

# Challenges of Peer Review: An Ethical Approach

This presentation will cover a broad overview of the research and submission process, types of peer review, paper mills and other key challenges to achieving ethical peer review, and some solutions our association has developed to overcome these challenges.



American Society  
of Agronomy

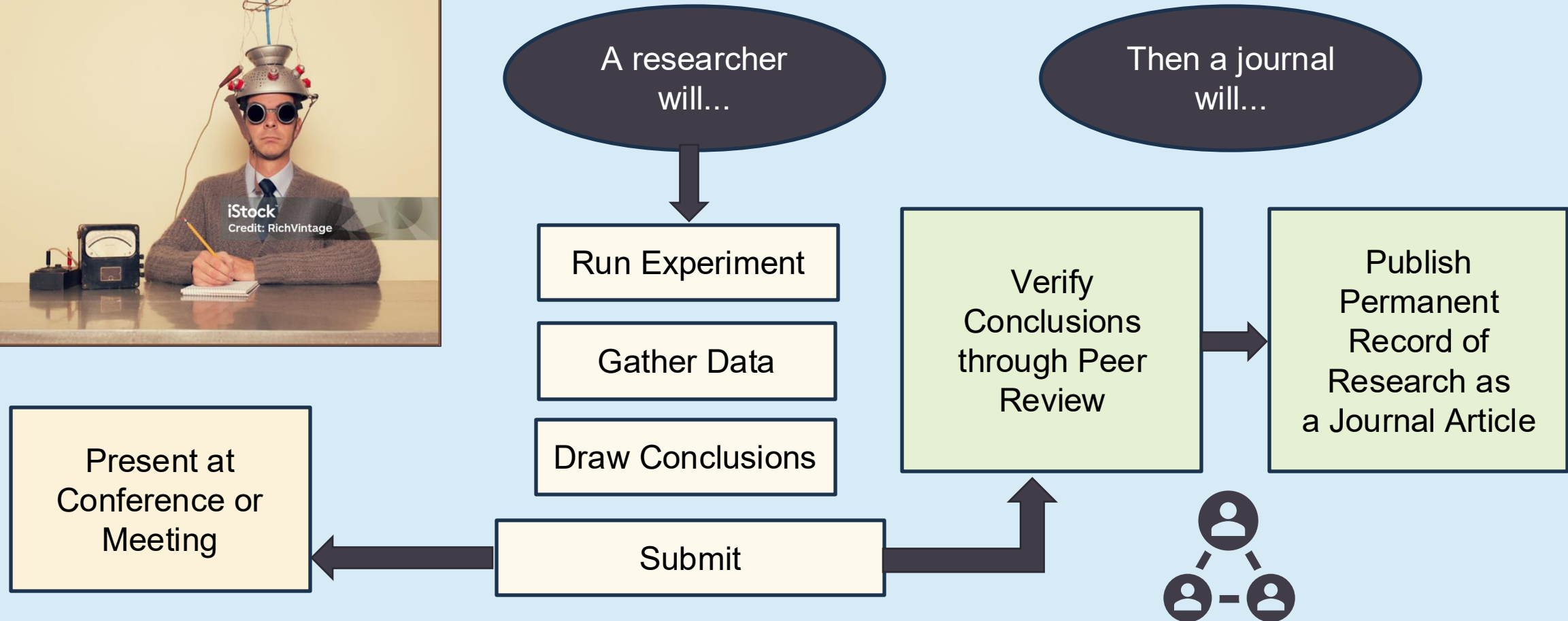


Crop Science  
Society of America



Soil Science  
Society of America

# Peer Review: An Ethical Approach



# Types of Peer Review

- Open
- Single Anonymous
- Double Anonymous
- Triple Anonymous



# Peer Review Problem: Paper Mills



"Cookie Factory" by timshortt is licensed under [CC BY-SA 2.0](#).

- Profit-oriented
- Potentially illegal organizations
- Sell and produce fraudulent manuscripts
- May also handle submitting the article(s)
- Usually produce large outputs at scale
- May be similar in layout, approach, and have similar images or figures.



American Society  
of Agronomy



Crop Science  
Society of America



Soil Science  
Society of America



# Ethical Peer Review: What's the Point?

## Potential Consequences

- Conflict of Interest
- Replication in real world
- Retractions
- Ethical investigations



American Society  
of Agronomy



Crop Science  
Society of America



Soil Science  
Society of America

# A Peer Review Problem

- Finding peer reviewers is a perennial challenge
- Researchers have less time
- Tendency to re-use reviewers
- Younger researchers lack confidence and experience



## Solution

**Focus on training early career professionals**

# Peer Review Workshop

- Two-hour workshop teaches how to review submissions
- Workshop requires completion of pre-workshop exercise
- Learn the role and responsibilities of a peer reviewer
- Receive personalized instruction from a team of experienced researchers and authors
- Work with a group of individuals with similar backgrounds to gain skills to become a confident reviewer

## At Completion

**Participants are often ready for  
our mentorship program**

# Peer Review Mentorship Program

- Targeted program educating early career professionals and PhD candidates
- Selective 6-month training program
- Connect with an experienced mentor
- Work virtually and at a custom pace
- Peer review an unpublished paper as capstone

## Outcome

**Enroll with journal as a peer reviewer and receive recognition**



American Society  
of Agronomy



Crop Science  
Society of America

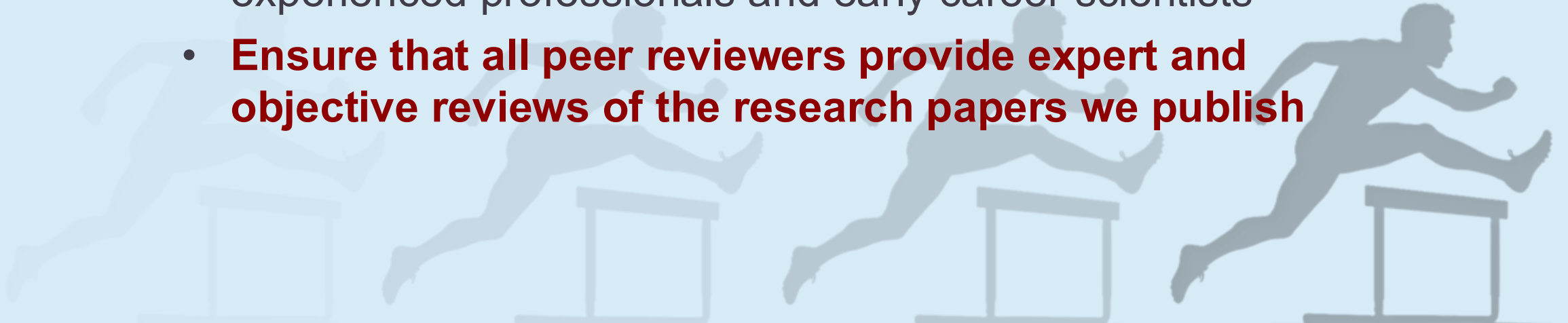


Soil Science  
Society of America



# What is our long-term goal?

- **Grow and diversify** the pool of reviewers
- **Provide opportunities** for young professionals
- **Provide pathways** for individuals to remain involved with the scientific community and our Societies
- Help **foster valuable professional relationships** between experienced professionals and early career scientists
- **Ensure that all peer reviewers provide expert and objective reviews of the research papers we publish**



American Society  
of Agronomy



Crop Science  
Society of America



Soil Science  
Society of America