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# What makes an organization?

- Strategy
- Information
- Processes
- People
- Structure
- Culture

# Challenges

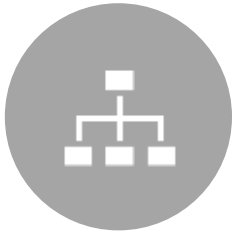
| | |
|---|---|
| Design across | Design across organizational boundaries |
| Engineer | Engineer processes into strategic capabilities |
| Develop | Develop individual competencies into a learning organization |
| Align | Align information technology with business strategy |
| Integrate | Integrate all the pieces |

# Mission of Higher Education

| | |
|---|---|
| Create | Create next generation of leaders |
| Center | Center of Excellence |
| Provide | Provide access to learning |
| Foster | Foster success and prosperity of each rising generation |
| Adapt | Adapt to changing times |

# College and Universities unique characteristics & challenges

DIVERSITY



HORIZONTAL DECISION STRUCTURES

TRADITION OF FACULTY AUTONOMY

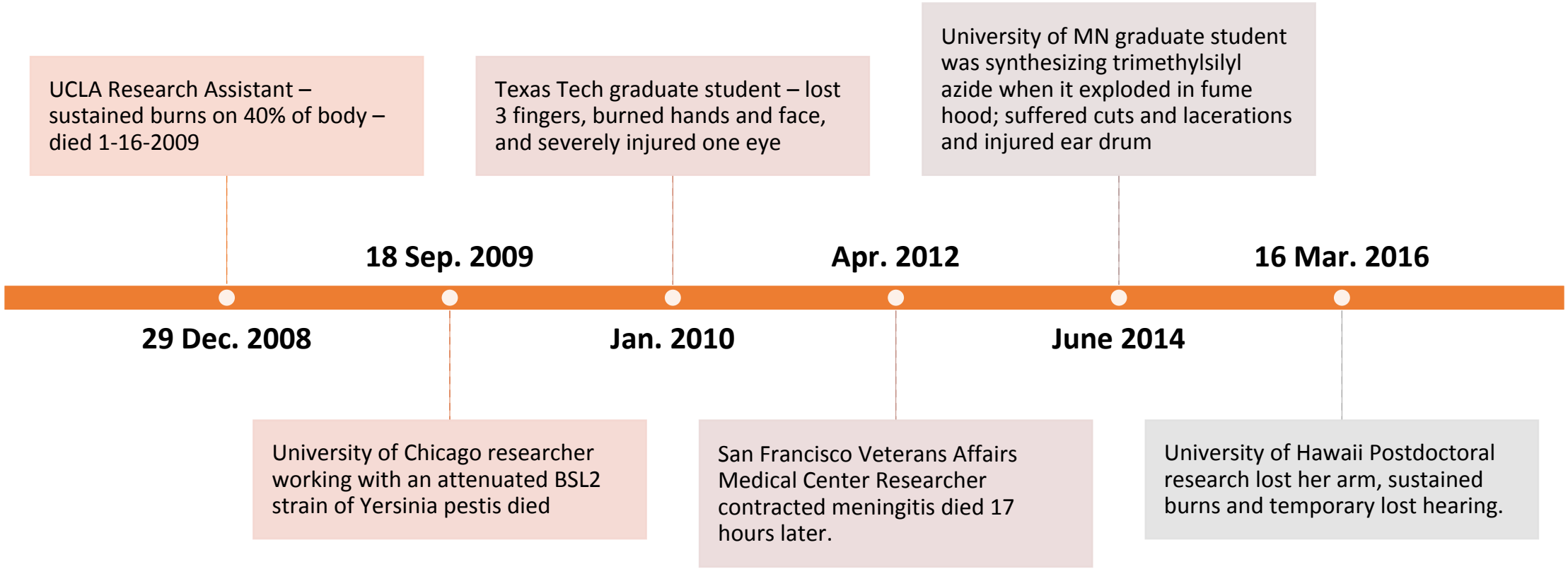
AUTHORITY

RESPONSIBILITY

# Innovative Environment

- Open-minded
- Sense of urgency
- Risk taking
- Perceptive
- Equal
- Nurturing/Safe
- Enabling
- Variety of thoughts/perspectives

# Call to action



# Three Cultures types of an Organization

- **Pathological** – power-oriented, information is guarded as personal resource
- **Bureaucratic** – heavily rule-oriented, information not welcome - or ignored
- **Generative** – performance-oriented, information welcomed and directed to the right person Generative culture allows for near-miss reporting, no blame, recognition of hazards

THE NATIONAL ACADEMIES
*Advisers to the Nation on Science, Engineering, and Medicine*

Generative cultures allows for near-miss reporting, open communication, no blame and best of all proactive recognition of hazards and elimination of those hazards

# Culture of Safety

- Core Value of Organization
- Safety is Everyone's responsibility – campus environment must support this and empower the community
- Good Science is Safe Science – Safety is a critical component of the scholarly excellence and responsible conduct of research.
- Safety training and safety education are essential elements of research and education.
- An investment in the future

# Why a Positive Safety Culture?

- More beneficial than a compliance only culture
- Core element of a successful organization.
- Leadership's commitment of resources drives safety as an unquestionable core value
- Positive use of resources:
  - Strong policies and expectations
  - Open communications
  - Sufficient incentives
  - Resources budgeting for safety

# Organizations succeed or fail as a whole

**Safety Culture Equation**

- Leadership
- Committee Structure
- Responsible Officials
- Culture
- Information systems

**Safety Culture = Leadership + organizational design(budget) + empowerment of the individual**

# EHS Organization must be a High-Performance Team

- Outperforms external standards
- Performs better than its potential
- Generates energy, excitement and enthusiasm
- Provide technical expertise
- Provide training
- Self audit the processes
- Manage the documentation
- Manage the regulators
- Recognize and reward successes

# What is an EHS organization's role and Message to the Organization?

***The anticipation, recognition, evaluation and control of the work environment to ensure a safe and healthy workplace and protect the environment for our employees  and communities.***

- EHS department is a collaborator
- EHS department recognizes and appreciates other unit's contributions to the health and safety program
- EHS department has a management system which guides the work

# Environment, Health & Safety

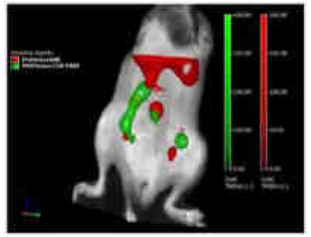
- Provides comprehensive environmental, health & safety services to the University community through education, training & consultation.
- Supports maintaining a safe environment through recognizing and controlling health and safety hazards.
- Maintains an EHS Management System.

## Mission of the Organization

- Providing a safe workplace
- Ensuring a process of compliance
- Minimizing future potential liabilities

# EHS Group Functions

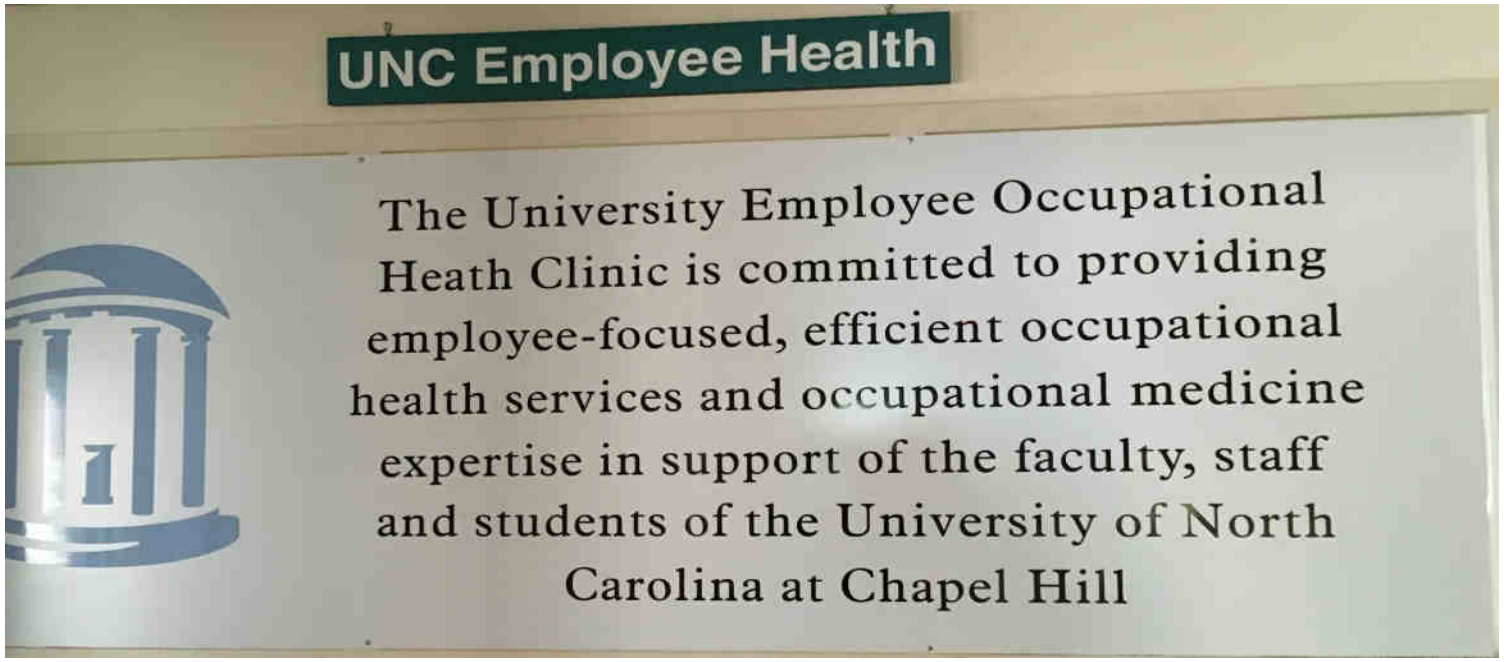
- Chemical  Safety
- Biological Safety
- Radiation Safety
- Environmental Affairs
- Fire Safety & Emergency Response
- Occupational Hygiene
- Workplace Safety
- University Employee Occupational Health Clinic



With the breadth and depth of UNC research always expanding, the process of EHS compliance management is ongoing and ever changing, requiring a robust and adaptive management system. In 2019, the department continued its emphasis on an integrated management system for the University's environment, health, and safety compliance programs. This effort was designed to ensure continuous improvements by incorporating a process of ongoing monitoring, reviews, and revisions of procedures and policies through the use of the Plan - Do - Check - Act (PDCA) model. Just as a circle has no end, the Plan - Do - Check - Act cycle is a four-step process model for carrying out change, cycling through each step for continuous improvement.

# Also Known as the C Department

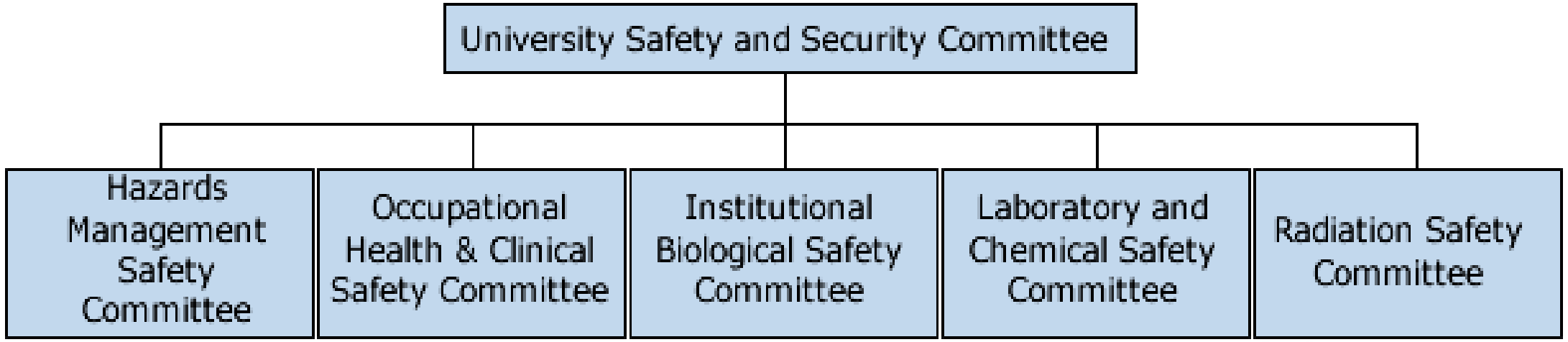
- Customer Service
- Collaboration
- Communication
- Compliance
- Compassionate
- Complaint department



# Plan Do Check Act

| PDCA | Integrated Management System | UNC EHS Management System |
|---|---|---|
| Plan | Objectives<br>Targets | Goals<br>Objectives<br>Work plans<br>Program development |
| Do | Implementation and Operations | Training<br>Communications<br>Consultation<br>Outreach<br>Lab Safety and Hazard Management Plans<br>Emergency response |
| Check | Checking | CLIP inspections<br>HMP inspections<br>Monthly reports<br>Annual reports<br>Performance reviews |
| Act | Corrective and Preventive Actions | Policy & procedure adoption<br>Strategic planning process |

# University Health and Safety Committees




State regulations require every state agency (including universities) to create health and safety committees to perform workplace inspections, review injury and illness records, make advisory recommendations to the administration, and perform other functions determined by the State Personnel Commission to be necessary for the effective implementation of the State Workplace Requirement Program.

# Responsibility For Lab Safety

- Employee/Lab Researcher
- Principal Investigator
- Department and/or School
- Environment, Health & Safety
- Workplace Safety Committees
  - University Safety & Security Committee
    - Institutional Biosafety Committee (IBC)
    - Laboratory & Chemical Safety Committee (LCSC)
    - Radiation Safety Committee (RSC)

# PI Responsibilities

**Ensure a safe working environment for employees**

Compliance with University Chemical Hygiene Plan

- Laboratory Safety Manual
- Laboratory Safety Plan (specific to PI)

Provide training

Provide Personal Protective Equipment (PPE)

Report workplace injuries & near misses

# Employee/Lab Researcher Responsibilities

| | |
|---|---|
| Know | Know safety hazard before you start working with something |
| Wear | Always wear proper personal protective equipment |
| Don’t work | Don’t work alone |
| Ask | Ask when you don’t understand something |
| Report | Report near misses, accidents and injuries to supervisor |

# EHS Requirements

# Training

## All lab workers:

- Lab Safety Orientation (one-time)
- Lab Safety Plan Review

## Laboratory specific trainings

- Radiation
- Blood Borne Pathogen
- BSL2
- Formaldehyde
- X-ray
- Laser
- Shipping/Export

# Forms

## Lab/Rad Worker Registration Form

- Required of all lab workers on campus
- Lab workers register under a PI
- Lab worker identifies what they will be working with which initiates training requirements

## Lab Safety Plan

- PI/Lab Director responsible for completion
- Details specific hazards and lab safety practices in lab

## Other Forms

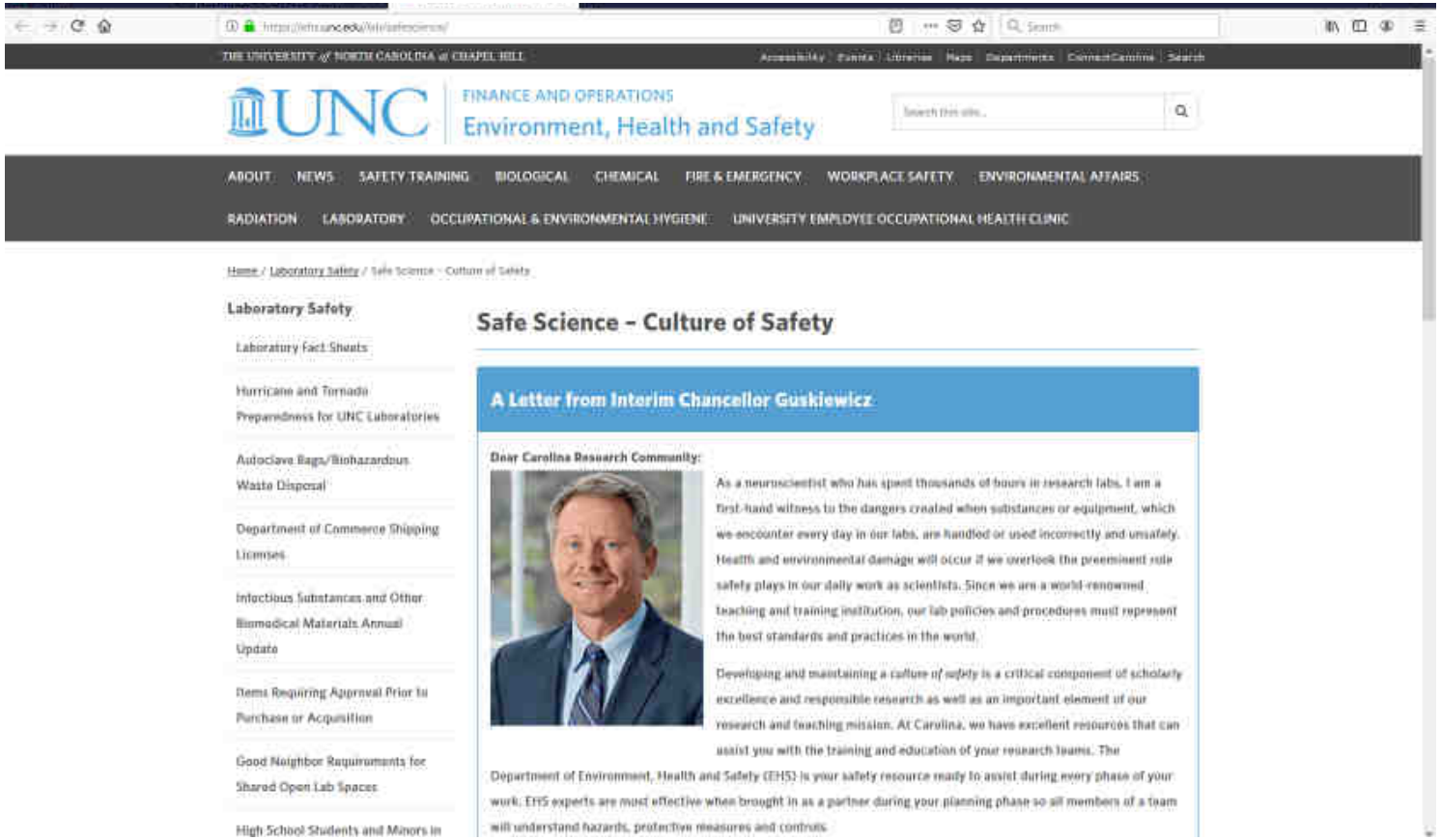
- IBC – Institutional Biosafety Committee
  - Schedule G (Recombinant DNA)
  - Schedule H (Use of Transgenic Animals or Plants)
  - Human Gene Transfer Experiments
- IACUC
  - Use of Hazardous Chemicals in Animals
  - Use of Biological Hazards in Animals
  - Use of Radioactive Materials in Animals
- Shipping and Export

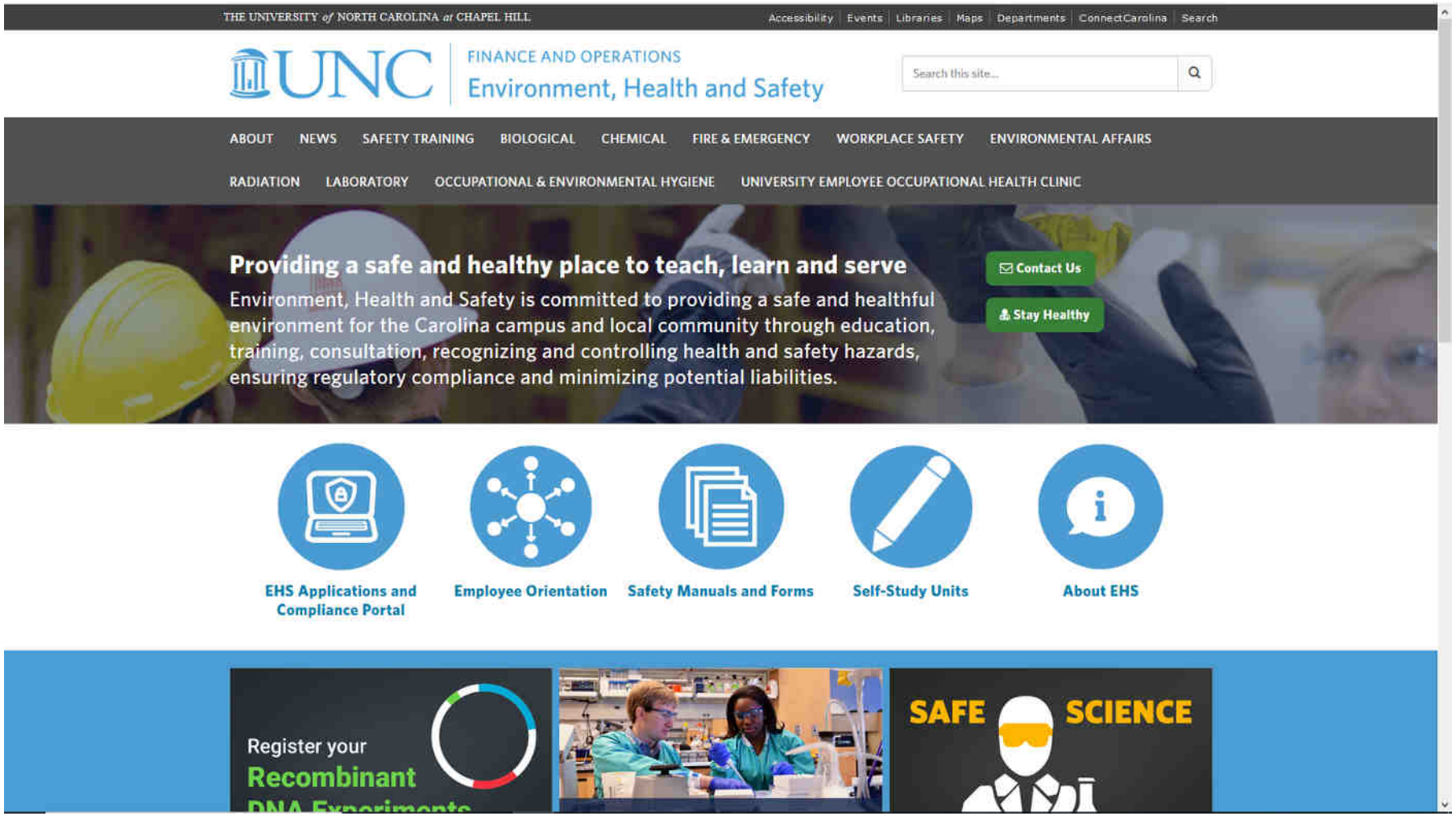
# UNC-CH SAFETY POLICY

- The University of North Carolina at Chapel Hill (UNC-CH) is committed to providing a safe and healthful environment for all persons associated with the University, including faculty, staff, students, visitors, and members of the Chapel Hill community.
- The University emphasizes an integrated systems approach, as well as safety education and training as the primary means of achieving this goal.
- The Environment, Health and Safety department is primarily responsible for environment, health and safety functions at the University, by developing EHS programs and performing various periodic inspections.
- **Department heads, faculty members, and supervisors are considered directly responsible for maintaining full compliance with State and Federal regulations and University safety policies and procedures.**

# Safe Science – Culture of Safety

**http://ehs.unc.edu/lab/safescience/**

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LABORATORY
OCCUPATIONAL & ENVIRONMENTAL HYGIENE
UNIVERSITY EMPLOYEE OCCUPATIONAL HEALTH CLINIC
Providing a safe and healthy place to teach, learn and serve
Environment, Health and Safety is committed to providing a safe and healthful environment for the Carolina campus and local community through education, training, consultation, recognizing and controlling health and safety hazards, ensuring regulatory compliance and minimizing potential liabilities.
Contact Us
Stay Healthy
EHS Applications and Compliance Portal
Employee Orientation
Safety Manuals and Forms
Self-Study Units
About EHS
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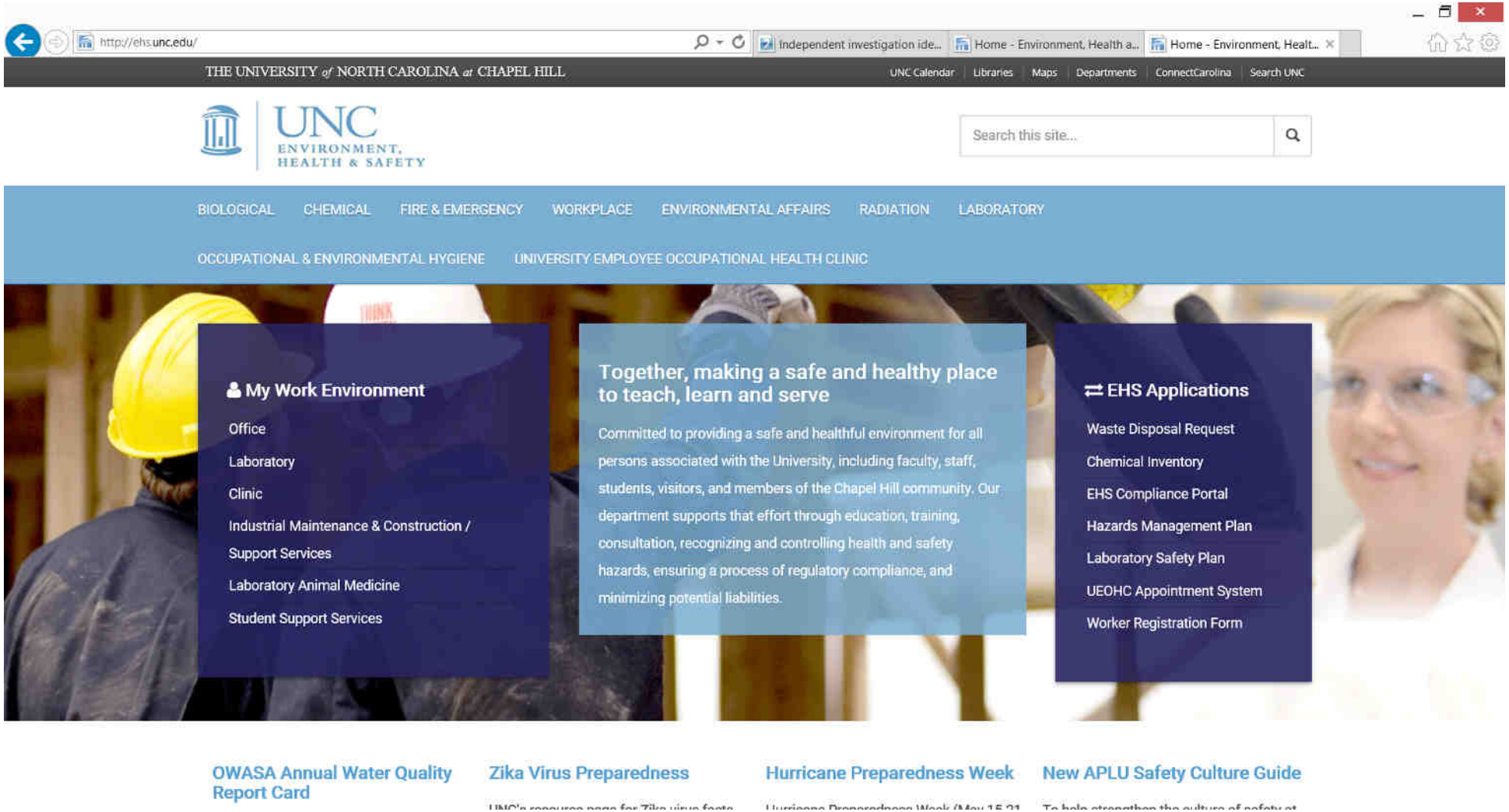
# Resources – UNC-CH ehs.unc.edu

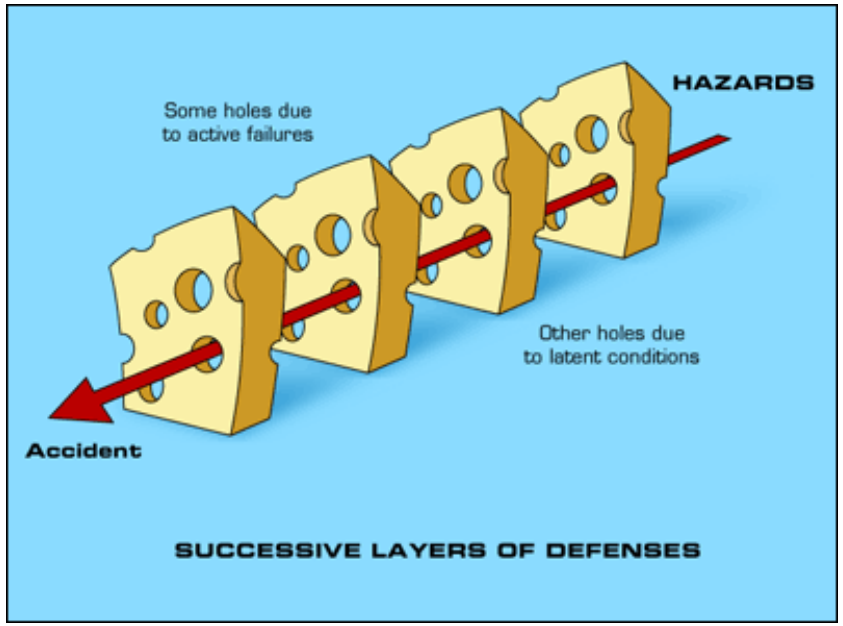


# 11 Questions to Measure a Safe Workplace

- Do I know what is expected of me to work safely?
- Do I have the materials and protective equipment I need to do my work safely?
- At work, do I have the opportunity to do what I do best every day in a safe environment?
- In the last seven days, have I received recognition or praise for doing a safe job or assignment?
- Does my supervisor, or someone at work, seem to care about me as a person?
- Is there someone at work who encourages my development and safety involvement?
- At work, do I share my safety concerns and do my opinions seem to count?
- Does the mission/purpose of my company make me feel my job is safe and important?
- Are my co-workers committed to doing quality,  safe work?
- In the past six months, has someone at work talked to me about my safety performance?
- This last year, have I had opportunities at work to learn and grow in the areas of Safety and Compliance?

# Accident Causation

- Reason's Swiss Cheese Model
  - Cheese Layer = Safety layers (system defenses) capable of preventing incident
  - Holes = Gaps within each system where failure could occur




- If failures align then an incident or accident will occur!

# I CHOSE TO LOOK THE OTHER WAY
## author unknown

I chose to look the other way.
I could have saved a life that day.
But I chose to look the other way.

It wasn't that I didn't care.
I had the time, and I was there.
But, I didn't want to seem a fool.
Or argue over a safety rule.

I knew he'd done the job before.
If I spoke up, he might get sore.
The chances didn't seem that bad.
I'd done the same, and he knew I had.

So I shook my head and walked on by.
He knew the risks as well as I
He took the chance, I closed my eye.
And that act, I let him die.

I could have saved a life that day.
But I chose to look the other way.

Now every time I see his wife.
I'll know, I should have saved his life.
That guilt is something I must bear.
But it isn't something you need to share.

If you see a risk that others take.
That puts their health or life at stake.
The question asked, or thing to say.
Could help them live another day.

If you see a risk and walk away
Then I hope you never have to say
I could have saved a life that day.
But I chose to look the other way.