

**THE SCHOOL OF INTERDISCIPLINARY AND  
GRADUATE STUDIES  
University of Louisville**

**GUIDELINES FOR THE PREPARATION  
AND PROCESSING OF DISSERTATIONS**

**Approved by Graduate Council  
February 23, 2009**

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**THE SCHOOL OF INTERDISCIPLINARY AND GRADUATE STUDIES**  
**University of Louisville**

**GUIDELINES FOR THE PREPARATION  
AND PROCESSING OF DISSERTATIONS**

The purpose of these guidelines is to assist graduate students and their mentors with the preparation, formatting, and submission of dissertations to the School of Interdisciplinary and Graduate Studies. Students should follow these guidelines and contact the School of Interdisciplinary and Graduate Studies with questions left unanswered by these instructions. Dissertations received by the School of Interdisciplinary and Graduate Studies that do not reasonably adhere to these guidelines will be returned to the student or committee chairperson; some deviations from these guidelines will be permitted if the student can demonstrate that the proposed format is acceptable to the individual's scholarly discipline. Final approval of all formatting of dissertations rests with the School of Interdisciplinary and Graduate Studies.

**Submission to the School of Interdisciplinary and Graduate Studies**

Students are required to submit one unbound copy on 25% cotton fiber paper to the School of Interdisciplinary and Graduate Studies. In addition to the paper copy, students may submit (but are not required to submit) an electronic version of their dissertations.

**Review by School of Interdisciplinary and Graduate Studies**

Students are required to have their dissertations reviewed by a representative from the School of Interdisciplinary and Graduate Studies prior to submitting the final copy to make sure that it adheres to the guidelines.

**Style and Format Requirements**

While some departments may suggest that students follow a particular style manual in the preparation of dissertations, the *Guidelines for the Preparation and Processing of Dissertations* supersede all other style manuals. Final responsibility for the form, accuracy, and completeness of the dissertation lies with the student, although the committee chair should assist the student in this process. It is in the best interests of the student to be internally consistent in style, notation, form, etc. **It is not acceptable to submit published articles or a published monograph manuscript in lieu of a properly formatted dissertation.** The finished dissertation should contain all the

components described in these guidelines. Students are expected **to prepare the dissertation with commercially widely-available word processing software.**

### **Published Work**

If students wish to use material that has been previously published under their names in their dissertation, they will need to contact the original publisher for permission. The original publisher will indicate whether or not the material may be used in the dissertation, and if permission is granted, the publisher will give instructions on how the material should be documented in the student's dissertation. Permission to use previously published material in a dissertation doesn't necessarily give the student permission to sell that material. The student may need to put a restriction on the sale and availability of his/her dissertation according to the publisher's wishes.

### **Paper and Copying**

Students should use a laser printer or other high quality printer to print a master copy of the dissertation, which the student retains. All pages should be printed only on one side. Students are responsible for obtaining copies of the approved dissertation, bearing the signatures of all dissertation committee members; typically, the student retains one copy, provides one copy to the advisor(s), one to the department, and one to the School of Interdisciplinary and Graduate Studies. Because the School of Interdisciplinary and Graduate Studies forwards its copy to the University Library, this copy must be a clean photocopy on 25% cotton fiber, white, 8 ½ by 11 inch paper, not the original copy. Folded pages must be of the same quality as the others and must be folded such that they accommodate binding. Copies to the advisor and department may be optional, so please check with your department.

### **Landscape Pages**

Landscape pages are allowed. When including landscape pages be sure to include the page number. The page number should remain in portrait style at the bottom center, ½" from the bottom edge.

### **Fonts**

A standard font of 10 or 12 points should be selected for use throughout the entire dissertation. Standard fonts include Arial, Courier, CM, or Times New Roman, and eccentric type styles, such as cursive, are not permitted.

## **Margins and Spacing**

Each page of the document should have the following margins:

<b>Top:</b>	2" for the first page of each chapter or division; 1" for all other pages.
<b>Bottom:</b>	1"
<b>Left:</b>	1½"
<b>Right:</b>	1"

The entire dissertation should be double-spaced except for long quotations, computer programs, endnotes, footnotes, and text in tables when appropriate. These exceptions should be single-spaced.

Paragraphs should begin with a standard, consistent indentation and each sentence should be consistently followed by one or two spaces after the period before the next sentence begins.

## **Pagination**

Preliminary pages should be numbered with lower-case Roman numerals (ii, iii, etc.) at the bottom and center of each page, ½" from the bottom edge. The title page should be counted when numbering successive pages, but the number should not appear on that page. The first page on which a number should appear is the signature page (numbered ii), unless copyright and/or acknowledgments pages are included in the document. See page 7 for a complete list of dissertation pages and how each should be numbered, and see illustrations A-N for examples of each page.

Begin numbering the text with Arabic numerals (1, 2, 3, etc.) at the start of the first page of text (after the abstract). Arabic numerals should appear ½" from the bottom center of the page. All pages in the appendices must also be numbered. The page and pagination continues through all content, e.g. References, Appendices, and Vita.

## **Electronic Format Dissertations**

The School of Interdisciplinary and Graduate Studies and UMI Dissertations Publishing (ProQuest) accept the submission of a digital dissertation in addition to the submission of a paper document. The digital document must appear in Adobe PDF format. No compression or password protection should be used. Neither the School of Interdisciplinary and Graduate Studies nor UMI Dissertations Publishing will make changes to the document. Therefore, the document's appearance when it is accessed or printed is entirely the responsibility of the author. The author must assume responsibility for preparing the document according to the School of Interdisciplinary and Graduate Studies *Guidelines for the Preparation and Processing of Dissertations*, reformatting the document into Adobe PDF, checking the reformatted document for appearance, and

submitting the PDF document on CD-ROM to the School of Interdisciplinary and Graduate Studies for publication. The electronic copy is reviewed in regard to formatting and will be sent with the printed copy if determined to be the same as the printed copy. The electronic version should not include signatures from the dissertation advisory committee. It should list the committee members' names only. **A candidate who elects to submit the dissertation in a digital format must still submit a printed copy to the School of Interdisciplinary and Graduate Studies; this copy is sent to UMI before being bound and housed in the University Library.**

Submission of an electronic format dissertation will allow **compound** (mixed format) documents to be developed. Such documents may contain both text on paper and databases only available and accessible through a specific electronic format. For example, a biological study could contain a database with a complete gene map, or an analysis of a screenplay could be accompanied by a CD containing full motion video of a performance of the work. All fonts used should be embedded in the document. External and internal links to multi-media files are acceptable. If multi-media elements are used in the document, file formats should be identified in the dissertation abstract. Acceptable file formats include the following:

Images:

GIF (.gif)  
JPEG (.jpeg)  
PDF (.pdf) use Type 1 PostScript fonts  
TIFF (.tif)

Video:

Apple Quick Time (.mov)  
Microsoft Audio Video Interleaved (.avi)  
MPEG (.mpg)

Audio:

AIF (.aif)            MIDI (.midi)            WAV (.wav)  
CD-DA                MPEG-2  
CD-ROM/XA        SND (.snd)

Submitted CD-ROMs must follow the ISO 96-90 specification for disk creation. Player or reader must be ubiquitous free ware (e.g., Netscape or Adobe Acrobat) or fully licensed third party software. A copy of the application used to display, play or read the document must be available on CD and be fully licensed on a reader's machine. Author created programming must be in a format that can be copied by a machine at an operating system prompt.

### **Plagiarism**

The School of Interdisciplinary and Graduate Studies of the University of Louisville defines plagiarism in the following way:

Representing the words or ideas of someone else as one's own in any academic exercise, such as:

1. Submitting as one's own paper a paper written by another person or by a commercial "ghost writing" service.
2. Exactly reproducing someone else's works without identifying the words with quotation marks or by appropriate indentation, or without properly citing the quotation in a footnote or reference.
3. Paraphrasing or summarizing someone else's work without acknowledging the source with a footnote or reference.
4. Using facts, data, graphs, charts, or other information without acknowledging the source with a footnote or reference.

Borrowed facts or information obtained in one's research or reading must be acknowledged unless they are "common knowledge." Clear examples of "common knowledge" include the names of leaders of prominent nations, basic scientific laws, and the meaning of fundamental concepts and principles in a discipline. The specific audience for which a paper is written may determine what can be viewed as "common knowledge": for example, the facts commonly known by a group of chemists will differ radically from those known by a more general audience. Students should check with their mentors regarding what can be viewed as "common knowledge" within a specific field, but often the student will have to make the final judgment. When in doubt, footnotes or references should be used.<sup>1</sup>

Plagiarism is forbidden and can result in disciplinary action and immediate dismissal from the University of Louisville.

### **Animal and Human Studies Approval**

Compliance with federal regulations governing the use of human subjects, experimental animals, animal care, radiation, recombinant DNA (Institutional Biohazard Committee approves <http://louisville.edu/dehs/biosafety/committees/IBC/icb.html>, or the handling of hazardous materials in research is monitored by a number of federal agencies. Students are required to verify their compliance with appropriate approval procedures prior to beginning any dissertation research. This approval must be cited in the dissertation. Please refer to the University Human Studies web site (<http://research.louisville.edu/UHSC/UHSC.htm>) or the Office of Research Services Institutional Animal Care and Use Committee (ext. 7307) for more information regarding University and Federal guidelines and the process of obtaining approval for human or animal research plans.

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<sup>1</sup> 2001-2002 Graduate Student Handbook, University of Louisville, Office of the Graduate Dean, page 36.

### **Survey of Earned Doctorates**

Doctoral candidates must complete the “Survey of Earned Doctorates” and submit with the final copy of the dissertation. Students will receive this form when the dissertation is reviewed by the School of Interdisciplinary and Graduate Studies.

### **Parts and order of pages for a Dissertation**

#### **Title Page**

The title page is required. It should be assigned the page number “i” (lower case Roman numeral one), although the number does not appear on the page. The date included on the title page is the month and year of the author’s graduation (December, May and August). On the title page, the student should include the unit (College of Arts and Sciences, School of Medicine, etc.) that houses the degree program and the faculty who will grant the degree. See Illustration A for a sample title page.

#### **Blank Page**

The blank page is required and should not include markings of any sort. It should be left unnumbered, and it is not counted in numbering successive pages. If there is no copyright page, the blank page follows the title page.

#### **Copyright Page**

The copyright page is optional but if included, must be inserted immediately after the title page. It should be left unnumbered, and it is not counted in numbering successive pages. See Illustration B for an example of a copyright page.

#### **Approval/Signature Page**

This page is required of all dissertations. The committee signatures must be original (not copies of the original) and in black or blue ink that will photocopy. The date on this page is the date of the final oral examination or defense. The page should be numbered as page “ii” (lower case Roman numeral two). Successive pages should be numbered from this page. For students submitting an electronic dissertation, the signature page submitted with the PDF file should NOT contain signatures. A printed signature page with signatures should be submitted separately to the Graduate School at the time of dissertation submission. See Illustration C for an example of an approval/signature page.

#### **Dedication and/or Acknowledgment Pages**

These pages are optional for dissertations. Lower case Roman numerals should be used to number these pages. See Illustrations D and E for sample dedication and acknowledgment pages.

### **Abstract**

All dissertations must include an abstract. It should be numbered with lower case Roman numerals and should include the student's name, the title of the dissertation, and the defense date or degree awarding date. The abstract must not exceed 350 words. Although students and their committees determine the contents of the abstract, the following information is appropriate:

- a brief introduction of background or importance;
- a brief discussion of methods and procedures used in gathering data;
- a condensed summary of findings; and
- a summary of conclusions reached in the study.

See Illustration F for a sample abstract.

### **Table of Contents**

The Table of Contents is required for all dissertations. The Table of Contents is NOT listed in the Table of Contents. Number all table of contents pages with lower case Roman numerals. See Illustration G for a sample Table of Contents page.

### **List of Tables**

This list should only be included in a dissertation that incorporates five or more tables. If used the List of Tables page(s) should be numbered with lower case Roman numerals. See Illustration H for a sample List of Tables. See Illustration K for a sample table.

### **List of Figures, Illustrations, Charts, or Graphs**

This list should only be included in a dissertation that incorporates five or more figures, illustrations, charts, or graphs. If used, the List of Figures page(s) should be numbered with lower case Roman numerals. See Illustration I for a sample list of figures. See Illustration L for a sample figure. A list of symbols page is optional as needed. If figures must be presented in landscape format, the page must be numbered at the bottom center and the margin of 1 1/2" must be maintained on the binding side of the figure. Page number will remain in portrait style.

### **Text**

The pages of the body of the dissertation should be numbered with Arabic numerals (1, 2, 3, etc). Each chapter or section should begin at the top of a new page. With a top margin of 2", the title of the section should be centered and typed in full capital letters. The first line of text begins two double spaced lines below the section title. Headings and subheadings may be bolded. See Illustration J for sample pages of text.

### **Footnotes or Endnotes**

Footnotes come at the bottom of the page where noted and endnotes come at the end of each chapter or are grouped together directly after the entire body of the dissertation. They should be uniform and formatted according to a standard style guide (such as the *Publication Manual of the American Psychological Association*).

### **References or Citations**

All dissertations must include a list of works cited and/or referenced. The citations should appear directly after the body of the dissertation (and after footnotes or endnotes, if they are used). References may be presented in the style of the scholarly discipline, i.e., they may be alphabetical, numerical, in order of citation, etc.. All pages of the references should be numbered with Arabic numerals at the center of the bottom of the page. See Illustration M for a sample reference page.

### **Appendix**

Appendices are optional for dissertations. If included, all pages of an appendix must be numbered in Arabic numerals as in text.

### **Curriculum Vitae**

Inclusion of a Curriculum Vitae as the last page(s) of the dissertation is required. The vita should be numbered at the bottom center of each page. See Illustration N for a sample Curriculum Vitae.

## **Dissertations Prepared in a Foreign Language**

Dissertations submitted to the School of Interdisciplinary and Graduate Studies should be written in English. Only under exceptional circumstances may another language be used, and only with prior approval obtained from the School of Interdisciplinary and Graduate Studies.

### **Binding**

Only one copy of the dissertation should be submitted to the School of Interdisciplinary and Graduate Studies for binding and placement in the University of Louisville libraries. Students are responsible for binding copies of the dissertation for themselves, their advisors, and their departments. Binding may be optional or required; **it is the responsibility of the student to check with department.** The School of Interdisciplinary and Graduate Studies can provide binding information to students who request it.

### **Microfilming and Copyrighting**

The School of Interdisciplinary and Graduate Studies will send all dissertations submitted for degrees from the University of Louisville to UMI (ProQuest) for microfilming. Abstracts of all dissertations will be published in *Dissertation Abstracts International*.

Students have the option to copyright their dissertations. Degree candidates may complete the copyright section on the Microfilm Agreement Form (available from the School of Interdisciplinary and Graduate Studies) and submit a personal check made out to the University of Louisville in the amount specified by the form. University Microfilms will handle the copyright process.

Publication rights are reserved to the author, subject to the provisions of research contracts, patent agreements, or other similar agreements made by the author with the dissertation advisor, the university, the funding agency, or other parties.

Dissertations are microfilmed and copyrighted exactly as they are submitted. They are not edited, typeset, or retyped by the School of Interdisciplinary and Graduate Studies. Students are responsible for the content and appearance of their work.

### **Deadlines**

Deadlines for the submission of dissertations are published in the schedule of classes.

## **Sample Dissertation Pages**

The following pages are samples illustrating these dissertation guidelines. **NOTE: Illustration letters at the top of each page refer to the contents below and should not be reproduced on actual dissertation pages. These Sample Pages are only examples of form and style; authors have flexibility as long as they remain internally consistent and consistent with their scholarly disciplines.**

Illustration A Title page\*

Illustration B Copyright page\*

Illustration C Signature/Approval page\*

Illustration D Dedication page

Illustration E Acknowledgment page

Illustration F Abstract

Illustration G Table of Contents (and text page 2)

Illustration H List of Tables

Illustration I List of Figures

Illustration J Sample pages of body of dissertation

Illustration K Table

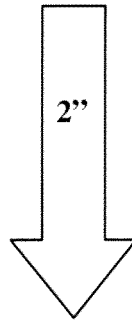
Illustration L Landscape Page

Illustration M Figure

Illustration N References

Illustration O Curriculum Vitae

\*The text on these pages should be centered between the left and right margins.

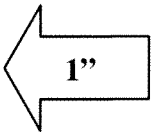
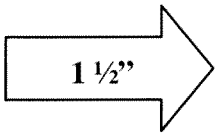


**Illustration A**

THE MOST PREVALENT FORM OF ENLIGHTENMENT

By

John Henry Stewart  
B.A., Seton Hall, 1996  
M.A., Louisiana State University, 1998



A Dissertation  
Submitted to the Faculty of the  
College of Arts and Sciences of the University of Louisville  
in Partial Fulfillment of the Requirements  
for the Degree of

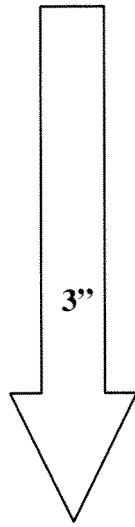
Doctor of Philosophy

Department of English  
University of Louisville  
Louisville, Kentucky

May 2002

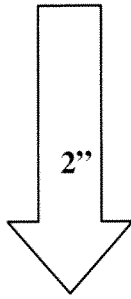


**Illustration B**



Copyright 2002 by John Henry Stewart

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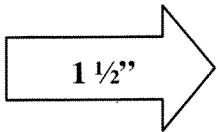
**Illustration C**

THE MOST PREVALENT FORM OF ENLIGHTENMENT

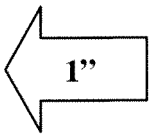
By

John Henry Stewart  
B.A., Seton Hall, 1996  
M.A., Louisiana State University, 1998

A Dissertation Approved on



April 22, 2002



by the following Dissertation Committee:

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Dissertation Director

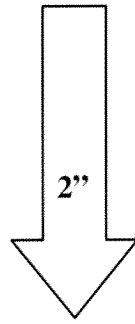
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**Illustration D**

DEDICATION

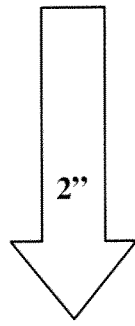
This dissertation is dedicated to my parents

Mr. Appurajapuram Krishnamurthy Sethuraman

and

Mrs. Nagalakshmi Sethuraman

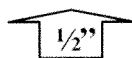
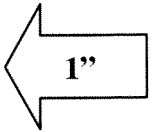
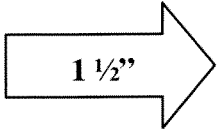
who have given me invaluable educational opportunities.



**Illustration E**

**ACKNOWLEDGMENTS**

I would like to thank my major professor, Dr. Jack Watson, for his guidance and patience. I would also like to thank the other committee members, Dr. Joe Perona and Dr. Fred Weber, for their comments and assistance over the past four years. I would also like to express my thanks to my wife, Amy, for her understanding and patience during those times when there was no light at the end of anything. She encouraged me and made me stick with it. Also, many thanks to the members of my family in Savannah, Georgia: Paul and Jeanenne Adams, Jim and Catherine Shippy, and the late Eleanor and Fred Catti. Finally, I would like to thank the members of my family in Knoxville, Tennessee, Andy and Ruth Thomason.





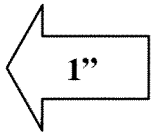
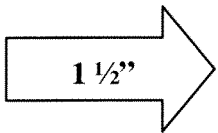
**Illustration F**

ABSTRACT  
Writing Assessment as Social Action

Ellen E. Schendel

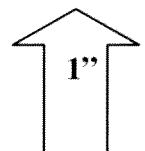
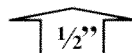
May 14, 2002

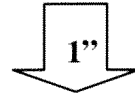
This dissertation is a historical and theoretical examination of writing assessment as social action. It begins with a historical overview of writing assessment as reform, focusing on the various ways in which writing assessments shape knowledge, subjectivities, and the university. It uses poststructuralist theory and educational measurement scholarship to argue for an understanding of writing assessment as progressive social action, an opportunity for teachers and administrators to reflect upon and change writing instruction. The latter part of the dissertation argues that understanding writing assessment as social action can help compositionists design and implement ethical assessment technologies.



The dissertation is divided into five chapters, covering writing assessment history, theory, practice, and ethics. Chapter One gives a historical overview of writing assessment and argues that it has always been a form of social action. Chapter One also looks to contemporary writing assessment theory and practice to explore how writing assessment might become a means of proactive social change within writing programs, universities, and the culture at large. Chapter Two explores through poststructuralist theories of power and education the role that writing assessment has played within

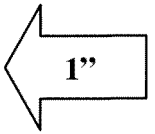
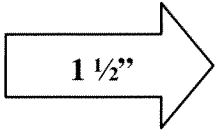
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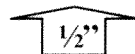


universities and culture at large. In particular, it highlights the role of human agency in changing the universities and the culture at large. In particular, it highlights the role of human agency in changing the way that writing assessments (re)produce institutional and cultural systems.

While Chapters One and Two are more theoretical in nature, Chapters Three and Four center on writing assessment practice and on the consequences that writing assessments have on programs, institutions, and individuals. Chapter Three focuses on a single assessment technology, the writing portfolio, to examine the extent to which writing assessment can be proactive social change in practice. And Chapter Four links writing assessment as social change to ethical inquiry, arguing that vigorous inquiry into the validity of writing assessments—including their social consequences on individuals and writing programs—is imperative research to conduct, as it is a means of reflecting upon and changing the course of writing assessment.



(l.c. Roman numeral page # here)

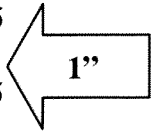
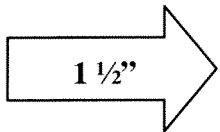




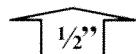
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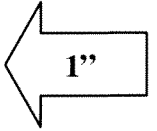
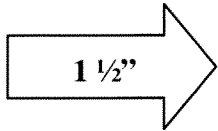




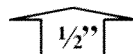
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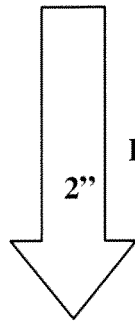
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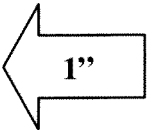
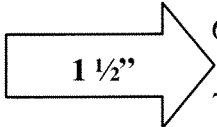




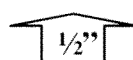
**Illustration I**

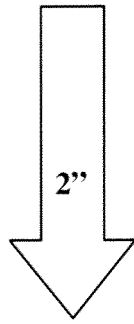
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**Illustration J**

CHAPTER III

CARBON AND KEVLAR<sup>®</sup> FIBERS

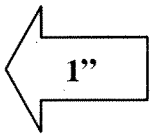
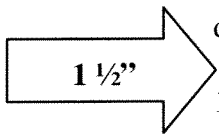
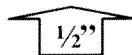
Morphology of Carbon and Kevlar<sup>®</sup> Fibers

General

A characteristic of considerable importance is the morphology of the void phase embedded in carbon and Kevlar<sup>®</sup> fibers. These voids range in size between 1-30 mm (Barton, 1994), and tend to be elongated in shape with the length of the void being on the order of 1.5-6 times the void width. The mechanism by which the void phase forms is dependent upon both processing conditions and material characteristics (Anson & Brown, 1996). In the case of wet spun fibers, such as Kevlar<sup>®</sup>, the voids are formed as the solvent leaves the polymer during coagulation (Smith, 2000). The ellipsoidal shape of the voids is due to the applied tensile force during this process.

The micro void phase in pitch-based carbon fibers has a number of sources. The formation of the structure is refined, and volatiles are given off (Barton, 1994). Polyacrylonitrile (PAN) based fibers often have similar structures with voids arising both from wet spinning and from carbonization. The more needle-like appearance of the voids in PAN based fibers are attributed to the high tensile forces applied to the fibers during spinning and carbonization (Jones, 2000). The appearances of voids in the PAN based fibers also contribute to the lightness of the fibers in virtually all applications. This property has contributed to the universal acceptance of PAN based fibers in

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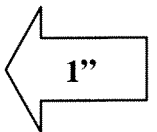
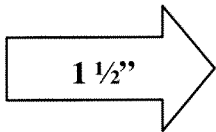


**Illustration K**

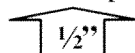
**Table 4**

Flexor Carpi Radialis Enthesis Measurements

Measurement (mm)	Left			Right		
	n	Maximum	Minimum	n	Maximum	Minimum
Length	246	17.00	8.00	234	16.00	7.00
Width	245	7.60	3.10	234	9.00	2.50
Height	246	5.00	1.50	231	5.00	1.50



Extensor Carpi Radialis Brevis Two (E2B) is one of the two insertions measured for this muscle, and is located on the dorsal ulnar side of a proximal MC2, just across from the ERL insertion. E2B is a raised bony area that runs obliquely across the ulnar fork of the bone (see Figure 22). The enthesis is narrower distally and wider proximally. The oblique axis was used as the length measurement with width the average of several measurements taken at equal distance perpendicular to the length.



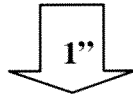


Illustration L

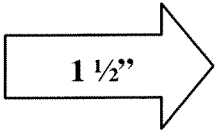
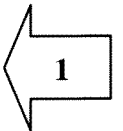


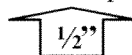
Table 4

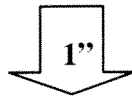
Composition of Various Lignocellulosic Raw Materials

	Corn stover	Wheat straw	Rice straw	Rice hulls	Bagasse fiber	Cotton in trash	News print	Populus trictis	Douglas fir
Carbohydrate (% of Sugar equivalent)									
Glucose	39	36.6	41	36.1	38.1	20	64.4	40	50
Mannose	0.3	0.8	1.8	3	NA	2.1	16.6	8	12
galactose	0.8	2.4	0.4	0.1	1.1	0.1	NA	NA	1.3
Xylose	14.8	19.2	14.8	14	23.3	4.6	4.6	13	3.4
Arabinose	3.2	2.4	4.5	2.6	2.5	2.3	0.5	2	1.1
Non-carbohydrate (%)									
Lignin	15.1	14.5	9.9	19.4	18.4	17.6	21	20	28.3
Ash	4.3	9.6	12.4	20.1	2.8	14.8	0.4	1	0.2
Protein	4	3	NA	NA	3	3	NA	NA	NA



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**Illustration M**

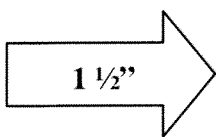
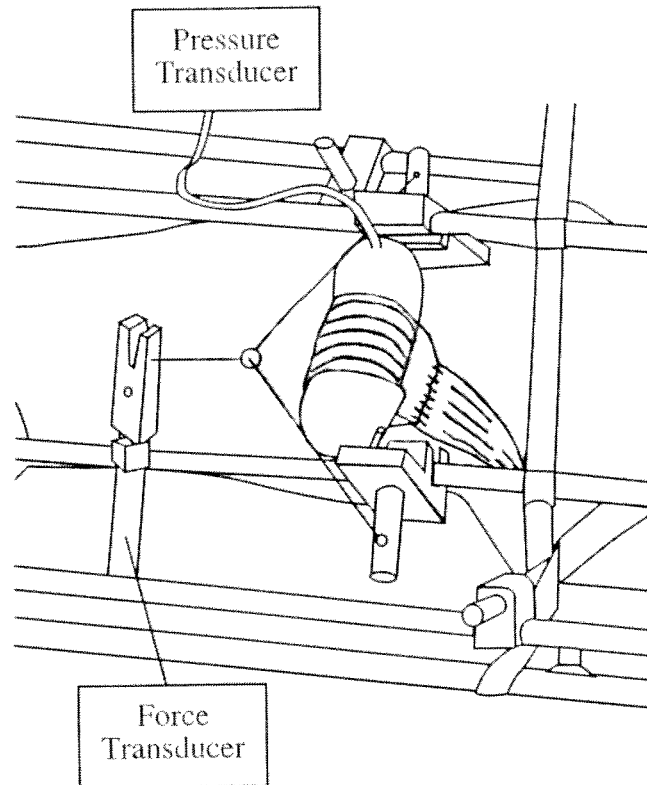
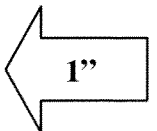
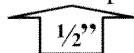


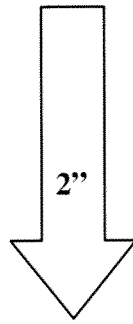
Figure 1. Schematic illustration of the contractile force measurement system.

Circumferential squeezing of the LDM is measured by the Pressure Transducer and longitudinal pull of the LDM is measured by a Force Transducer. See text for further explanation.



(**Note:** types of figures may include: graphs, charts, dot maps, drawings, photographs, etc.)





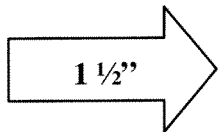
**Illustration N**

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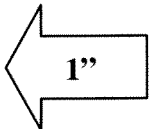
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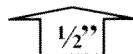
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**Illustration O**

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M.Ed., Music Education  
Columbia University  
1994-95

Ph.D., Meteorology  
University of California, Los Angeles  
1995-2002

**AWARDS:** Nobel Prize in Physiology or Medicine  
2002

Golden Apple Teaching Award  
University of California, Los Angeles  
2001

**PROFESSIONAL SOCIETIES:**

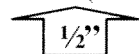
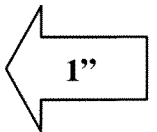
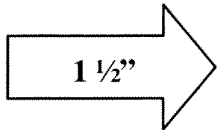
**PUBLICATIONS:**

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