GUIDELINES FOR SUBMISSION OF

THESES

AND

DISSERTATIONS

VANDERBILT UNIVERSITY

GRADUATE SCHOOL

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INTRODUCTION

These guidelines provide students at Vanderbilt University with essential information about how to prepare and submit theses and dissertations in a format acceptable to the Graduate School. The topics range from writing style to the completion of required forms and the payment of fees.

The majority of students submit an electronic version of their thesis or dissertation to the Graduate School. Electronic versions, once approved for format by the Graduate School, are uploaded to the Vanderbilt University database of Electronic Theses and Dissertations (ETD). There are instructions on the Graduate School website for guidance through this process.

<u>Style</u>

There is a distinct difference between submitting a manuscript to a publisher and providing a completed thesis or dissertation to the Graduate School. A manuscript represents a pre-publication format; a thesis or dissertation is a final, completely edited, published document. Students should use these guidelines, not other style manuals, as the final authority on issues of format and style. Areas not covered in this document or deviation from any of the specifications should be discussed with the Graduate School format editor. Do not use previously accepted theses and dissertations as definite models for style.

Composition and Structure

Manuscripts consist of four major sections and should be placed in the order listed:

Preliminary Pages

Title Page (required)

Copyright (optional, Ph.D. only)

Dedication (optional)

Acknowledgment (optional)

Preface (optional)

Table of Contents (required)

List of Tables (required)

List of Figures (required)

List of Abbreviations/Nomenclature/Symbols (optional)

Text

Introduction (may be referred to as Chapter 1) Body of Manuscript

References (required)

Appendices (optional)

Acknowledgement of Support

Acknowledgement of grant and contract support is included on the Acknowledgement page (Example: A grant from the National Science Foundation). A sample is on page 19.

Abstract

The Abstract is a separate document from the manuscript; it is not bound with the thesis or dissertation. Abstracts must be printed on white paper meeting the specifications listed below under Paper. No page numbers are printed on the Abstract. One copy is required with the master's thesis. Two copies are required with the doctoral dissertation. Abstracts must have the original signature(s) of the faculty advisor(s). The maximum length of the thesis abstract is 250 words. The maximum length of the dissertation abstract is 350 words, including the dissertation title. A sample is provided on page 13. Majors are listed on page 29-30.

Title Pages

Title pages must be printed on white paper meeting the specifications outlined under Paper. The Graduate School requires two copies. Both copies must be printed on paper of this quality.

Spacing between text on the title page will vary according to the length of the title. Sample title pages, including one revised for electronic submission, are on pages 15-16. Format instructions are on page 14.

MANUSCRIPT PREPARATION

Paper

Submit final copies on 8 ½ X 11 inch white, acid free, quality bond paper of at least 20-pound weight and not less than 25% cotton content. Paper of this quality is required to preserve the content over time. Vanderbilt watermark meets these minimum specifications, but watermark is not required. Upon request, the Graduate School will provide students with a few sheets of paper that meet these specifications.

Printing

Copies submitted to the Graduate School must be sharp, clear, and free of smudges or extraneous marks. Use paper meeting the specifications outlined above under Paper. Text print must be consistently clear and in black characters. Print on **one** side of the page only. The use of color in graphics, figures and tables enhances detail and is encouraged.

Font

Use a standard font consistently throughout the manuscript. Font size should be 10 to 12 point for all text, including titles and headings. It is permissible to change point size in tables, figures, captions, footnotes, and appendix material. Retain the same font, where possible. When charts, graphs, or spreadsheets are "imported," it is permissible to use alternate fonts.

Italics are appropriate for book and journal titles, foreign terms, and scientific terminology. **Boldface** may be used within the text for emphasis and/or for headings and subheadings. Use both in moderation.

Margins

Measure the top margin from the edge of the page to the top of the first line of text. Measure the bottom page margin from the bottom of the last line of <u>text</u> to the bottom edge of the page. Page margins should be a minimum of one-half inch from top, bottom, left and right.

Right margins may be justified or ragged, depending upon departmental requirements or student preference.

Pagination

The title page is considered to be page one, but the page number should not be printed on this page. All other pages should have a page number centered at the bottom of the page. Number the preliminary pages in lowercase Roman numerals. Arabic numerals begin on the first page of text. Pages are numbered consecutively throughout the remainder of the manuscript.

The Introduction may be placed before the first page of Chapter 1, even if it is not considered a chapter. The use of Arabic numbers may begin on the first page of the Introduction.

Spacing

The entire text should be single-spaced, one and one-half spaced, or double-spaced. Block quotations, footnotes, endnotes, table and figure captions, titles longer than one line, and individual reference entries may be single-spaced.

Double spacing should follow chapter numbers, chapter titles and major section titles (Dedication, Acknowledgements, Table of Contents, List of Tables, List of Figures, List of Abbreviations, Appendices, and References). Double spacing should also occur before each first-level and second-level heading, and before and after tables and figures embedded in the text. There should only be one blank space after headings.

Numbering Schemes

Chapters may be identified with uppercase Roman numerals or Arabic numbers. Tables, figures, and equations should be numbered consecutively throughout the manuscript with Arabic numerals. Equation numbers should be placed to the right of the equation and contained within parentheses or brackets.

Use uppercase letters to designate appendices.

Division

Body of Manuscript

Departments will determine acceptable standards for organizing master's theses into chapters, sections, or parts. Usually, if a thesis has headings, a Table of Contents should be included.

The dissertation must be divided into chapters. The use of parts, in addition to chapters, is acceptable.

Words and Sentences

Take care to divide words correctly. Do not divide words from one page to the next. Word processing software provides for "widow and orphan" protection. Utilize this feature to help in the

proper division of sentences from one page to another. In general, a single line of text should not be left at the bottom or top of a page. Blank space may be left at the bottom of a page, where necessary.

Headings and Subheadings

Use headings and subheadings to describe briefly the material in the section that follows. **Be** consistent with your choice of "levels" and refer to the instructions on spacing on page 6 for proper spacing between headings, subheadings, and text. First-level headings must be listed in the Table of Contents. Second-level and subsequent subheadings may be included.

Acronyms/Abbreviations/Capitalization

Abbreviations on the title page should appear as they do in the body of the thesis or dissertation. Examples: *Xenopus laevis*, Ca, Mg, Pb, Zn; TGF-β, p53.

Capitalize only the first letter of words of importance, distinction, or emphasis in titles and headings. Do not alter the all-cap style used for acronyms (Example: AIDS) and organizational names (Example: IBM). Use the conventional style for Latin words (Examples: *in vitro, in vivo, in situ*). Genus and species should be italicized. Capitalize the first letter of the Genus, but not that of the Species name (Example: *Streptococcus aureus*).

Tables and Figures

Figures commonly refer to photographs, images, maps, charts, graphs, and drawings. Tables generally list tabulated numerical data. These items should appear as close as possible to their first mention in the text. Tables and figures may be placed in appendices, if this is a departmental requirement or standard in the field.

Tables and figures should be numbered with Arabic numerals, either consecutively or by chapter. <u>Be consistent</u> in the style used in the placement of tables and figure captions (see pages 22-23).

Tables and figures may be embedded within the text or placed on a page alone. When placed on its own page, a figure or table may be centered on the page. When included with text, a table or figure should be set apart from the text.

Tables and figures, including captions, may be oriented in landscape.

Table data and figure data must be kept together, if the information fits on one page.

<u>Table of Contents Preparation</u>

Although the Graduate School does not provide word processing expertise or information, one hint is included. In Word, use the "Format Tabs" feature to prepare the table of contents. Type the number 6.5 in the Tab stop position box, select Alignment right and select Leader Option 2. These commands allow the computer to right align the page numbers and accurately place the "dots". Use the space bar for indentation. Table of contents instructions and examples are included on pages 20-21.

Use these same steps to prepare the List of Tables and Lists of Figures.

GENERAL INFORMATION

Language Other than English

Students in foreign language departments may submit manuscripts in a language other than English. On the Title Page and on the Abstract, the title of the thesis or dissertation should be written in the foreign language.

Multi-Part and Journal Article Format

A multi-part presentation format may be used for combining research that has been conducted in two or more related or non-related areas, or for presentation of combined journal articles (published or submitted for publication). Organization of the parts or articles into chapters is recommended. Each "chapter" may contain its own list of references and appendices.

Each dissertation should include the appropriate preliminary pages, an introduction presenting the general theme of the research and literature review, and a conclusion summarizing and integrating the major findings. Each "chapter" should consist of well-defined "subheadings," such as introduction, methods, results, and discussion.

The preliminary pages should include only one Table of Contents, List of Tables, List of Figures, and List of Abbreviations/Nomenclature. Tables and figures should be placed within the text, not at the end as is customary in articles prepared for journal publication.

Permission to Use Copyrighted Material

The standard provisions of copyright laws regarding quoted material under copyright apply to electronic publication. Dissertations are scanned by ProQuest/UMI for previously copyrighted material. When a student has published portions of their dissertation as articles in a copyrighted journal, permission from the journal to include that material must be obtained. ProQuest/UMI requires written permission from the copyright holder of any extensively quoted material. Emailed approvals from the journals are accepted. Proper acknowledgement within the text of the manuscript must be made. Students should discuss questions about copyrighted material with their dissertation director.

EXTRA COPIES

The Graduate School recommends Campus Copy for procuring bound copies of theses and dissertations. You may contact them directly at 615-322-6849, or by email at http://printingservices.vanderbilt.edu.

FINAL INSTRUCTIONS

At the beginning of the semester in which a student will be completing a degree, he or she must fill out an "Intent to Graduate" form and return it by the date specified at the top of the form. Intent forms can be downloaded at www.vanderbilt.edu/gradschool/formlocator and require the signature of the Director of Graduate Studies. Inform the Graduate School if information on "Intent to Graduate" form changes or if completion plans are delayed.

SUBMISSION

Required documents should be submitted to the Graduate School. Refer to the "Checklist" on page 10. IMPORTANT: Students should schedule an appointment with Liz Leis, the format editor, before submitting paperwork (322-3934). This review requires less than an hour.

Students who no longer reside in Nashville must adhere to the specifications in these Guidelines. Many students schedule a meeting time when they are on campus for their defense. Manuscripts can be sent for format review electronically. Students are responsible for ensuring that all documents are received. The Graduate School street address is 2101 West End Avenue, 411 Kirkland Hall, Nashville, TN 37240.

Master's Thesis

The master's student must submit two copies of the title page with original signatures of the committee members on each title page and one copy of the Abstract, with the original signature of the advisor. Both documents must be printed on white paper meeting the specifications listed under Paper, on page 5.

Ph.D. Dissertation

The doctoral student must submit two copies of the title page with original signatures of the committee members on each title page, and two copies of the abstract with the original signature of the advisor on each copy. Both documents must be printed on white paper meeting the specifications listed under Paper, on page 5.

The forms described below must also be completed and returned.

<u>ProQuest/UMI Information and Learning</u>. Dissertations must be published electronically through ProQuest/UMI. The Publishing Agreement Form is available from the Graduate School. Worldwide access to their dissertation is preferred, or students may restrict access to their work for a period of up to two years. After two years, the dissertation will be released for worldwide access.

<u>Copyright Registration</u>. ProQuest/UMI will register a copyright on behalf of doctoral recipients. Students who elect this service should sign the copyright section of the Publishing Agreement Form, include a copyright page within the dissertation, and pay the copyright fee. Copyrighting is optional. Discuss questions with committee members.

<u>Survey of Earned Doctorates</u>. Students finishing a doctorate degree are requested to complete the SED survey accessible at http://sed.norc.org/survey. Information provided to the National Opinion Research Council remains confidential and will be used for research or statistical purposes.

<u>Curriculum Vitae</u>. Instructions on preparing a curriculum vitae are available at http://www.vanderbilt.edu/gradschool/form_locator. This document may be sent electronically to liz.leis@vanderbilt.edu or printed and delivered to the Graduate School.

PRINTED SUBMISSION

Students who elect to print their theses or dissertation must provide the Graduate School with two copies of their document. Both copies must be printed on white, quality bond paper of at least 20-lb. weight and 25% cotton content. There is a binding fee of \$38 (\$19 per volume). Both copies are placed in the Vanderbilt University library system.

Checklist and Fees

The following items must be submitted to the Graduate School:

Master's Thesis

	1 Two (2) copies of the title page on *bond paper with the original signatures of advisor and second reader on both copies (month on the title page reflects the degree conferral month—May, August, or December).
	2 One (1) copy of the Abstract on *bond paper with original signature of advisor.
Ph.D. D	issertation
	1 Two (2) copies of the title page on *bond paper with the original signatures of committee members on both copies (month on the title page reflects the degree conferral month—May, August, or December).
	2 Two (2) copies of the abstract on *bond paper with original signature of dissertation director.
	3 Three (3) photocopies of the title page, after original signatures are obtained. Copy paper is acceptable.
	4 One (1) photocopy of the abstract, after the signature is obtained. Copy paper is acceptable.
	5 ProQuest/UMI Publishing Agreement Form plus one photocopy (Pages 4 & 5 are requiredinclude page 6 if copyright registration is requested).
	6 One (1) completed Survey of Earned Doctorates (http://sed.norc.org/survey)
	7 Fees:

Electronic publishing through UMI/ProQuest:
_____\$ 25.00 Traditional Publishing OR

\$ 120.00 Open Access Publishing

_____\$ 55.00 Copyright registration (optional)

8.____ Curriculum vitae (send electronically to liz.leis@vanderbilt.edu)

Electronic submission: Revise the title page as outlined on page 16, convert the document to a PDF, and name your file with your last name. Upload on the ETD (Electronic Theses and Dissertations) website.

Printed Submission: Two copies of the entire thesis or dissertation, printed on *bond paper, must be turned into the Graduate School. Both copies will be placed in the Vanderbilt University library system. The binding fee is \$38.00. Electronic publishing is required for Ph.D. only.

*Paper requirement: White quality bond paper of at least 20-lb. weight and 25% cotton.

Checks or cash: One check for the total amount due should be made payable to Vanderbilt University. Cash is accepted in the **exact** amount only.

Margin Template



½" top margin
(from top of page to top of fist line text)

← ½" left margin ½" right margin →

(Page numbers fall WITHIN the bottom margin and must be centered

(From the <u>bottom</u> of the last line of text to the bottom of the page)

Minimum ½" bottom margin



Format for Abstract

MAJOR

(All caps, underlined, right justified, one inch from top of page. DO NOT precede Program name with the words "Department of"). *See pages 29-30 for the list of majors

(Set line spacing to double spacing after <u>Title</u>)

Final title of dissertation, upper/lower case, single-spaced, centered

Your name, upper/lower case, centered

<u>Dissertation (or Thesis) under the direction of Professor (Full Name)</u>
(Underlined, centered, upper/lower case, double space to text, no page numbers)

TEXT(Double spaced)

Approved _		Date
	Type full name of Dissertation (or Thesis) director	

Sample Abstract

HUMAN GENETICS

Strain-Specific Alleles of *Phox2B* Differentially Modify *Sox10*^{Dom} Aganglionosis

Lauren Colleen Walters

Dissertation under the direction of Professor E. Michelle Southard-Smith

Hirschsprung disease (HSCR) is characterized by a lack of enteric ganglia in a variable portion of the distal bowel. The complex inheritance pattern of this disorder has led researchers to focus on genetic effects other than the putative disease mutation. Mouse models provide a controlled background for these types of studies. *Sox10* is an essential gene for the development of the enteric nervous system (ENS). *Sox10*^{Dom} mice on a mixed genetic background exhibit the variable aganglionosis seen in HSCR cases. Congenic lines of *Sox10*^{Dom} mice on distinct inbred genetic backgrounds, C57BL/6J (B6) and C3HeB/FeJ (C3Fe), differ in penetrance and extent of aganglionosis. A linkage screen for modifiers of *Sox10*^{Dom} aganglionosis was undertaken in a large B6 X C3Fe F₂ population. Several potential modifier regions were identified, with the most significant located on chromosome five (*Sox10m3*). The most relevant candidate gene in this region was *Phox2B*, an essential factor in autonomic neurogenesis.

Approved	Date	
* *		

Format for Title Page

Title of dissertation, upper/lower case, single-spaced, centered (One inch from top of page to top of title)

(Spacing will vary depending on length of the title of thesis or dissertation)

By

Your Name (The following five lines must be included in this exact format)

Dissertation (or Thesis)

Submitted to the Faculty of the

Graduate School of Vanderbilt University

in partial fulfillment of the requirements

for the degree of

DOCTOR OF PHILOSOPHY

in

Major (Refer to pages 29-30)

Month, Year

*IMPORTANT: The month will always be either <u>May</u>, <u>August</u>, or <u>December</u>
This is your actual <u>GRADUATION</u> semester, not your thesis or defense semester

Nashville, Tennessee

Approved: (Original signatures of committee members)	Date:
	
	·
	

(Title Page carries the value of page "i", but do not print number on page)

Sample Title Page

Mechanisms of Antibiotic Resistance and Pathogenesis in *Acinetobacter baumannii*

Ву

Marguerite Indriati Hood

Dissertation

Submitted to the Faculty of the

Graduate School of Vanderbilt University

in partial fulfillment of the requirements

for the degree of

DOCTOR OF PHILOSOPHY

in

Microbiology and Immunology

August, 2012

Nashville, Tennessee

Approved:	Date:
Timothy L. Cover, M.D.	
Dean W. Ballard, Ph.D.	
Timothy S. Blackwell, M.D.	
Terence S. Dermody, M.D.	
Eric P. Skaar, Ph.D.	

(Title Page carries the value of page "i", but do not print number on the page)

Sample Title Page, Revised for Electronic Submission

Mechanisms of Antibiotic Resistance and Pathogenesis in *Acinetobacter baumannii*

Ву

Marguerite Indriati Hood

Dissertation

Submitted to the Faculty of the

Graduate School of Vanderbilt University

in partial fulfillment of the requirements

for the degree of

DOCTOR OF PHILOSOPHY

in

Microbiology and Immunology

August, 2012

Nashville, Tennessee

Approved:

Timothy L. Cover, M.D.

Dean W. Ballard, Ph.D.

Timothy S. Blackwell, M.D.

Terence S. Dermody, M.D.

Eric P. Skaar, Ph.D.

(Title Page carries the value of page "i", but do not print number on the page)

Sample Copyright Page

Copyright © 2013 by Clinton Cody Bertram All Rights Reserved

Sample Dedication Page

To my amazing daughters, Megan and Alisha, wise beyond their years
and
To my beloved husband, Jonathan, infinitely supportive

Begin printing page numbers here, using lower case Roman numerals and continue consecutive Roman numeral numbering throughout the preliminary pages.

Sample Acknowledgement Page

ACKNOWLEDGEMENTS

This work would not have been possible without the financial support of the Vanderbilt Physician Scientist Development Award, the American Roentgen Ray Society Scholarship or the Vanderbilt University Medical Center Department of Radiology and Radiological Sciences. I am especially indebted to Dr. Martin Sandler, Chairman of the Department of Radiology, and Dr. John Worrell, Chief of the Section of Thoracic Radiology, who have been supportive of my career goals and who worked actively to provide me with the protected academic time to pursue those goals.

I am grateful to all of those with whom I have had the pleasure to work during this and other related projects. Each of the members of my Dissertation Committee has provided me extensive personal and professional guidance and taught me a great deal about both scientific research and life in general. I would especially like to thank Dr. Ron Price, the chairman of my committee. As my teacher and mentor, he has taught me more than I could ever give him credit for here. He has shown me, by his example, what a good scientist (and person) should be.

Nobody has been more important to me in the pursuit of this project than the members of my family. I would like to thank my parents, whose love and guidance are with me in whatever I pursue. They are the ultimate role models. Most importantly, I wish to thank my loving and supportive wife, Jennifer, and my three wonderful children, Lauren, Jacob and Elizabeth, who provide unending inspiration.

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Spacing Template – Chapter One, Page One

CHAPTER I

TITLE OF CHAPTER

First-Level Heading

Begin each chapter at the top of a new page. Follow the chapter number and chapter title with the same amount of space (line and one-half, double space, or "two enters, with spacing set to double space"). Use this same amount of space to precede first -and second-level headings, and before and after figures and tables.

Second-Level Heading

The number of levels and the placement of the headings and subheadings will vary, dependent on departmental requirements or preference. Headings may be centered, left justified, in bold face, italicized, indented or numbered. Use the same style throughout the document.

Be consistent with spacing and heading styles.

(Begin the use of Arabic numbering on the first page of text. Continue consecutive Arabic page numbering throughout the remainder of the document, including the appendices and references)

Sample Chapter One, Page One

CHAPTER 1

INTRODUCTION

Most children develop spatial concepts by looking at their environment and moving through their surroundings (Long & Hill, 2000). Children who are blind are unable to visually learn about their environment and are often delayed in the motor skills necessary to explore their environment (Adelson & Fraiberg, 1974; Jan, Sykanda, & Groenveld, 1990; Palazesi, 1986). Despite these delays, children who are blind are able to develop and use cognitive maps of spatial relationships though not necessary following the same pattern as children with typical sight (see literature review).

First, key terms are defined and the impact of blindness on cognitive mapping is discussed.

Next, a historical perspective on cognitive mapping in children with visual impairments is provided.

Then, methods of measuring cognitive mapping are presented, and the importance of studying cognitive mapping abilities in children is discussed. Finally, research questions are presented.

Definitions and Impact of Blindness on Cognitive Mapping

Definitions

Cognitive mapping – a psychological process in which one "acquires, codes, stores, recalls, and decodes information about the relative locations and attributes of phenomena in his everyday, spatial environment" (Downs & Stea, 1973, p. 9).

Sample Continuation Page (with quotation and footnotes)

Once again when he reminds us of Thomas S. Kuhn's work on paradigms: "But as Thomas S. Kuhn has stated in the *Structure of Scientific Revolutions*, theory often follows rather than precedes the practical 'shift in paradigm' that he regards as constituting a revolution in most research disciplines." Perhaps the practice of a new paradigm is coming into place with the theory to follow. Perhaps we as historians of ancient Israel should acknowledge an axiom of philosopher of history, Michael Stanford,

It is therefore not a weakness of history that it generates unending debates Therefore history is to be seen not as a set of cast-iron facts, but rather as an ongoing conversation with one's fellows about affairs of importance or interest – past, present or future. The discussion can at times become debate, or fierce argument...History is not a concept but an activity – an activity of a unique kind...History is...best understood as an endless debate, constituting an important part of the continuing conversation of mankind [sic].

Contemporary historians then continue to press forward by contemplating increasingly complex questions. Perhaps it is in conversation with the broader discipline of history and philosophy of history that historians of ancient Israel will find acceptable foundations for a new paradigm. Historiography in general, and historiography of ancient Israel specifically, finds itself at an extended crossroad, in need of an agreed-upon historiographic framework. In establishing this framework, the discipline must acknowledge the tradition upon which it stands; it must acknowledge the corrective challenges that have and continue to modify that tradition; it must push that tradition to ask itself challenging questions; it must reformulate itself to meet its current "depression + conduct disorder but do not have ADHD". This is a more accurate representation of the presentation clinicians must deal with in community settings. Finding "pure" examples of a single diagnosis is uncommon. Therefore, in the current study, a child was listed as having a diagnosis if he/she met the criteria for that diagnosis and regardless of the other diagnoses for which he/she might have qualified.

⁹⁵ Dever, 69, discussing Thomas S. Kuhn, *The Structure of Scientific Revolutions* (3rd ed.; Chicago: University of Chicago Press, 1996).

⁹⁶Stanford, *An Introduction to the Philosophy of History*, preface, viii.

⁹⁷As already suggested by Long, "The Future of Israel's Past," passim and Halpern, *The First Historians*, passim.

Continuation Page (with table or figure)

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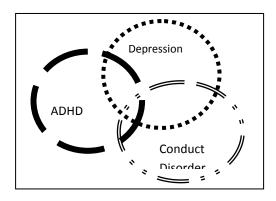


Figure 2. Venn Diagram of Co-Morbid Disorders

In addition to the *PCAS* diagnoses, Internalizing and Externalizing scores from the *Child Behavior Checklist* were used as indicators of "broadband-specific features" (Weiss, Susser, & Catron, 1998) rather than the narrowband-specific features represented by specific diagnostic categories. Measures of Internalizing and Externalizing behaviors function as indicators of what the parent/surrogate views as the primary problem. *T* scores for theses two scales were used in analyses. Theses *T* scores reflect the deviation of all subjects from the mean of their respective normative (age and gender) groups in the same fashion without losing any statistical power (Achenbach, 1991).

Sample References Page

REFERENCES

Able, S. and Ungewickell, E. (1990) Auxilin, a newly identified clathrin-associated Protein in coated Vesicles from bovine brain. *J Cell Biol*, **111**, 19-29.

Bartels, C., Xia, T., Billeter, M., Guntert, P. and Wuthrich, K. (1995) The program XEASY for computer-supported NMR spectral analysis of biological macromolecules. *J Biol NMR*, 1-10.

Bashford, D. and Case, D.A. (2000) Generalized born models of macromolecular salvation effects. *Annu Rev Phys Chem*, **51**, 129-152.

Bayer, P., Arndt, A., Metzger, S., Mahajan, R., Melchior, F., Jaenicke, r. and Becker, J. (1998) structure determination of the small ubiquitin-related modified SUMO-1. *J Mol Biol*, **280**, 275-286.

Beal, R., Deveraux, Q., Xia, G., Rechsteiner, M. and Pickart, C. (1996) Surface hydrophobit residues of multiubiquitin chains essential for proteolytic targeting. *Proc Natl Acad Sci U S A*, **93**, 861-866.

Bertolaet, B.L., Clarke, D.J., Wolff, M., Watson, M.H., Henze, M., Divita, G. and Reed, S.I. (2001a) UBA domains mediate protein-protein interactions between two DNA damage-inducible proteins. *J Mol Biol*, **313**, 955-963.

Bertolaet, B.L., Clarke, D.J., Wolff, M., Watson, M.H., Henze, M., Divita, G. and Reed, S.I. (2001b) UBA domains of DNA damage-inducible proteins interact with ubiquitin. *Nat Struct Biol*, **8**, 417-422.

Biederer, T., Volkwein, C. and Sommer, T. (1997) Role of Cue1p in ubiquitination and degradation at the ER surface. *Science*, **278**, 1806-1809.

Bodehausen, G. and Ruben, D.J. (1980) Natural abundance nitrogen-15 NMR by enhanced heteronuclear spectroscopy. *Chemical Physics Letters*, **69**, 185-189.

Bonifacino, J.S. and Traub, L.M. (2003) Signals for Sorting of Transmembrane Proteins to Endosomes and Lysosomes. *Annu Rev Biochem*, **72**, 395-447.

Braunschweiler, L. and Ernest, R.R. (1983) Coherence transfer by isotropic mixing: Application to proton correlation spectroscopy. *Journal of Magnetic Resonance*, **53**, 521-528.

Buchberger, A. (2002) From UBA to UBX: new words in the ubiquitin vocabulary *Trends Cell Biol*, 12, 216-221.

ACADEMIC PROGRAMS AND MAJORS

Majors listed in *middle* column below *must* be used on *Title Page* and *Abstract*

Academic Program	<u>Major</u> *(To be reflected on title page)	<u>Degrees</u>
Anthropology	Anthropology	M.A., Ph.D.
Biochemistry	Biochemistry	M.S.*, Ph.D.
Biological Sciences	Biological Sciences	M.S.*, Ph.D.
Biomedical Engineering	Biomedical Engineering	M.S., Ph.D.
Biomedical Informatics	Biomedical Informatics	M.S., Ph.D.
Biostatistics	Biostatistics	M.S., Ph.D.
Cancer Biology	Cancer Biology	M.S.*, Ph.D.
Cell and Developmental Biology	Cell and Developmental Biology	M.S.*, Ph.D.
Cellular and Molecular Pathology	Pathology	M.S.*, Ph.D.
Chemical and Biomolecular Engineering	Chemical Engineering	M.S., Ph.D.
Chemical and Physical Biology	Chemical and Physical Biology	M.S.*, Ph.D.
Chemistry	Chemistry	M.S.*, Ph.D.
Civil Engineering	Civil Engineering	M.S., Ph.D.
Classical Studies	Classical Studies	M.A.
Community Research and Action	Community Research and Action	M.S.*, Ph.D.
Computer Science	Computer Science	M.S., Ph.D.
Creative Writing	Creative Writing	M.F.A.
Earth and Environmental Sciences	Earth and Environmental Sciences	M.A.T., M.S.
Economic Development	Economics	M.A.
Economics	Economics	M.A.*, Ph.D.
Electrical Engineering	Electrical Engineering	M.S., Ph.D.
English	English	M.A.*, Ph.D.
Environmental Engineering	Environmental Engineering	M.S., Ph.D.
Epidemiology	Epidemiology	Ph.D.
French	French	M.A.*, Ph.D.
German	German	M.A.*, Ph.D.
Hearing and Speech Sciences	Hearing and Speech Sciences	Ph.D.
History	History	M.A.*, Ph.D.
Human Genetics	Human Genetics	Ph.D.
Interdisciplinary, Individualized Degrees	Interdisciplinary Studies: (Subtitle)	M.A., M.S., Ph.D.
Interdisciplinary Materials Science	Interdisciplinary Materials Science	M.S., Ph.D.
Latin American Studies	Latin American Studies	M.A.
Law and Economics	Law and Economics	Ph.D.
Leadership and Policy Studies	Leadership and Policy Studies	Ph.D.
Learning, Teaching, and Diversity	Learning, Teaching, and Diversity	M.S.*, Ph.D.
Liberal Arts and Science	Liberal Arts and Science	M.L.A.S.
Management	Management	Ph.D.
Mathematics	Mathematics	M.A., M.S., Ph.D.
Mechanical Engineering	Mechanical Engineering	M.S., Ph.D.
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Medicine, Health, and Society	Medicine, Health, and Society	M.A.
Microbiology and Immunology	Microbiology and Immunology	M.S.*, Ph.D.
Molecular Physiology and Biophysics	Molecular Physiology and Biophysics	M.S.*, Ph.D.
Neuroscience	Neuroscience	M.S.*, Ph.D.
Nursing Science	Nursing Science	Ph.D.
Pharmacology	Pharmacology	M.S.*, Ph.D.
Philosophy	Philosophy	M.A.*, Ph.D.
Physics and Astronomy	Physics	M.A., M.S., Ph.D.
Political Science	Political Science	M.A.*, Ph.D.
Psychology	Psychology	M.A.*, Ph.D.
Psychology and Human Development	Psychology	M.S.*, Ph.D.
Religion	Religion	M.A., Ph.D.
Sociology	Sociology	Ph.D.
Spanish and Portuguese	Spanish	M.A.*, Ph.D.
	Portuguese	M.A.*
	Spanish and Portuguese	M.A.*, Ph.D.
Special Education	Special Education	Ph.D.

^{*}A master's degree is awarded only under special circumstances.