National Science Foundation's
Experimental Program to Stimulate
Competitive Research (NSF EPSCoR)
Research Infrastructure Improvement (RII)
Award IIA-1301726

"The Solar Energy-Water-Environment Nexus in Nevada"

Summer 2015
Undergraduate Research Opportunity Program (UROP)
Request for Proposals

Announcement for:
Full-time undergraduate students attending the
University of Nevada, Las Vegas; University of Nevada, Reno;
Nevada State College; College of Southern Nevada; Great Basin College;
Truckee Meadows Community College; Western Nevada College

Submission Deadline: Friday, March 6, 2015

Application materials and faculty recommendations must be submitted no later than 5:00 PM PDT of the submission deadline date.

Attention Undergraduate Students!! Paid Research Opportunity

Who is eligible? Any full-time undergraduate student attending an NSHE institution. U.S. citizens, permanent residents and non-U.S. citizen students with a valid visa may apply.

Research areas: Students working in any area of science, technology, engineering or math (STEM) are encouraged to apply. Fields related to solar energy, water and/or environmental research are of special interest. These include (but are not limited to): Biology, Civil & Environmental Engineering, Climatology, Computer Science, Ecology, Economics, Education, Environmental Studies, Geography, Hydrology, Journalism, Natural Resources, and Political Science.
Deadline: Friday, March 6, 2015

Scholarship amount: $4,500 to students and $750 to faculty mentors for project expenses. Past recipients of a scholarship funded by the *NSF-EPSCoR Solar Energy-Water-Environment Nexus in Nevada* project are not eligible to apply for a scholarship under this award.

Award Period: June 1, 2015 through Aug 14, 2015

Sponsored by: National Science Foundation's Experimental Program to Stimulate Competitive Research (NSF EPSCoR), Award #IIA-1301726.

For details about the NSF EPSCoR Solar Energy-Water-Environment Nexus in Nevada program, visit http://nvsolarnexus.org/

Applications must be submitted as a pdf document with ALL required documentation and signatures, and must be titled as indicated on page 10 "Proposal Submission" section of this solicitation.

I. INTRODUCTION

The Nevada System of Higher Education (NSHE) received a Research Infrastructure Improvement (RII) Award from the National Science Foundation's Experimental Program to Stimulate Competitive Research (NSF EPSCoR). The *Solar Energy-Water-Environment Nexus in Nevada* project's mission is to advance knowledge and discovery through research on solar energy generation, its environmental impacts and the associated water issues, and accelerate this research by developing new capabilities in cyberinfrastructure in Nevada. Four goals will support this mission. Development and expansion of cyberinfrastructure and long-term sustainability are embedded in each goal to promote project integration.

Goal 1) Solar Energy-Water-Environment Nexus Research and Cyberinfrastructure: Advance new knowledge and discoveries in solar energy, water and the environment. Expand the cyber connectivity network to incorporate Nexus data within the Nevada Research and Data Center (NRDC).

Goal 2) Diversity: Develop a comprehensive approach that leads to an increase in the number of underrepresented students who graduate with STEM degrees.

Goal 3) Workforce Development: Develop a sustainable STEM workforce by creating a pipeline of STEM-trained students, educators, and workers while increasing public understanding of solar energy, water and the environment.

Goal 4) External Engagement: Enable Nevada scientists to collaborate and develop relationships with industry, institutions, and the public to strengthen research that will support the economic development of Nevada.

Started June 1, 2013, the Solar Energy-Water-Environment Nexus in Nevada program is a multifaceted five-year research project focusing on the linkage between (nexus) solar energy generation and Nevada's limited water resources and fragile environment. The focus of the Solar Nexus Project is to create a center of research excellence on solar energy conversion to electricity, minimizing its negative impacts on water usage and the environment. In essence, it will seek to create a paradigm shift in how solar plants are built and utilized, helping Nevada establish itself as a competitive state in the field of solar nexus research.

For more information on Nevada's NSF EPSCoR Solar Energy-Water-Environment Nexus Program and involved faculty researchers, visit http://nvsolarnexus.org/.

You must identify one or more faculty with whom you would be interested in conducting research.

Having trouble identifying a research mentor? Contact any of the UROP administrators or visit the Nevada STEM Mentor Network at http://epscorspo.nevada.edu/mentors.html

UROP Administrators:

University of Nevada, Reno: Dr. Michael Collopy, 775-784-8262, mcollopy@unr.edu
Dr. Scott Mensing, 775-784-6346; smensing@unr.edu

University of Nevada, Las Vegas: Dr. Kurt Regner, 702-895-1071, kurt.regner@unlv.edu

NSHE EPSCoR:
Michele Casella, 702-522-7076, michele_casella@nshe.nevada.edu
Mike Sady, mike_sady@nshe.nevada.edu

If you are interested in conducting research related to the Nexus research themes, you may also contact the project leads for assistance.

Project Component Leads:
Solar Energy: Dr. Robert Boehm, 702-895-4160, bob.boehm@unlv.edu

Water: Dr. JaciMaria Batista, 702-895-1585, jaci.batista@unlv.edu;

Environment: Dr. Markus Berli, 702-862-5452, Markus.Berli@dri.edu; Dr. Dale Devitt, 702-895-4699, dale.devitt@unlv.edu

Cyberinfrastructure: Dr. Sergiu Dascalu, 775-784-4613, dascalus@cse.unr.edu; Dr. Fred Harris, 775-784-6571, fredh@cse.unr.edu

Workforce Development: Dr. Jacque Ewing-Taylor, 775-784-7784, Jacque@unr.edu

II. PROGRAM DESCRIPTION AND INSTRUCTIONS

A. Program Solicitation

The NSHE announces the 2015 Summer Undergraduate Research Opportunity (UROP) scholarship program to promote undergraduate research in all NSHE institutions. The program is supported by funding from Nevada's NSF EPSCoR Solar Energy-Water-Environment Nexus program and the State of Nevada. Students working in any STEM discipline or addressing STEM-related issues are eligible, but at least 50% of the proposals will be awarded to projects that support the Solar Energy-Water-Environment Nexus mission and goals listed above.

Proposals must be original and written by the scholarship applicant. The research must be conducted during the summer of 2015 under the guidance of a NSHE faculty. Scholarships will provide $4,500 per student awardee and $750 to the faculty mentor overseeing the project to cover research expenses. Changes have been made regarding the eligibility and application process this year, so students are urged to carefully read the guidance provided below. Applications that do not follow the instructions provided will not be considered.

B. Eligibility

1. Applicants must be:

    a. U.S. citizens, permanent residents of the United States, or non-U.S. citizen students with a valid visa;
    b. Full time students in a degree program with a GPA of 3.0 studying at one of the NSHE institutions: UNLV, UNR, NSC, CSN, GBC, TMCC, or WNC;
    c. Supervised by a NSHE faculty mentor; and
    d. Maintain their undergraduate status throughout the entire program.

2. Past recipients of the NSF-EPSCoR undergraduate research awards are <u>not</u> eligible to apply.

Women and members of underrepresented groups are especially encouraged to apply. NSF defines underrepresented groups as Alaska Natives, Native Americans, Blacks or African Americans, Hispanics, Native Hawaiians and other Pacific Islanders, and Persons with Disabilities.

C. Award Information

1. These scholarship funds are awarded to encourage student engagement in undergraduate research and will be administered as a scholarship.

2. Since acceptance of this award may impact a student's income level to a degree that could affect eligibility for other scholarships, fellowships, and student loans, it is the students' responsibility to consult with campus financial aid advisors.

3. The NSHE does not provide tax advice. If you have questions about possible tax liabilities, you may refer to the IRS web sites: http://www.irs.ustreas.gov.

4. Participants are generally not allowed to engage in other research programs or have other work or employment. Special permission to have outside employment is only allowed if granted by the Lead for Undergraduate Research, Dr. Michael Collopy. Requests should be made through Michele Casella, via email, at michele_casella@nshe.nevada.edu.

D. Program Guidelines

1. Research must be conducted under the direction of a NSHE faculty mentor who has agreed to supervise the research project.
2. Proposals are requested that involve the STEM disciplines, especially in areas related to solar energy, water and the environment. Students who are working outside of STEM disciplines (e.g. economics, education, journalism, policy) are welcome to apply but should propose projects that support the advancement of STEM-related research and education. Proposals on the education or communication of project-related topics are also welcomed.
3. It is acceptable for proposals from two or more students to be part of a larger research project; however, each proposal must be a unique effort by the student and will be reviewed on its own merit.
4. Awardees must be present during the entire program period and the research is to be completed by August 14, 2015.
5. Successful candidates are required to provide programmatic feedback for an NSF Evaluation through participation in surveys and questionnaires.
6. Each student **must** prepare and present a poster at the Nevada Undergraduate Research Symposium, held in April of each year. Exact dates and location will be provided to participants. The poster should represent the research done over the course of the funded project period. Some travel funding is available for out-of-town students to attend these meetings.
7. Each awardee will submit a signed obligation form, a digital photograph of themself, and an abstract of their proposed research to Michele Casella at the time they accept the scholarship.
8. Each awardee will be strongly encouraged to participate in the Solar Energy-Water-Environment Nexus program during and after the end of their undergraduate research experience in one capacity or another (e.g. peer mentor, poster presenter, etc.).
9. ***NOTE: IMPORTANT CHANGE TO APPLICATION PROCESS.*** **While all NSHE students are now eligible to apply for the summer UROP program, the application process is different for <u>lower division</u> students (those who have completed 59 or fewer semester credits overall) and <u>upper division</u> students (those who have completed 60 or more semester credits overall). We anticipate awarding scholarships to both lower and upper division students in proportion to the number of applications that are received.**
10. Be sure to read the directions below carefully, as those that do not submit the appropriate application information will not be considered. Application writing workshops will be

offered to interested applicants. These workshops will provide details regarding this solicitation, as well as provide feedback on your scholarship application. Contact Michele Casella, michele_casella@nshe.nevada.edu, for workshop dates/locations.

E. Proposal Preparation Instructions for lower division students (59 or fewer semester credits completed)

Each proposal must be submitted as a **single pdf document**. If an applicant does not receive confirmation that the proposal was received, s/he should contact Michele Casella (michele_casella@nshe.nevada.edu) to verify receipt of proposal by the NSHE Sponsored Programs Office. To further understand the UROP application process, refer to "The Application Process: Who does what?" (**Form A in Appendices**)

1. **Cover Page (Form B in Appendices):** Applicants will need to complete the form and obtain the required signatures.

2. **Applicant's Statement:** Applicants should prepare a statement that answers the following questions:
   a. What are your educational goals? What are your career goals?
   b. How will participation in this program assist you in achieving your career goals?
   c. What relevant courses have you completed?
   d. Do you have any prior research or applicable work experience?
   e. What research are you interested in conducting with your mentor? Be as specific as you can about the research questions and methodologies you propose to use to conduct the work, to include a research timeline.

   This statement must be written solely by the undergraduate applicant and is limited to a total length of two pages. Statements must be single-spaced with 1" margins, in 12-pt. Times New Roman font. Handwritten statements will not be accepted.

1. **Scanned transcripts or downloaded "unofficial" pdf transcripts from your college website:** Transcripts of all college courses completed must be submitted.

2. **Biographical Sketch or CV (Form D in Appendices):** Submit one for the student applicant and one for the mentor; limited to two pages per person.

3. **Endorsement Letter(s)**: Each mentor must write a nomination letter in support of his/her student's application and commit to serve as a mentor. It is very important that the letter describe the objectives/hypotheses and timeline for the student's proposed research project.

F. Proposal Preparation Instructions for upper division students (60 or more semester credits completed)

Each proposal must be submitted as a **single pdf document**. If an applicant does not receive confirmation that their proposal was received, s/he should contact Michele Casella

(michele_casella@nshe.nevada.edu) to verify receipt of the proposal by the NSHE Sponsored Programs Office. To further understand the UROP application process, refer to "The Application Process: Who does what?" (**Form A in Appendices**)

1. **Cover Page (Form B in Appendices):** Applicants will need to complete the form and obtain required signatures.

2. **Project Description (limit two pages, including all graphs or pictures):** The formulation of the research project may be a result of a collaborative effort by the applicant and mentor; however, the project description **must be written solely by the undergraduate applicant.** It should be a concise statement including clear hypotheses to be tested or questions to be asked. The project description must be written in a way that is understandable to reviewers whose background may be outside the applicant's specific field of research. The two page project description should be single-spaced with 1" margins, in 12-pt. Times New Roman font and must include the following sections:
    a. Abstract (50-100 words)
    b. Introduction
    c. Objectives
    d. Research hypotheses or questions
    e. Plans for research and/or creative work
    f. Timetable
    g. Plans for dissemination of results

3. **References/citations (Form C in Appendices):** Not included in the two page limit for the project description.

4. **Scanned transcripts or downloaded "unofficial" pdf transcripts from the University website:** Transcripts of all courses completed.

5. **Biographical Sketch or CV (Form D in Appendices):** One each from student applicant and mentor, limited to two pages per person.

4. **Endorsement letter(s):** Letters are to be written by supervising faculty mentor(s) indicating their approval of the proposal and describing their level of involvement in the project. All proposed mentors should affirm that the proposal is the original work of the student and that only guidance in editing and formatting the document were provided to the student applicant. Each proposed mentor must "sign-off" on the proposal, noting approval and affirming that they have read the student's proposal and pledge to mentor the student throughout the project period.

G. Roles and Responsibilities of Faculty Mentors

1. Each mentor or co-mentor agrees to arrange recurring meeting times to discuss the research project. The mentor agrees to ensure the mentee has proper guidance/training and supervision on a daily basis.

2. Each mentor or co-mentor should respect the mentee and provide advice, support and encouragement as described in *Mentoring as the "Giving and Receiving of Wisdom" among Faculty and Students* (http://www.csun.edu/eop/htdocs/fmp%20manual.pdf).

H. Projects Involving Human Subjects or Vertebrate Animals

Prior approval by the Institutional Review Board (IRB) for human subjects and/or the Institutional Animal Care and Use Committee (IACUC) for animal subjects is not required for proposal submission. However, students chosen to receive a scholarship under this program who anticipate the use of human or animal subjects in their research must receive approval of their research protocols by the appropriate review board prior to the beginning of research and release of funds.

1. Human Subjects: If this proposed project involves the collection of information from human beings through interaction or observation, include an attachment (not included in the two-page limit) that provides sufficient information to enable reviewers to evaluate potential risks to subjects. Include information concerning the subject population, type(s) of information to be gathered, and measures to be taken to protect privacy and reduce risks.

2. Vertebrate Subjects: If this proposed project involves living vertebrate animals in any way, include an attachment (not included in the two page limit) that provides sufficient information to enable reviewers to evaluate the choice of species, number of animals to be used, and any exposure of animals to discomfort, pain, or injury.

III. PROPOSAL REVIEW PROCESS AND EVALUATION CRITERIA

Proposals will be selected based on a statewide, merit-based review. The selection process will include a review committee that will focus on the following review criteria:

1. Is the proposed research related to the solar energy-water-environment nexus theme? All STEM-related research topics are welcome; however, at least 50% of all awards will be granted to those whose research is related to solar energy, and its impacts on water and the environment. (not a screening factor).
2. Has the applicant demonstrated a level of academic preparation and excellence, as reflected by his/her GPA, appropriate coursework and/or other measures, which would predict success in a research experience?
3. Does the applicant have other background experience and/or extracurricular activities which would help predict success in a research experience?
4. Is the "Applicant's Statement" (lower-division student) or "Project Description" (upper-division student) clearly articulated with sufficient detail to assess the likelihood that the student will have a successful experience?
5. Are the applicant's recommendation letters supportive of his/her participation in the program, including specific reference to his/her potential for success in this program?

IV. PROPOSAL SUBMISSION, AWARD NOTIFICATION AND TIMELINE

A. Submission of Proposals

All required documentation *listed in this announcement under "E. Proposal Preparation"* should be scanned into the completed proposal and converted into one pdf file for submission.

It is the responsibility of the applicants to obtain and submit all required documentation for their proposal via email to:

Michele Casella **at:** **michele_casella@nshe.nevada.edu.**

The email subject line and the pdf application document should be specific to each applicant and read:

Last Name_First Name_SummerUROP2015
Example: (Jones_Tom_SummerUROP2015)

NOTE: Application deadline: Friday, March 6, 2015, 5:00 p.m.
Incomplete applications will not be accepted.

B. Notification

Letters of award as well as letters of regret will be sent to all applicants after a statewide review has been conducted.

C. Obligation to the Government

Applicants for the award will be considered without regard to race, creed, color, sex, age, national origin and/or physical impairment.

D. Contacts

Potential applicants with questions regarding this program are strongly encouraged to contact a Program Leader.

University of Nevada, Reno:	**University of Nevada, Las Vegas:**
Dr. Michael Collopy; Email: mcollopy@unr.edu Dr. Scott Mensing; Email: smensing@unr.edu	Dr. Kurt Regner; Email: kurt.regner@unlv.edu

APPENDICES

Forms A-D

Form A: The Application Process: Who Does What?

Activity/Responsibility	Student	Faculty Mentor
Review UROP program Request for Proposals (RFP)	The student should carefully read the UROP RFP, paying close attention to eligibility and preparation and submission guidelines. The student should forward a copy of the program guidelines to the faculty mentor. If the student does not have a faculty mentor, utilize the resources on page 3 of the RFP or contact the Program Leader assigned to your institution office to determine one.	Faculty mentors should identify and encourage outstanding students to apply for UROP. The faculty mentor should review program guidelines to understand the role of the faculty mentor in advising the student throughout all phases of the UROP application process.
Develop the idea for a Research project	Students can find ideas for projects from a variety of sources such as courses they have taken, the scholarly interests of a faculty member, or ideas of their own that they would like to explore further. Students may work within or outside of their major field of study.	A faculty member with a general area of interest may encourage a student to pursue a project in that area, but the formulation of the project itself should be primarily the student's responsibility. The faculty member may provide feedback and constructive criticism during the formulation of the project and proposal.
Collaboration	The discussion between student and faculty mentor should lead to an agreement on the nature and scope of the project, the method of inquiry or creative activity, and expected outcomes. Discussions should also include a proposed budget and timeline for completing the project. Students and their faculty mentors should expect to meet more than once during the application process.	
Complete the application	The student prepares the UROP Cover Sheet (Form B) and all elements of the proposal described in Section E: Proposal Preparation Instructions in the RFP. The proposal components should be combined into a single pdf document for submission. Student should provide mentor with a final copy of the application.	The faculty mentor reviews a draft of the proposal, which includes the cover sheet, project description, timeline, resume(s), and budget to ensure that the proposed work can be performed and supervised within the space, time frame, or level of support indicated.
Submit the application	The student sends the application portfolio materials in a single pdf document to Michele Casella via email at michele_casella@nshe.nevada.edu. The email subject line and the application document should be titled LAST NAME_FIRST NAME_UROP2015. The application should be submitted no later than 5:00 PM PDT Friday, March 6, 2015. **Late or incomplete proposals will not be reviewed.** **If the student does not receive a confirmation of receipt, within 1 day of submitting, it is his/her responsibility to follow up via email, michele_casella@nshe.nevada.edu, or 702-522-7076.**	Faculty mentors are invited to submit letters of recommendation/support separate from the student application package to michele_casella@nshe.nevada.edu, but they must be submitted prior to the deadline date of March 6, 2015, 5:00 PM PDT. Faculty mentors will be copied on the email of receipt by the EPSCoR Administrator. They will also be copied on student notification of award or decline.

FORM B

Cover Page:
NSF EPSCoR R II Award IIA-1301726
"Solar Energy-Water-Environment Nexus in Nevada"

Undergraduate Research Opportunity Program (UROP)
SUMMER 2015

Name of Project:_____

This project involves human or vertebrate animal subjects: YES__ NO__

Student Information:

_____ _____
Student name Student signature Date

_____
Student's Educational Institution

_____
Student's Street Address City State Zip Code

Student Phone:_____ E-mail:_____

□ Lower Division Applicant (59 credits or less as of 12/31/14)
□ Upper Division Applicant (60 credits or more as of 12/31/14)

Broadening Participation for Greater Diversity

The Solar Energy, Water and Environment Nexus in Nevada program is a National Science Foundation Experimental Program to Stimulate Competitive Research (NSF-EPSCoR) project administered by the Nevada System of Higher Education. The NSF-EPSCoR has a strong commitment to broadening participation (http://www.nsf.gov/od/broadeningparticipation/bp.jsp). Groups underrepresented in science, technology, engineering and mathematics (STEM) include women, underrepresented minorities (African Americans, American Indians including Native Alaskans, Hispanics and Native Pacific Islanders), and persons with disabilities.

Checking the underrepresented groups box(es) on the application is optional and will not influence the determination of funding.

☐ First in your family to attend college
☐ Reside in a geographically isolated area. Where? _____

Ethnicity (choose one):
☐ Hispanic or Latino
☐ Not Hispanic or Latino
☐ Do not wish to disclose

Citizenship (choose one):
☐ U.S. Citizen
☐ Permanent Resident (Green Card holder)
☐ Dual citizenship with U.S. passport

Race (select one or more):
☐ American Indian or Alaskan Native
☐ Asian
☐ Black or African American
☐ Native Hawaiian or Pacific Islander
☐ White
☐ Do not wish to disclose

Nominating Faculty:

Name _____ Signature _____ Date _____

Institution _____ Department _____

Phone: _____ E-mail: _____

Will Nominating Faculty also function as research mentor? □ Yes □ No

Mentor (if applicable):

Mentor name _____ Mentor signature _____ Date _____

Mentor's Institution _____ Mentor's Department _____

Mentor Phone: _____ E-mail: _____

*Projects not involving the solar energy-water-environment nexus are eligible.

By the faculty mentor signing above, he/she certifies the accuracy of the information in this proposal, and certifies that he/she is a faculty member of the NSHE during the period covered in the attached proposal. If a second mentor is participating in this research, please provide his/her name and contact information.

Remember that a complete application consists of the following:

- Project Descriptions or Applicant's Statement addressing all questions asked on Pages 6-7 of the solicitation.
- Current transcript (unofficial are acceptable)
- Letter of endorsement from faculty mentor from home institution
- Letter of endorsement from research faculty co-mentor from university (if warranted).
- The application, including cover page, should be type-written and submitted as one pdf file.

FORM C

References Cited

Each reference must include the names of all authors (in the same sequence in which they appear in the publication), the article and journal title, book title, volume number, page numbers, and year of publication. If the document is available electronically, the website address also should be identified. Proposers must be especially careful to follow accepted scholarly practices in providing citations for source materials relied upon when preparing any section of the proposal. While there is no established page limitation for the references, this section must include bibliographic citations only and must not be used to provide parenthetical information outside of the Project Description.

Biographical Sketch(es) (FOR MENTOR USE ONLY)

A biographical sketch (limited to two pages) should be included with your solicitation. The following information must be provided in the order and format specified below:

(a) Professional Preparation

A list of the individual's undergraduate and graduate education and postdoctoral training as indicated below:

Undergraduate Institution(s)	Major	Degree & Year
Graduate Institution(s)	Major	Degree & Year
Postdoctoral Institution(s)	Area	Inclusive Dates (years)

(b) Appointments

In reverse chronological order, list all of the individual's academic/professional appointments beginning with the current appointment.

(c) Products

A list of: (i) up to five products most closely related to the proposed project; and (ii) up to five other significant products, whether or not related to the proposed project. Acceptable products must be citable and accessible including but not limited to publications, data sets, software, patents, and copyrights. Unacceptable products are unpublished documents not yet submitted for publication, invited lectures, and additional lists of products. Only the list of 10 will be used in the review of the proposal.

Each product must include full citation information including (where applicable and practicable) names of all authors, date of publication or release, title, title of enclosing work such as journal or book, volume, issue, pages, website and Uniform Resource Locator (URL) or other Persistent Identifier.

(d) Synergistic Activities

A list of up to five examples that demonstrate the broader impact of the individual's professional and scholarly activities that focuses on the integration and transfer of knowledge as well as its creation. Examples could include, among others: innovations in teaching and training (e.g., development of curricular materials and pedagogical methods); contributions to the science of learning; development and/or refinement of research tools; computation methodologies, and algorithms for problem-solving; development of databases to support research and education; broadening the participation of groups underrepresented in science, mathematics, engineering and technology; and service to the scientific and engineering community outside of the individual's immediate organization.

(e) Collaborators & Other Affiliations

- **Collaborators and Co-Editors.** A list of all persons in alphabetical order (including their current organizational affiliations) who are currently, or who have been collaborators or co-authors with the individual on a project, book, article, report, abstract or paper during the 48 months preceding the submission of this proposal. Also include those individuals who are currently or have been co-editors of a journal, compendium, or conference proceedings during the 24 months preceding the submission of the proposal. If there are no collaborators or co-editors to report, this should be so indicated.
- **Graduate and Postdoctoral Advisors.** A list of the names of the individual's own graduate advisor(s) and principal postdoctoral sponsor(s), and their current organizational affiliations.
- **Thesis Advisor and Postgraduate-Scholar Sponsor.** A list of all persons (including their organizational affiliations), with whom the individual has had an association as thesis advisor, or with whom the individual has had an association within the last five years as a postgraduate-scholar sponsor. The total number of graduate students advised and postdoctoral scholars sponsored also must be identified.

FORM D

STUDENT CURRICULUM VITAE (CV) BUILDER

What is a Curriculum Vitae

A Curriculum Vita ("CV" or "vita") is a comprehensive, biographical statement emphasizing your professional qualifications and activities. In general, curricula vitae are three or more pages in length. Because a CV is similar to a resume, you may find the "Resume and Cover Letter Construction" guide helpful. An advantage to the C.V. format is the significant freedom to choose the headings and categories for your information and the strength reflected in their arrangement.

When Is A Curriculum Vita Appropriate

A CV should **only** be used when specifically requested. This might occur in the following instances:

- Applications for admission to Graduate or Professional Schools
- Independent consulting in a variety of settings
- Providing information related to professional activities (e.g., applications for professional memberships and leadership positions, and presentations at professional conferences)
- Proposals for fellowships or grants
- Applications for positions in academia, including:
- School administration, (e.g., elementary or secondary school principals, superintendents, deans of schools)
- Institutional research and consulting
- Higher Education positions in teaching, research, and administration

Possible Sections To Include In Your C.V.

Heading	Name, address(es), and phone number(s), including area code(s)
Education	Listing of academic degrees beginning with the degree in progress or most recently earned. Include name of institution, city and state, degree type (B.A., B.S., M.A., etc.), area of concentration, month and year degree was (will be) received. Note: You may wish to include the title (using the format appropriate to your particular academic field) of your thesis. If you are an undergraduate and your GPA is 3.5 or higher, it is appropriate to include it. You may also include “Relevant Coursework” under this heading.

Honors and Awards	Receipt of competitive scholarships, fellowships, and assistantships; names of scholastic honors; teaching or research awards.
Relevant Experience	Listing of positions (part-time, full-time, volunteer, temporary and permanent) related to the work sought. Include: department, firm, agency, or organization; complete name; city and state; job/position title; dates; also include a brief description of your activities/duties, using strong action verbs. List these in reverse chronological order.
Other Experience	Groupings of other experiences (including volunteer work and/or internships) can enhance your C.V. Your experience can also be broken into other categories such as: Teaching, Counseling, Administration, Volunteer, Community, Internship, etc. Entries within each section should be in reverse chronological order.
Professional Associations	Memberships in national, regional, state, and local professional organizations should be listed. Also list significant appointments to positions or committees in these associations. Student memberships in professional associations are appropriate.
Publications	Give bibliographic citations (using the format appropriate to your particular academic discipline) for articles, pamphlets, chapters in books, research reports, or any other publications that you have authored or co-authored. In the fine arts, this can include descriptions of recitals and art exhibits.
Presentations	Give titles of professional presentations (using the format appropriate to your particular academic discipline); name of conference or event; dates and location; if appropriate in your discipline, also include a brief description. Presentations should be listed in reverse chronological order.
Recent/Current Research	Description of research projects recently conducted or in progress. Include the type of research and a brief description of the purpose.
Community Involvement	Appropriate and relevant volunteer work, church work, community service organizations, etc.
References	Optional to end vita with statement "Available upon Request." If you are responding to an advertisement that asks for references, include those requested on a separate addendum sheet.
Qualifications or Skills	A summary of particular or relevant strengths or skills which you want to highlight. (Typically, this is not included as a separate section, but addressed in other sections. Occasionally, however, it may be appropriate to list special computing or language skills.)
Personal Information	Do not include marital status, age, ethnicity, race, religion, place of birth or citizenship.