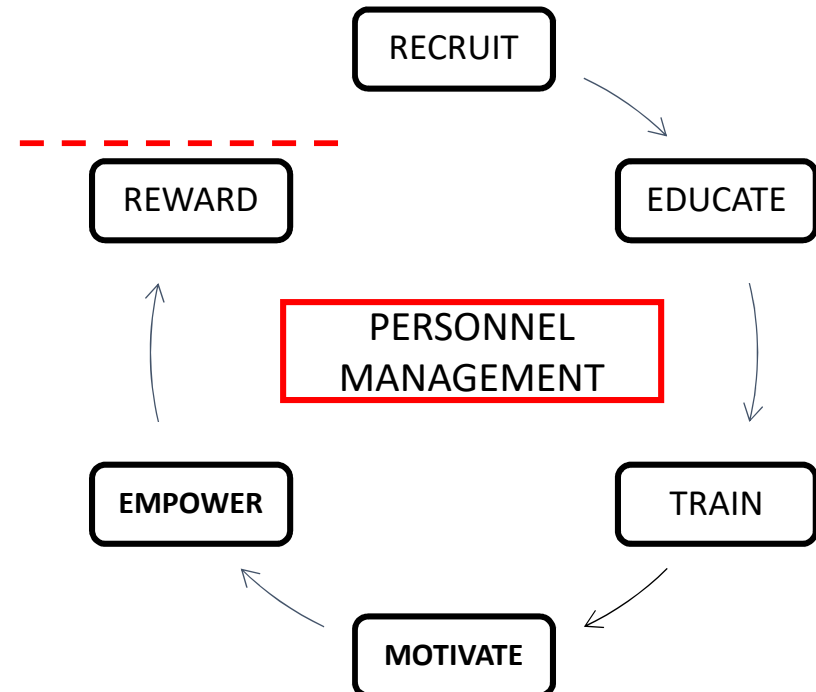
[Home](#) • [Education](#) • [Courses](#) • [Health and Colony Management of Laboratory Fish 2018](#)

### Health and Colony Management of Laboratory Fish 2018

A short course for principal investigators, technicians, trainees, core managers, veterinarians, and veterinary technicians who utilize or plan to utilize fish models in laboratory research.

August 12–17, 2018

Location: MDI Biological Laboratory ([travel information](#))



## Motivate and Empower

- **Create defined schedules that allow staff to self manage**
  - Distribute tasks equitably between staff members
- Use less desirable work to create team building opportunities



## Motivate and Empower

- Create defined schedules that allow staff to self manage
  - **Distribute tasks equitably between staff members**
- **Use less desirable work to create team building opportunities**



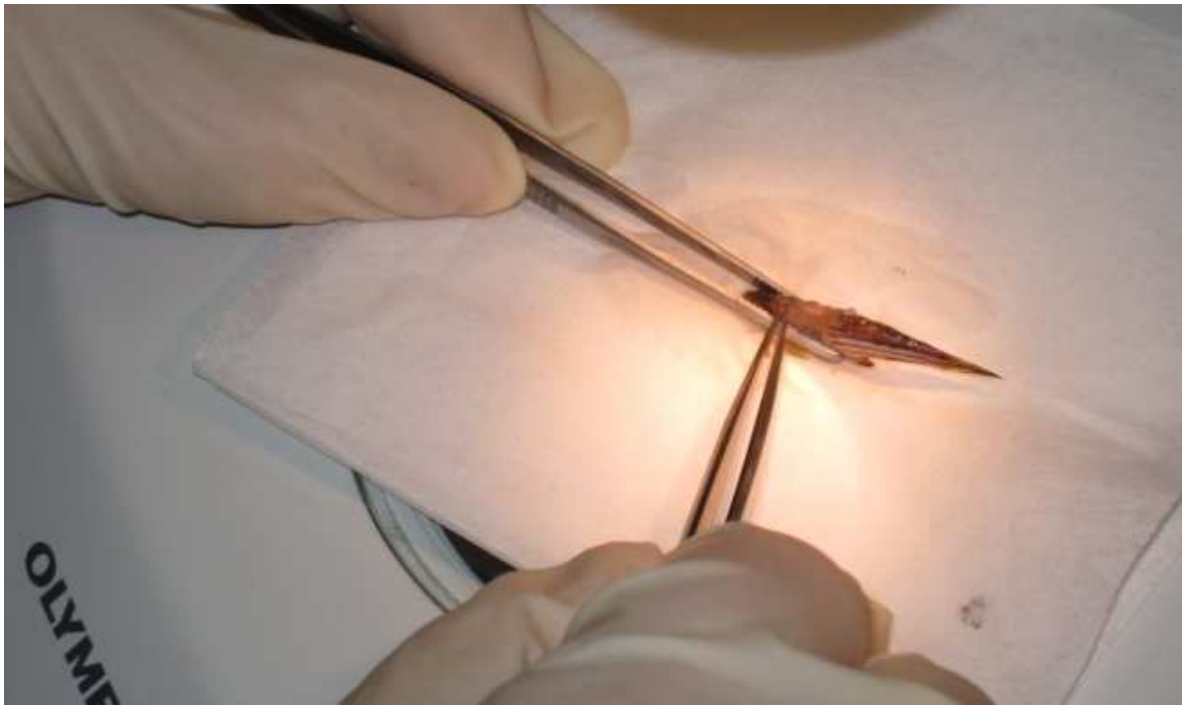
Ensure equitable contributions!  
Don't let one employee carry the team!



Even a super hero will experience burn out

Reward

- **Identify strengths and create specialty tasks within these areas**





## Team Approach





The chart, titled "Under Staffing", displays four data series from 2000 to 2019. The red line represents the highest values, followed by the blue line, the grey line, and the dark blue line represents the lowest values. All four series show a consistent upward trend over the 20-year period.

Year	Red Line (Approx.)	Blue Line (Approx.)	Grey Line (Approx.)	Dark Blue Line (Approx.)
2000	1.8	1.5	1.3	1.1
2005	1.6	1.4	1.2	1.0
2010	1.7	1.5	1.3	1.1
2015	1.9	1.7	1.5	1.3
2019	2.0	1.8	1.6	1.4

# How many people here are chronically understaffed??

## Negative impact of understaffing:

- Low work quality
- Employee stress level increases
- Missed growth opportunities



### **Protocol drift**

- how it happens
- how to identify it
- how to prevent or correct it

### **Fostering positive interactions between staff and investigators**

- developing a clear chain of command
- communication
- mutual understand of goals

### **Training**

- A thorough approach is key

New users should not just be theoretically trained and left to their own devices!!

**Three part approach:**

Step 1) Observe the procedure

Step 2) Perform the procedure under supervision

Step 3) Perform the procedure solo, but with help on sight to answer question if needed

## Protocol Drift

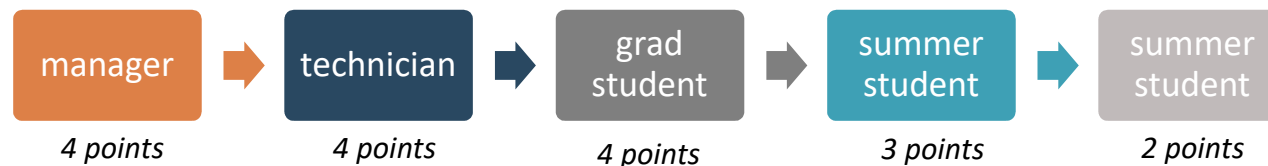
**Protocol drift** is the sometimes gradual change in how a protocol is performed, that ultimately results in an incorrect end result, or unfavorable side effects.

*Often done with the intention of saving time or simplifying a process*

**Example:** Technician A determines that it is faster to distribute dry feed when it is suspended in water and squirted into each tank with a bottle or pipette.

**Outcome:** Feed loses valuable nutrients before going into the tank, slowing growth rates and impacting larval survival.

Protocol drift can also occur when the training chain of command breaks down.



## Protocol Drift



### Finding protocol drift

- observe tasks
- scheduled and spontaneous observation times

### Avoiding protocol drift

- periodically review time given to do tasks – Is it realistic?
- regularly provide immediate feedback
- encourage open communication with and between staff members
- schedule time for training and retraining, and Q & A sessions
- accommodate different learning styles if needed
- provide tools to ensure compliance
- ensure all necessary equipment to do task correctly is present

# Protocol Drift



## Finding protocol drift

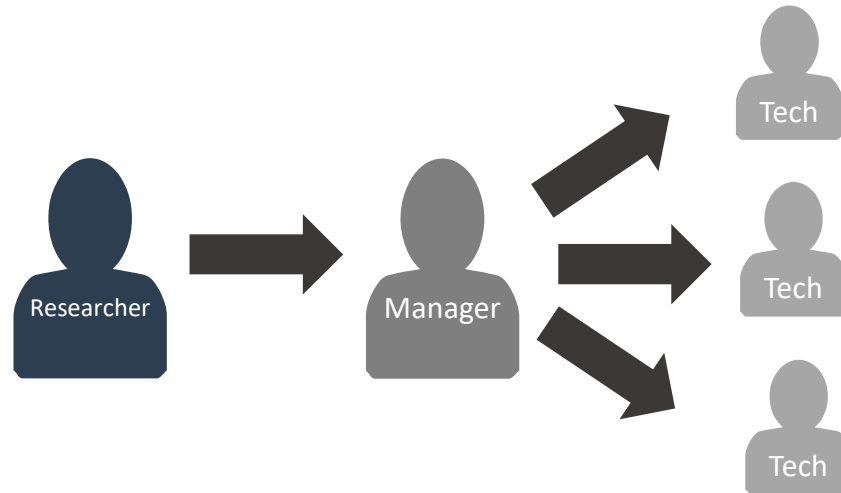
- observe tasks
- scheduled and spontaneous observation times

Managers have to ensure the resources and time are available to do the job!

## Avoiding protocol drift

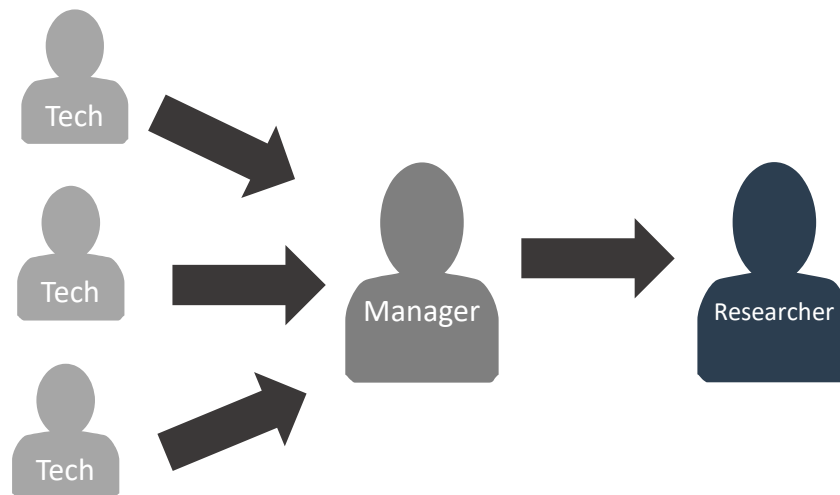
- periodically review time given to do tasks – Is it realistic?
- regularly provide immediate feedback
- encourage open communication with and between staff members
- schedule time for training and retraining, and Q & A sessions
- accommodate different learning styles if needed
- provide tools to ensure compliance
- ensure all necessary equipment to do task correctly is present

## Clear Chain of Command



**Who do researchers go to when they have a concern??**

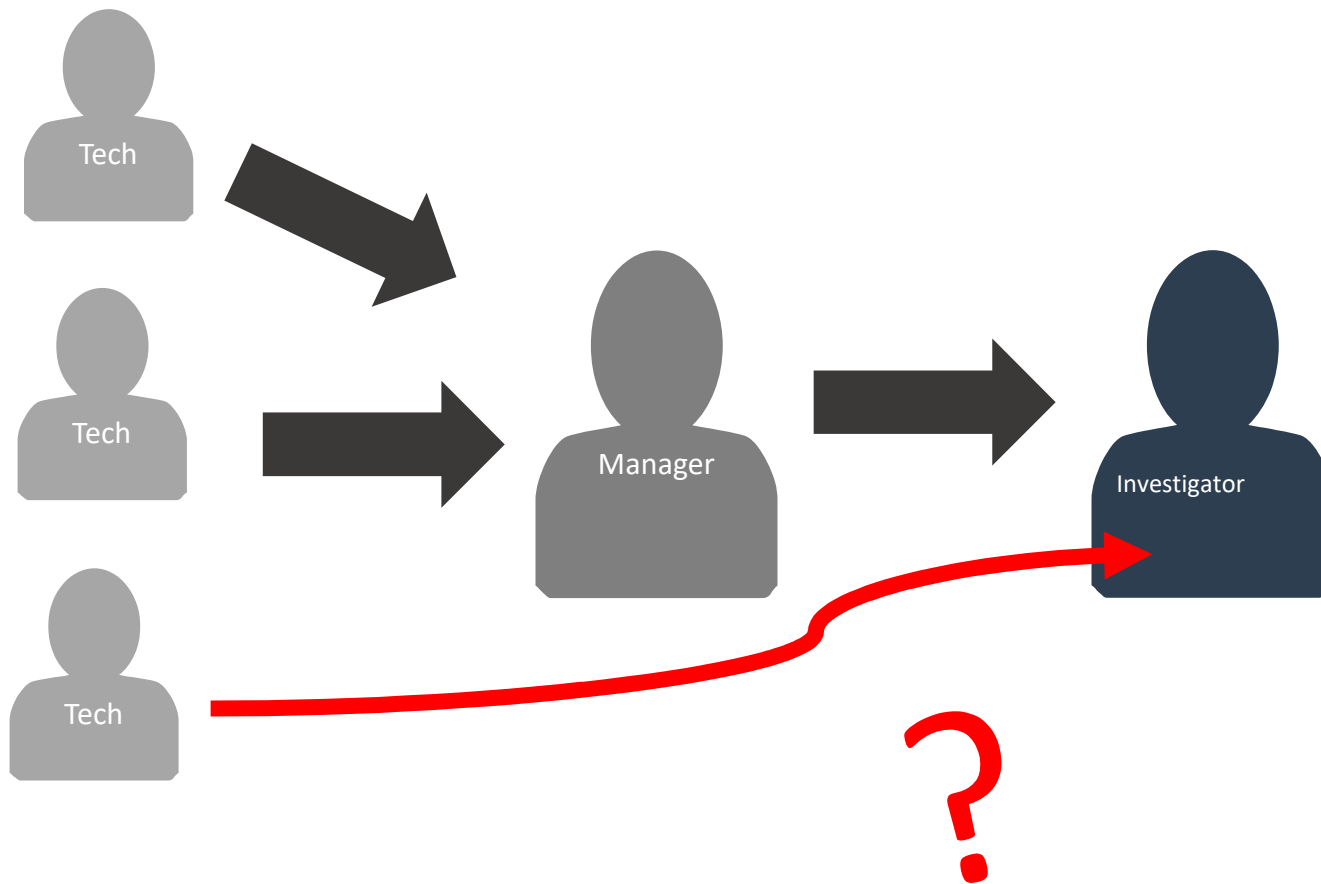
- Facility manager?
- Area manager?
- Lead Tech?



**Who does staff go to when they have a concern??**

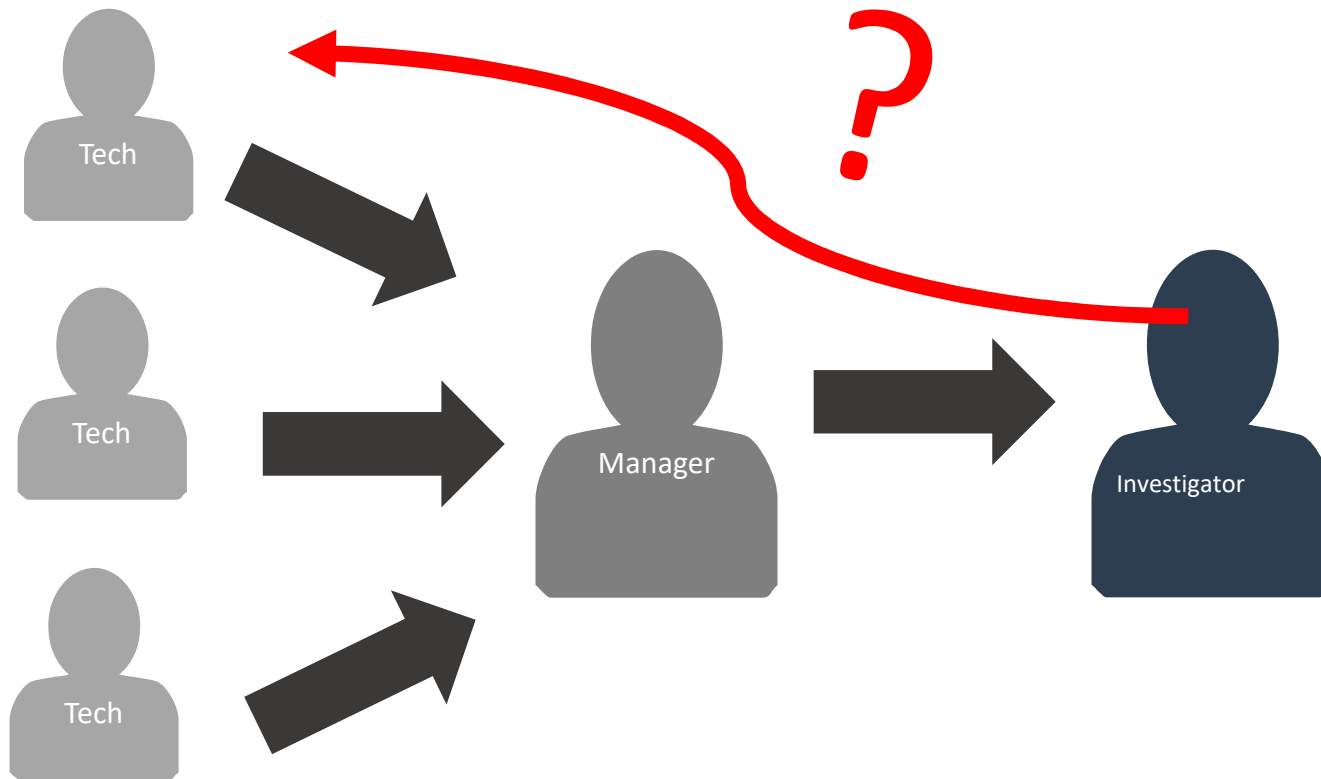
- Area Manager?
- Facility manager?

## Clear Chain of Command





## Clear Chain of Command



## Communication

Identify the most effective methods of transferring information and use it regularly:

- information board
- email lists
- tank postings
- daily team meetings





## Mutual Understanding of Goals

### Researcher Goals vs. Husbandry Staff Goals

Foster a mutual understanding that research can't happen without husbandry support staff and that support staff wouldn't be needed without the research.

- Invite researchers to give support staff a general overview of their work and goals.
- Create a binder of recent publications supported by the facility to leave in the break room.
- Invite researchers to husbandry or technique training opportunities
- Encourage communication between users and staff

# Thank You

