



Virginia Polytechnic Institute and State University Proposal Cover Sheet

PROPOSAL INFORMATION

Virginia Winegrowers Advisory Board

Sponsor

Solicitation No.

Viticulture Extension-Research Assistant

Proposal Title

\$38,964

Amount

7/1/04

Begin Date

6/30/05

End Date

☐ New or

☒ Renewal of 447110

PRINCIPAL INVESTIGATOR(S)

Tony K. Wolf

Principal Investigator

Co-Principal Investigator

Co-Principal Investigator

Signature

Signature

Signature

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Professor

PI Title

Co-PI Title

Co-PI Title

AHS Jr AREC

Department / Center

Department / Center

Department / Center

INSTITUTIONAL INFORMATION

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David W. Richardson

Director of Sponsored Programs

3-30-04

Date

04-1906-03

VT Proposal No.

A proposal submitted to:

Virginia Winegrowers Advisory Board

VITICULTURE EXTENSION-RESEARCH ASSISTANT

Principal Investigator:

Dr. Tony K. Wolf

Professor

AHS Agricultural Research and Extension Center

Virginia Tech

595 Laurel Grove Rd., Winchester VA 22602

Tel: 540-869-2560 (Fax: 540-869-0862)

Start date: 1 July 2004

Amount requested: \$38,964 (current year)

Title: Viticulture Extension-Research Assistant

Date: 1 July 2004

Duration: One year

Objectives:

- 1) To provide extension assistance to both beginning and advanced grape producers beyond that afforded by the Principal Investigator (PI) or by Virginia Cooperative Extension (VCE) agents.
- 2) To assist with and independently conduct viticulture research projects at the AHS Jr. AREC, Winchester and/or at cooperating vineyards

Justification/Practical Importance:

The continued, positive growth of the Virginia grape and wine industry has greatly increased the demand for grape production information, problem diagnosis, fertilizer and pest-management recommendations, as well as on-site assistance with site evaluation and trouble-shooting. These demands far exceed the extension time resources of the PI, Tony Wolf.

Grape production information is provided in bulletin and book form (Mid-Atlantic Winegrape Growers Guide [1996] – *currently undergoing revision*), through semi-annual “Beginners” shortcourses (*team-taught with colleagues in MD and PA*), newsletters (Viticulture Notes and GrapeNews), and through personal consultation with the PI and his assistant. Much of this information is now web-based and the newsletters are electronically distributed. Additionally, many Virginia Cooperative Extension (VCE) agents provide direct assistance to growers. Extension agents, however, have a tremendous diversity of demands on their time, and very few have the time to acquire more than a basic knowledge of vineyard practices. Thus, it is unrealistic to think that all VCE agents will have time to absorb the more technical aspects of grape production to the point where they can relate that information to new and experienced growers. Unfortunately, the economic conditions of the last several years have led to the early retirement of over 25% of the experienced VCE agents, including several with commercial horticulture responsibilities.

The Virginia Winegrowers Advisory Board strategic planning session, conducted as part of the Virginia Vineyards Association’s 2002 annual technical conference, generated multiple suggestions that additional viticultural, technical assistance was needed. Thus, the Viticulture Extension-Research Assistant has been instrumental in meeting the specific needs of new and existing grape growers. This service has become even more important with the increased administrative tasks required of the PI.

Background:

The PI originally proposed a Viticulture Extension Assistant to the VWAB in 1996 and, with the Board’s funding, four different individuals have filled that position from July 1996 through June 2004. The extension responsibilities of the Assistant have been to:

- 1) Provide basic viticulture information to individuals who inquire about opportunities in the Virginia wine industry.
- 2) Meet on-site, and in concert with VCE agents where feasible, to advise clients on site suitability, vineyard design, and other aspects of vineyard establishment and maintenance.
- 3) Diagnose routine vineyard pest and nutritional problems.
- 4) Assist Viticulturist (PI) with newsletter production and mailing, and assist with other educational media (e.g., WWW site, graphic presentations, etc.).
- 5) Provide logistical support and arrangements with shortcourse development and conduct.
- 6) Assist with special projects, such as extension publications.
- 7) The current assistant (P.Peacock) has authored a chapter on grape varieties for the Eastern Wine Grape Production Manual, a revision of the Mid-Atlantic Winegrape Growers Guide.
- 8) As of 2003, the assistant has also maintained a research assistant role, most recently in conducting a fruit exposure experiment in 'Norton' to try reduce titratable acidity in fruit at harvest.

The Assistants maintained a log of contacts and periodically assessed the impact of their activity by circulating a questionnaire to contacted clientele. Given private consulting fees of \$50 to \$100/hour, clientele voiced strong enthusiasm for the free and constructive recommendations offered by Assistants. Survey results or other clientele comments are typically shared with the VWAB, at least once per year as part of the project quarterly reports.

Procedure:

The activities of the Viticulture Extension/Research Assistant will continue to be similar to those activities of the last seven years. This proposal differs, however, from previous proposals, in that as a condition of my appointment to Director of the ASHAREC, I was granted the opportunity to convert the restricted position into a classified staff position. Virginia Tech's College of Agriculture and Life Sciences agreed to fund the position. However, full funding would occur over a three-year period: the College agreed to fund 1/3 of the Assistant's salary in FY05 (July 2004-June 2005), two-thirds in FY06, and full funding thereafter. I agreed to continue to seek travel costs (\$4,000 to \$6,000 per year) each year, even after full salary funding from the College.

Therefore, the current proposal seeks two-thirds salary (\$40,000 base salary) and fringe, as well as travel support for the Extension/Research Assistant position here at the AHS Jr. AREC. A proposal to the VWAB next year will seek only one-third salary and fringe, and travel, as shown in the budget. And any "extension" proposals thereafter will seek only travel support.

To implement the transition to a classified position, a new position will have to be created and advertised during 2004. The current Assistant, Ms. Patricia Peacock, will be encouraged to apply for the new position, but the position announcement will be nationally advertised. Procedures have begun in that regard and will be completed by summer of 2004. It is not essential that the new position start on July 1.

We are, however, anxious to secure continued funding for the current Assistant until the new position is filled, either by the incumbent or by a more highly trained/experienced candidate. The position search committee will make that decision.

Assessing impact: Activity and impact of the Assistant will continue to be monitored and summarized on a quarterly basis for the VWAB and on an annual basis as required by Virginia Tech's Office of Personnel Services. Activity logs will be maintained to document travel, personal contacts, and phone calls.

Results: A *continued*, underlying goal of this project is to increase the scope and impact of the viticulture program. Freeing the PI of some of the routine, basic extension tasks permits this program expansion. The following viticultural projects, compiled from suggestions from the viticulture extension advisory committee and from the Virginia Vineyards Association, are either ongoing or have been completed since 1996 (when first Assistant was hired).

Table 1. Viticulture extension and research projects initiated since 1996 at Virginia Tech's AHS Jr. AREC (Winchester).

Project	Status
Revised extension variety bulletin (VCE publ. #463-019)	Completed in 1999 (with Imed Dami)
Optimizing Chardonnay and Cabernet Sauvignon crop levels for sustainability, fruit and wine quality (with B. Zoecklein)	Commenced in 1995; project results currently being summarized; some presented at VVA meeting in 2002, Intl Hort Congress in Toronto in 2002 and published in <i>Acta Horticulturae</i>
Chardonnay clone evaluations at Winchester AREC	Commenced in 1997; three years' crop data collected to date
Use of horticultural oils to delay spring bud break	Commenced in 1998; results presented to industry and published (with Imed Dami)
Evaluation of JMS Stylet Oil and other horticultural oils on vine physiology	Commenced in 1999, finished in 2001; results presented to industry and published (Sarah Finger)
Revised extension bulletin of vineyard economics based on different training system options (VCE publ. # 463-008)	Completed in 1998 (with Eric Capps); revised again in 2002 with Mike Hill; currently being revised in extension bulletin format
Correction of Cabernet bunch stem necrosis through improved vine nutrition	Commenced in 1996; finished in 2000; results presented to industry and published (Eric Capps)
GIS approach to mapping vineyard site suitability	Commenced in 1996; completed in 1998 (with John Boyer) and published/provided to industry.
Training system/variety interaction trial: Winchester AREC	Commenced in 1998; four years' data collected to date; prelim results presented at VVA and Wineries Unlimited meetings in 2003.
Determination of insect vectors of grapevine yellows disease agent	Commenced in 1999; Dr. LeAnn Beanland hired in Jan. 2002; prelim results presented at VVA meeting in 2003
Wine Grape Variety evaluation in the Southern Piedmont (Blackstone AREC)	Commenced in 2001; data collection will commence in 2004
Evaluation of Apogee (prohexidione-calcium) for reduced berry size	Commenced in 2001; unfunded research; results presented at VVA and ASEV/ES meetings in 2002, two scientific papers published on this work (2003 and 2004)
Revision of <u>Mid-Atlantic Wine Grape Growers Guide</u>	Commenced in 2002; anticipate publication in 2004, but may fall to 2005 (90% complete now).
Revised Vineyard Site Selection extension bulletin	Commenced in 2002 (with John Boyer); posted to WWW in December 2003
Clonal evaluation of Merlot, Cabernet Sauvignon, Cabernet franc, Petit Verdot, etc.	Indefinite – need to survey industry for relevance of this need
Use of root-restricting bags to limit vine vigor and vine size	Possibly 2005, depending upon support
Evaluation of under-trellis living mulches to stabilize soil and reduce vine vigor	Possibly fall of 2004, depending upon support

Personnel and facilities: The Extension-Research Assistant (currently Ms. Patricia Peacock) works directly under the supervision of the PI, Dr. Tony K. Wolf. The AHS Jr. AREC provides office, computer, telephone and internet access (overhead costs).

Other entities: N/A

Source of other funds: N/A.

Budget:

	2004
Salary (Research Associate)	\$26,800
Fringe (23%)	\$6,164
Travel	\$5,000
Supplies	\$1,000
Total	\$38,964

Budget justification:

Proposed budget is based on base salary of \$40,000, competitive for similar MS level positions and Research Associate level faculty. Fringe benefits of 23% are ONR negotiated rates for VA Tech faculty. Two-thirds of full salary and fringe rate is sought in 2004.

Travel funds of \$5,000 are a conservative average of travel expenses of the Assistant and PI over the last several years. This support also provides for limited, overnight travel within Virginia in the conduct of visiting grower sites in distant areas of the state.

A nominal supplies (\$1,000) request is included for expendables such as color printer supplies, photography and other graphics media, office supplies (badges, notecards, etc.) for meetings, mailing (UPS and FedEx) charges, and other incidentals.