

# RESEARCHER/EDUCATOR

## JOB DESCRIPTION

Most research scientists in arboriculture are employed as professors at universities, although some work for commercial firms or arboreta. Fields of study vary, but some of the common disciplines are arboriculture, urban forestry, plant physiology, horticulture, entomology, and plant pathology. By examining trees scientifically, researchers find better ways for caring for trees. Many professors also teach undergraduate and graduate classes in various subjects within their field of study. Most present workshops for professionals and speak at conferences.

## TYPICAL BACKGROUND

With few exceptions, most research professors have obtained a Ph.D. It is also common for these individuals to have worked in various aspects of arboriculture as they were working toward their graduate degree.

## ELIGIBILITY REQUIREMENTS

Most research professors have a Ph.D. Some college-level educators have a master's degree. At least two years of practical experience is desired.



## EDUCATION/TRAINING NEEDS

- Tree identification
- Hazard tree recognition and assessment skills
- Protection of trees on construction sites
- Computer skills using spreadsheets, word processing, and data bases
- Proficiency in statistical analysis
- Teaching proficiency
- Pruning principals and techniques
- Public communication skills
- Strong organizational skills
- ANSI A300 Standards
- Transplanting of trees
- Diagnostic skills

## EDUCATION TRAINING MATERIALS

- ANSI A300 Standards
- Best Management Practices series
- *Arboriculture* by Harris, et al
- *ISA: A Photographic Guide to the Evaluation of Hazard Trees in Urban Areas*
- *ISA: Trees and Development*
- *ISA: Arboriculture and the Law*
- *ISA/ASCA: Guide to Report Writing*
- *ISA: Arborists' Certification Study Guide*
- *Diseases of Trees and Shrubs*
- *Insects That Feed on Trees and Shrubs*
- *Journal of Arboriculture*

## CERTIFICATIONS/LICENSES

Certified arborist and a pesticide applicator license are helpful, but rarely required.

## TYPICAL FUTURE CAREER PATHS

Researchers/educators often stay at this level for their entire career. Some may become involved as department chairs or in college administration. Many also do consulting on the side. Some may author books, and many devote time to speaking at seminars.