

## RICHTER SCHOLAR PROJECTS - 2006

### ART

***Professor Ann Roberts***

***Durand 204***

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#### **Nineteenth –century Representations of Mary of Burgundy (1 student)**

Mary of Burgundy, the last Duchess of Burgundy, died in 1482, but her name was frequently invoked in the nineteenth century. In images, in novels, and in histories, Mary of Burgundy was treated either as a key figure for the development of the new Belgian state, or as a heroine of romantic fiction. This research project will focus on nineteenth century representations of the Duchess. It will require searching through history texts published in the nineteenth century, reading novels and biographies that include her, and locating images that depict the Duchess or episodes from her life.

The job of the Richter Scholar, then, will be part sleuth and part careful reader of these texts. I have located some texts, but need assistance in summarizing the action and identifying key passages in them. Other texts need to be identified and obtained. I would also like to search out reviews of the novels and histories or other forms of response to these representations. I also need to construct a catalogue of nineteenth century images of the Duchess and obtain reproductions of them.

The ideal candidate for this program of research will read at least one European language beyond English (French especially preferred, but German could work) and enjoy sifting through novels in the spirit of Walter Scott and Victor Hugo. The research program will require going off campus to Chicago area libraries such as the Newberry Library, Northwestern University Library and the University of Chicago.

***Professor Christopher Reed***

***Durand 205***

***Ext. 5183; email: reed@lakeforest.edu***

***Mr. Erik Larson***

***Library 103***

***Ext. 6219; email: larson@lakeforest.edu***

#### **Create Campus Guidebook and Interactive Map for Website (1 student)**

We are looking for one Richter Scholar to work under the joint supervision of Professor of Art History Christopher Reed and Manager of College Web Services Erik Larson on a project to help create a guidebook to the campus and an interactive map of the campus for the website.

This project focuses on finalizing and publicizing the work produced by the students in Art/History 349, "Lake Forest College as Cultural Landscape." The Richter student need not have taken this class, but some interest in the campus's architectural history would be welcome.

The student must be familiar with Flash and HTML. Interested Richters should talk to both Chris Reed and Erik Larsen about the details of this project.

## **ATHLETIC DEPARTMENT**

***Coach Michael E. Dau***  
***Sports Center 068B***  
***Ext. 5297; email: dau@lakeforest.edu***

### **History of Athletics at Lake Forest College (1 student)**

Phase I. Collect all available data from:

1. the *Stentor*
2. college yearbooks
3. athletic conferences (C.C.I., M.C.A.C.)
4. L.F.C. Athletic Department files
5. alumni sources
6. Library of Congress

Phase II. Construct a historical summary for each varsity sport to include:

1. team rosters
2. team honors; captain, M.V.P., etc.
3. external athletic honors; All Conference, All America, etc.
4. team records and stats
5. publicity (press clippings)
6. photographs, programs, memorabilia

Phase III. Construct a chronological summary highlighting items 2, 3 and 4 from Phase II for all varsity teams for each school year. In addition, prepare biographical sketches of the inductees to the L.F.C. Athletic Hall of Fame.

This is an ongoing project and to date have completed, for print, two decades of information. The primary goal for this summer's project would be for a Richter Scholar to compile, for print, another decade of research.

## **BIOLOGY**

**Professor Shubhik DebBurman**  
**Johnson Science Building-A201**  
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**Discovering Molecules That Combat Protein Misfolding Linked to Neurodegeneration (2-3 students)**

During summer 2006, the DebBurman lab seeks two or three highly motivated hardworking undergraduates to join a diverse group of five other peers, who collaboratively study how certain disease-linked proteins misfold and if such folding errors can be suppressed or reversed. To fold correctly, most proteins require chaperones, which are proteins that help other proteins fold into their proper shapes and maintain their shape. If proteins still misfold, they are targeted for destruction by the ubiquitin-proteasome complex. But some misfolded proteins that such escape quality control, build up in tissues and cause tragic incurable diseases. We have focused on the protein folding mysteries underlying two such illnesses: Parkinson Disease (PD) and dentatorubral pallidolusyan atrophy (DRPLA). Mutations in  $\alpha$ -synuclein and atrophin cause PD and DRPLA, respectively. Mutant  $\alpha$ -synuclein and atrophin proteins are both thought to misfold, aggregate, and somehow selectively kill nerve cells. We hypothesize that chaperones, and enzymes of the ubiquitin-proteasome pathway, lysosomal degradation pathway, and oxidative damage pathway can regulate mechanisms underlying the misfolding of these two proteins. To test this hypothesis, we have chosen to work with yeasts and mammalian cell culture as model systems and utilize techniques in molecular genetics, cell biology, and biochemistry. Students choose from several ongoing hypothesis-driven projects and enjoy significant control over experimental design. Richter students will attend a prestigious scientific summer conference in Chicago in May as part of their introduction to biology research, and they will learn to present scientific journal clubs and lead data discussions at weekly lab meetings. Many past students choose to continue working additional years in these projects. Some expand it a senior thesis, which they present at national and international conferences. Recently, eight students, including two past Richter scholars, became published co-authors in research articles published in major scientific journals, and all lab graduates have pursued graduate degrees in biology or a diverse array of health professions.

Pre-requisite: BIOL120, Bio Core Seminar, and CHEM111.

**Professor Caleb Gordon**  
**Johnson Science Building-J207**  
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**Stopover Ecology of Migrating Woodland Birds (1-2 students)**

The notion that a 10-gram bird would make a thousand mile journey twice a year seems unbelievable, and yet *most* of the bird species that breed in North America engage in such seasonal migratory activities. Understanding the ecology of migrating birds *during* their migration is critical for understanding the life histories of these birds, and for their conservation. As a Richter scholar under this project, students will participate in an intensive bird-banding study that I initiated in 2002, targeted at 1) monitoring long-term and continent-wide population trends in North American migratory birds; and 2) understanding the “stopover ecology” of

migrating birds as they pass through Lake Forest during spring migration. Students selecting this project should enjoy working outdoors in moderately strenuous and very muddy conditions, and be willing to wake up very early most days during the second half of May. Students will learn how to operate mist-nets and handle live birds in the field, including identification, weighing, banding, and physiological and reproductive condition assessment. This project involves many volunteer banders from the local community as well, and so an interest in working with the public, and helping to train and coordinate volunteers is also desirable. This project will involve two weeks of intensive field work at a Lake Forest nature preserve in the second half of May, followed by data entry, analysis, and research. The precise topic for research is flexible depending on students' interests, and will represent an opportunity for students to become involved in publications, presentations and/or continued research on migratory bird ecology.

***Professor Anne Houde***  
***Johnson Science Building-D231***  
***Ext. 6043; email: houde@lakeforest.edu***

**Sex, Mate Choice, and Evolution (1 student)**

Research in my laboratory focuses on the evolution of sexual behavior and mate choice. Our study organism is the guppy, a common, easy-to-breed tropical fish. I have been able to show that the bright colors that male guppies exhibit evolve through mate choice by females. Beyond this, there are many questions to be asked, addressed and answered about sex in guppies. A Richter Scholar will have the opportunity to observe the sexual antics of guppies, to come up with some fascinating questions, and to try to answer those questions through an original research project that you design. This is your opportunity to experience the full process of scientific research. Your project may yield insights that are new to science and can be published in a professional journal. You will get the chance to develop a real feel for how we do science and you will come away with a deeper insight into what it means to be a scientist.

In addition to the laboratory project, the Richter Scholar could also be involved in a book project I hope to start on the role of sexual behavior in the evolution of new species. Charles Darwin shook up the world in 1859 when he published his book, *On the Origin of Species*. Yet nearly 150 years later, there is widespread lack of understanding and even skepticism about the idea of evolution, especially in this country. In particular, the mechanisms by which new species of organisms arise have received very little attention in popular media. The Richter Scholar would be involved in gathering, reading and summarizing scientific literature, and then beginning work on one or more chapters.

***Professor Karen E. Kirk***  
***Johnson Science Building-D235A***  
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**Telomeres: Harbingers of Age and Immortality (1-2 Students)**

In order to understand the process of cellular immortalization, many cancer biologists study telomeres, the protein/DNA complexes that protect the very tips of eukaryotic chromosomes.

Telomere structure is altered in cancer cells, and it has been hypothesized that this change is part of the tumorigenic process. Evidence for this potential role stems from the finding that telomeres are shorter in cells with limited replication potential (most normal human cells) and longer in those that can divide for numerous generations or indefinitely (germ, stem, or cancer cells). Although shortened telomeres and reduced replication potential is a normal part of the aging process in humans, aberrant telomere lengthening may be part of the molecular mechanism needed for cells to turn cancerous.

In my lab, we seek to learn more about telomere function by using a genetic model organism called *Tetrahymena*. We mutate the telomeric DNA sequence in the living cell and ask how this mutation perturbs various aspects of cell growth and nuclear division. Our studies indicate that mutated telomeres are rapidly degraded, leading to deprotected chromosome ends and most likely to chromosomal fusions. In response to these events, the cell cycle appears to arrest in mid-anaphase of mitosis. We are now trying to better understand the molecular mechanism that results in such devastating cellular consequences.

Students in my lab learn how to design and execute experiments utilizing state-of-the-art molecular and cell biology techniques, and often present their findings at scientific conferences and in co-authored manuscripts. Most students continue their projects during subsequent years. Candidates must have completed at least one semester of biology and one year of basic chemistry.

***Professor Doug Light***  
***Johnson Science Building-D230***  
***Ext. 6039; email: [light@lakeforest.edu](mailto:light@lakeforest.edu)***

#### **Regulation of Cell Volume in Red Blood Cells (1-2 students)**

I study problems associated with animal physiology and homeostasis, mainly focusing on membrane transport mechanisms and signaling processes at the cellular level. Currently, I am looking for students interested in investigating the physiological basis of cell volume regulation. The ability to control size is a fundamental property of cells and is one of the oldest regulatory mechanisms from an evolutionary standpoint. In fact, many of the mechanisms involved with cell volume regulation also are associated with important biological phenomena, such as activation of white blood cells, regulation of the cell cycle, and programmed cell death. Nonetheless, the underlying mechanisms used to regulate cell volume are ill defined.

Students conducting research in my laboratory will perform novel experiments, which will lead to new findings that can be presented at regional and national meetings. These studies also may result in student-faculty co-authored publications in scientific journals. Students have the option of continuing with these studies beyond the summer so they may become the basis of a senior thesis.

Specifically, my research incorporates several complementary experimental approaches, using fish, amphibian, or reptilian red blood cells as model systems. These include hemolysis experiments to examine osmotic fragility, electronic sizing of cells to determine their volume,

and fluorescence microscopy to monitor intracellular calcium. The specific lab procedure(s) used by students will depend on individuals' particular interests. Given the nature of these studies, a minimum of Biology 120 and Chemistry 110 is required; having a full year of both Biology and Chemistry is strongly encouraged.

## **BUSINESS**

*Professor Les Dlabay*

*Young Hall 306*

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### **Project 1: Global Currencies: A Comparison Of The U.S. Dollar, The Euro, The Pound, The Yen, And The Yuan** (1 student)

In 2000, the U.S. dollar became the official currency of El Salvador and Ecuador. The Euro is being used in many countries with less stable currencies. Most countries of the world are influenced by five major currencies.

*Dollarization* refers to the use of a country's currency in another country. For decades, economists and others have predicted the emergence of one or more global super-currencies. This project involves an analysis of existing and potential activities involving the U.S. dollar, the Euro, the British pound, the yen, and others.

#### Richter Activities

IDENTIFY KEY ISSUES related to historic, economic, cultural, and political influences of dollarization and the emergence of the regional currencies.

LIBRARY, WEB RESEARCH to prepare summaries of background information regarding dollarization in various regional settings.

INTERVIEWS with people familiar with the culture and business environment in other countries.

WEB SITE DEVELOPMENT to plan the format and content for a web site with resources related to formal and informal dollarization.

### **Project 2: Culture and Economic Development in Ethnic Communities of North America** (1 student)

Every major city in the United States and Canada, along with many suburban areas, provides great insight into the culture and values of various ethnic groups. The foods, clothing, music, customs, and buying habits of ethnic groups provide a foundation for local and global business activities.

#### Richter Activities

IDENTIFY KEY ISSUES related to ethnic influences in the United States regarding global cultures.

CREATE ANALYTIC FRAMEWORK to identify the relationship among various cultural factors, buying behaviors, and global business activities.

LIBRARY, WEB RESEARCH to prepare summaries of background information regarding ethnic influences in the United States.

INTERVIEWS with people familiar with cultures, business activities, and microfinance programs among various ethnic groups.

FIELD OBSERVATIONS of ethnic retailing enterprises, informal economic activities, and cultural activities in Chicago and the suburbs.

WEB SITE DEVELOPMENT: To plan the format and content for a web site for reporting on the ethnic neighborhoods of Chicago.

**Project 3: The Informal Economy: A Comparison of Africa and Latin America** (1 student)  
Informal enterprises involve pushcarts, street vendors, temporary open-air stands, and peddlers on foot as well as unregistered offices, shops, and factories in homes. Many of these businesses are characterized by transient facilities, limited product lines, emphasis on perishable items, negotiated pricing (bargaining and barter), and untaxed revenues. The informal economy is known by many names, including the shadow economy, the underground economy, the parallel economy, and the black market. In many developing economies of Africa, Asia, and Latin America, the informal economy can represent between 40 percent and 60 percent of the workers.

#### Richter Activities

IDENTIFY KEY ISSUES related to informal economic activities in Africa and Latin America.

CREATE ANALYTIC FRAMEWORK to identify characteristics, causes, and consequences of informal economic activities in Africa and Latin America.

LIBRARY, WEB RESEARCH to prepare summaries of background information regarding informal economic activities in Africa and Latin America.

INTERVIEWS with people familiar with the culture, political situation, business environment, and microfinance activities in Africa and Latin America.

WEB SITE DEVELOPMENT: To plan the format and content for a web site of resources related to informal economic activities in Africa and Latin America.

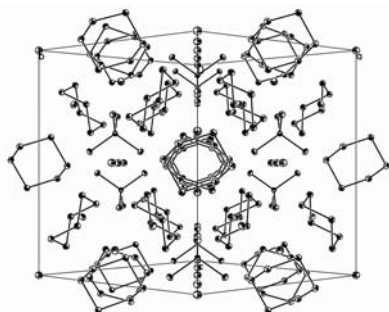
## **CHEMISTRY**

**Professor Jason Cody**  
**Johnson Science Building-A305**  
**Ext. 5093; email: cody@lakeforest.edu**

### **Making New Molecules in a Pressure Cooker (1 student)**

Building new molecules is the heart of chemistry. Before the properties of new materials can be measured and the first applications can be imagined, the molecules must be made. In my laboratory, we are investigating reactions of metal atoms with phosphorus, sulfur, and selenium.

The reactions will be done using a solvothermal approach: starting materials (ingredients) will be combined in a high pressure reactor (pressure cooker), and heated. Because some of the



materials decompose in air, precautions must be taken with these materials to work with them under conditions where oxygen and water are excluded. Thus, we will use special laboratory techniques for handling such air-sensitive materials. Subsequently, we will study the structure of the products using X-ray diffraction. With this technique, we can learn the exact molecular structure. The figure shows a new compound,  $K_3PSe_4 \cdot 2Se_6$ , that was prepared in my laboratory by summer and senior thesis research students. We recently published the structure of this new compound, and presented the work at

national meetings in San Diego, CA, and Orlando, FL.

The Richter Scholar will participate in every aspect of this project, working with me to formulate goals and experiments. Careful record keeping, enjoyment from working with one's hands, and imagination are keys to the success of this project. The project will conclude with a written summary of results and suggestions for future experiments. One year of college chemistry is a prerequisite.

**Professor Dawn Wisler**  
**Johnson Science Building-A301**  
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### **Chemistry, Computers, Calculations: The Convergence of Science, Technology, and Math in Industrial Applications (1 student)**

My research uses computer modeling to understand how the structure of a catalyst can affect the outcome of a catalytic reaction. The reactions of interest are called asymmetric reactions and are important to the *pharmaceutical* and *petrochemical* industries.

The recent availability of powerful and affordable desktop computers makes computer modeling of molecules a powerful research tool for chemists in industry and academia. Although the insight gained by computer modeling is remarkable, the full utility of this tool is realized only when computational results are combined with appropriate laboratory data. Richter scholars participating in this project will be directed and closely supervised by me, and will work closely with my upper level research students to gain valuable experience with the use of computer

modeling here at Lake Forest College. Once appropriate data has been collected, students will have the opportunity to interact with my collaborators at the University of Chicago and the University of Wisconsin at Madison.

The goal of my research is to understand how to optimize the synthesis of metallocene and hydroformylation catalysts in order to increase their availability for use in the manufacture of specialty polymers and in pharmaceutical research. The project involves exploring the structural and energetic aspects of a series of known catalysts and then using this information to guide the synthesis of new catalysts. The project also involves the development of new methods to model chemical structure and energy.

A student working on this project will perform molecular modeling calculations using a variety of computer programs running on Mac OS X, Linux, and Unix operating systems. Interested students will gain valuable experience in understanding chemical structure and in developing skills in the area of computer modeling. The project is suitable to students interested in the intersection of chemistry, computers, mathematics, and/or physics. Necessary prerequisite material includes introductory chemistry and a willingness to use Macintosh, UNIX, and PC computers. As with all research, there will also be a significant amount of literature research.

## COMMUNICATIONS

*Professor Leslie Harris*

*Young Hall 415*

*Ext. 5176; email: harris@lfc.edu*

### **Rhetoric of American Child Custody Law before 1850 (1 student)**

This research will contribute to a book manuscript on the rhetoric of child custody law in the United States where I trace shifts in child custody after divorce and attempt to connect these shifts to representations of family in the United States. There is consensus among historians and legal scholars that fathers had presumptive custody rights prior to 1850. The purpose of this research is to document trends in custody, compare those trends to legal principles, and discover how these child custody decisions were rhetorically justified. In other words, what were the implicit meanings of “mother,” “father,” “child,” and “family” that enabled these courts to make the decisions that they did?

Student responsibilities may include:

- documenting child custody and related case law prior to 1850
- evaluation of legal treatises
- archival work, especially newspaper research

## ECONOMICS

*Professor Robert J. Lemke*  
*Young Hall 315*  
*Ext. 5143; email: lemke@lakeforest.edu*

**Project 1: The Funding of Public Education** (1 or 2 students)

The funding of public education is a leading civil rights issue in the United States. As a researcher, I am interested in education policy with particular emphasis on taxation and funding. I am also interested in the means by which fiscal resources bring about (or fail to bring about) the educational goals of society.

The first question, therefore, is what are and what should be the educational goals of society. We will consult primary sources, read legislation, and become more informed about the ideas regarding and arguments surrounding education policy. We will study both the social perspective of education and the financing of public education. Questions of interest will include: What are the goals of public education? How have those goals changed over time? What are the best education systems to bring about those goals? What are the options for financing public education? To what extent are they fair, equitable, or efficient? To what extent does the current system of financing education, primarily through local property taxes and state governments, affect the ability to bring about the goals of public education? How can education reform, and specifically education finance reform, help the system?

The next task is then to obtain data to quantify the relationship between the financing of education and educational outcomes. Although inequality in educational outcomes and opportunities arises for many reasons, one primary reason is inequitable funding. Funding for public education comes from four sources – the federal government, state governments, localities (property taxes), and private contributions. We will study how the federal and state governments distribute funds and how local school districts spend their funds. Although state governments tend to redistribute funds so that rich school districts subsidize poorer districts, we will quantify the extent to which this actually happens, especially in the light of private contributions.

At this point in the analysis, the question arises, should education policy be focused on equitable education outcomes, equal funding of education opportunities, or sufficient funding to insure a minimum level of acceptable education for all children? This requires a philosophical discussion of the “civil rights” of education along with an economic analysis of the tax incentives and policy requirements associated with education. We will complete our research by studying the competing theories of the best way to reform the funding of education. We will draw from the leading ideas from both ends of the political spectrum, including federal financing of education to vouchers to privatizing the education industry.

The ideal student is interested in education policy, has taken Economics 110 Principles of Economics and Economics 180 Quantitative Methods for Economics and Business, reads well, is computer literate, is organized, works well with a team, stays on task, manages time well, and is interested in economic and education research. We will meet everyday to discuss the status of the project and to assign tasks. The project will likely begin on May 15 and continue through July 21, but the dates are somewhat flexible.

**Project 2: Investigating the Path From the Liberal Arts to Graduate School** (1 to 3 students)

My research focuses on the effect undergraduate education and experiences have on the decision to attend graduate school and pursue a doctoral degree. In the summer of 2004, I worked with three Richter students on a project that studied the effect faculty research and undergraduate degree requirements at liberal arts colleges have on encouraging graduates to pursue a Ph.D. in economics. The results from that summer's work are contained in a working paper we submitted to the Social Science Research Network (<http://ssrn.com/abstract=654241>) and in a paper we have submitted for publication in the *Journal of Economics Education*.

Recently I have been asked by Ron Ehrenberg of Cornell University to write a similar paper that goes beyond looking at just economics Ph.D.s. The point of the research will be to determine what characteristics of a liberal arts education determine who is likely to attend graduate school and in what fields. I will present the paper at a conference in Ithaca, NY in October of 2006. About twelve papers will be presented at the conference and (hopefully) published in an edited volume on the current state of doctoral education in the United States.

I am looking for one to three Richter students to serve as research assistants to help me put this paper together. The primary task will be to collect data on liberal arts colleges, doctoral programs, and recent Ph.D.s. We will then assemble and combine the data in a way to facilitate the statistical analysis. To complete the paper, the data will be analyzed and the results will be written up.

The ideal Richter candidates for this project will be interested in experiencing the research process firsthand and must be willing to work hard. They will also possess organizational and computer skills as well as an ability to work well with a team and to stay on-task. In terms of computer skills, we predominately will be using Excel and downloading data from the Internet. The statistical analysis and graphing will be carried out in STATA, but previous knowledge of STATA is not expected.

In addition to collecting and assembling data for the paper to be presented at Cornell, the objective of the project is to assemble a data set that can be used to answer many questions concerning the relationship between liberal arts colleges and doctoral education. To this end, the possible long-term benefits of this project are numerous. I expect the Richter students to serve as research assistants on the Cornell project. If, however, the students lend seriously good ideas to the statistical analysis and to the writing of the paper, they will be included as co-authors on the paper and I will look for funds to bring them to Cornell for the conference. More likely, I am hoping that the data set will lead to more projects in the future. Students who served as competent Richter students will be given the opportunity to be co-authors on other papers with me. If we pursue this opportunity, I would try to secure department summer funding for the student(s) in 2007 and possibly beyond; we would submit our results for publication in peer-reviewed journals; and I would expect that we would travel to conferences to present our results.

## EDUCATION

***Professor Rachel Ragland***

***Reid 206***

***Ext. 5198; email: [ragland@lakeforest.edu](mailto:ragland@lakeforest.edu)***

### **Investigating Best Practices in Professional Development for Secondary Teachers of American History (1 student)**

I am currently working on two research projects in the broad fields of teacher education/professional development and the teaching of American history. The goal of the first

research project underway is to investigate the sustainability of changes made to instructional practices in the classrooms of middle and high school history teachers in Lake County, IL public schools. The teachers were participants in a recently concluded federal Department of Education-funded *Teaching American History* grant program called McRAH: Model Collaboration: Rethinking American History. Teacher participants were surveyed, interviewed and observed concerning their use of “McRAH teaching strategies” during the course of the program, and changes in teachers’ instructional practices were noted. The current research is designed to see if these changes in teaching practices have continued in these classrooms now that the project has concluded and teachers are no longer receiving regular professional development from project faculty and colleagues. The methodology used to collect data was a written survey questionnaire and individual follow-up interviews of teachers.

The goal of the second research project underway is to conduct a meta-analysis of five different professional development programs funded by the federal Department of Education’s *Teaching American History* grant program in order to discover similarities in various approaches to professional development for inservice teachers. Participants in all five projects were surveyed concerning similar aspects of their experiences with these projects. This research is designed to see if there are similarities in terms of what was successful in each project in achieving the goals set by the project, and the types of professional development activities and collaborations preferred by the participants. Based on the meta-analysis recommendations will be made for design of future successful professional development for teachers. The methodology used to collect the data was a written survey questionnaire.

The role of the Richter Scholar will be to conduct the data entry, and assist me in the analysis of the data collected in these surveys. We will work collaboratively to formulate conclusions from the data. Additional work will include literature review and analysis of related work in the field. The student’s contributions will be credited in any future publication of this work. An interest in the fields of education, teaching and/or history and comfort with both data analysis and research literature is preferred. No prerequisite coursework is required.

***Professor Shelley Sherman***

***Reid Hall 205***

***Ext. 5172; email: sherman@lfc.edu***

### **Educational Reform in Chicago (1 student)**

Prominent individuals from Chicago have had a major impact on educational thought and practice across the United States. The meaning of educational reform should be examined from a variety of perspectives, from the progressive philosophy of John Dewey and Francis Parker to the agendas of contemporary Chicago figures and groups, including the controversial Paul Vallas, the former CEO of Chicago Public Schools who has been used as an example nationally for his own vision of the meaning of educational reform, and the Chicago Business Roundtable.

Lake Forest College is positioned beautifully to provide a focus on educational reform in Chicago and its suburbs. This includes access to diverse Chicago Public Schools, prominent

private schools with deep historical roots (e.g., Lab School at University of Chicago, Francis Parker), charter schools in the city and suburbs, Winnetka schools, and Waukegan schools.

I am in the process of creating a new course on educational reform in Chicago. My goals for this summer include the creation of a bibliography of primary and secondary sources on educational reform efforts in the Chicago area. The Richter Scholar assisting me will search for relevant text and images, including those available in libraries and schools, as well as human resources. The student will be engaged in on-line research using our library's databases and also must be willing to travel into Chicago and neighboring suburbs to do on-site research where this is possible. The student also may conduct interviews with individuals involved in current educational reform initiatives. In addition, the student will help me work out logistics for class field trips and may help develop a home page for this course.

## ENGLISH

*Professor Davis Schneiderman*

*Carnegie 205*

*Ext. 5282; email: dschneid@lakeforest.edu*

### **Project 1: Exquisite Corpse Anthology/Project (1 student)**

Together with Lake Forest College Art Professor Tom Denlinger and Academic Technology Specialist David Levinson, as well as representatives from two other ACM colleges, I have been facilitating an update of the Surrealist parlor game of Exquisite Corpse. The update consists of the electronic transfer of artistic 'texts', with responses generated by a different student at each transfer point. For instance, a student in my creative writing class might produce a one-page text, which once uploaded onto the Corpse server at LFC, would then be accessed by a student at Monmouth College. That student might produce a digital image in response to the text, and the resulting image would then be sent to a student at Colorado College, who would respond in kind. The finished Corpses are on display at <<http://nutmeg.durand.lfc.edu/corpse/gallery.html>>, and the Corpse planning group (all faculty and staff from six participating colleges) is working to expand the project for the 2006-07 academic year. Funding for the project since its inception totals \$60,000 and last year's Richter was able to travel to a project meeting in Colorado from these funds.

Thus, the first part of this project would entail a Richter Scholar providing support for the expansion of the project through research on the Exquisite Corpse, and potential technologies that might be used to update the cross-campus collaboration. The Richter Scholar will serve as a program assistant for a small summer planning conference for the Corpse group, and will be able to participate directly in the shape of future iterations of the project.

The second part of this project involves my co-editorship on the anthology *The Exquisite Corpse: Creativity, Collaboration, and the World's Most Popular Parlor Game* about the Exquisite Corpse. Professor Tom Denlinger and I are writing a chapter about the MITC-funded

version (above), and along with one other editor, are editing a number of essays that deal with the historical models of the Corpse, as well as with more recent updates.

The Richter Scholar would thus conduct research to assist in the editorial work, researching and discussing with me a large body of literature about the Surrealists, the Exquisite Corpse game, and a related literary group called the Oulipo. The summer work would serve as a primer in this branch of collaborative aesthetics, and the student would be able to have influence, directly, in the development of the anthology. Previous Richter Scholars have worked with me in a similar capacity on the forthcoming book, *Retaking the Universe: William S. Burroughs in the Age of Globalization*, which is scheduled for an April 2004 release.

The ideal student will have an interest in literature and art, and will perhaps have completed at least one course that deals, in part, with either of these topics in the 20<sup>th</sup> century. Of course, some familiarity with the work of the Surrealists and/or new Web technologies would be welcome, but is not absolutely necessary.

### **Project 2: Literary and Cultural Copyright (1 student)**

I am continuing research on a large project considering literary copyright and literary theft, within the context of contemporary issues of corporate ownership (music downloading, fan fiction, etc.). This project calls for a student interested in collecting material on the development of literary copyright, the rise of the “author” over the past 2000 years, as well as the implications of ownership standards on consumerism. The Richter Scholar will help develop a list of primary and secondary materials that investigate the ways that corporate leveraging of copyright law (in music sampling, in book publishing, and in advertising) dovetails with artistic production, and the possibilities of artistic production within the limits of the law.

On the literary side, I am particularly interested in researching writers who routinely “borrow” previously published work (Walter Benjamin, Kathy Acker, William S. Burroughs), and the ways in which they attempt to subvert copyright law.

On the more current side, for example, the musician Beck routinely “samples” from a variety of sources for each of his albums. Backed by a large record company (Geffen/BMG), he is able to cover the copyright usage fees. In 1998, a group of underground musicians released a CD called *Deconstructing Beck*, which mixed Beck songs *without* clearing any fees. Beck’s label threatened to sue the makers of the CD, until the company realized that public debate about the way transnational capital/money authorizes only certain people to make sample-driven music was exactly the point of the *Deconstructing Beck* project. Thus, this Richter project will entail making connections between the literary and cultural spheres, and may also involve interviewing professionals in the field of copyright law (professors, lawyers, etc).

The ideal student will be motivated to develop her own research directions, and will be interested in linking literature to broader social enterprises.

## **HISTORY**

***Professor Voula Saridakis***

***Young 520***

***Ext. 5123; email: [saridaki@lakeforest.edu](mailto:saridaki@lakeforest.edu)***

**King Charles II's Patronage of the Sciences (1 student)**

My research project for the summer will be for an article on King Charles II's (r. 1660-85) patronage of the sciences (especially astronomy) in late seventeenth-century England. Upon his restoration to the throne of England after the English Civil War, Charles II became a great patron of the arts and sciences. Among other things, he is known for founding the Greenwich Observatory near London for improving English navigation. He also sponsored the founding of the Royal Society of London in 1660 to promote scientific research (a society that still operates to this day).

The Richter Scholar would have the opportunity of assisting me with my research of both primary (locating manuscripts and archival work) and secondary sources using the Internet and materials found in local libraries. The student would also accompany me to these libraries if necessary. The student would prepare a bibliography of relevant sources and images, and meet with me on a weekly basis to discuss the material. There are no language requirements, although some coursework in history is highly desirable. Moreover, the ideal student would have an interest and willingness to immerse herself or himself in historical research. I hope that by assisting me with this research, the Richter Scholar might discover her or his own ideas about a variety of historical topics including royal patronage of the sciences and the history of the sciences in Restoration England.

**LIBRARY**

***Arthur H. Miller***

***College Archivist/Librarian for Special Collections***

***Library 016***

***Ext. 5064; email: [amiller@lakeforest.edu](mailto:amiller@lakeforest.edu)***

**Campus Preservation Planning Project (Getty Foundation, etc. grant, 2005-07) (1-3 students)**

This two-year project is documenting (inventorying, analyzing and interpreting) the historic College campus and its buildings, with staff and students engaged with outside architectural, preservation, and landscape architecture professionals. In the summer of 2006 students will assist in completing inventory forms and participate in analyzing data by creating spreadsheets and packets on individual buildings and spaces on campus, working with some of the leading professionals in their fields in the Midwest. I will supervise them, assisted by experienced longer-term student interns in Special Collections. My experience in the history of the campus, in preservation, and in interpretation is rooted in a third of a century at the College, a Ph.D. in the humanities (critical analysis, research methods), scholarship on local preservation (in addition to being a co-author of the College's 2000 history, "30 Miles North...", participation in various

historical/critical publications documenting local architecture and landscape. Though part of a larger whole, students would be given discrete projects as theirs, which they would be able to present. Work times could be flexible, anytime between Commencement and the beginning of the 2006-07 academic year, or within Richter program constraints.

For orientation, I would also endeavor to give the student(s) an opportunity to tour some relevant local estates and buildings, for comparison--including Ragdale for which a similar study was completed in 2002. Skills could range from historical research and on-site work with photography (campus interior spaces) to software applications and related problem-solving, as data is organized and analyzed.

## **MATHEMATICS/COMPUTER SCIENCE**

*Professor Joseph Hummel*  
*Young Hall 218*  
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### **Data Structure Visualization (1-3 students)**

Visualization is an important mechanism for learning in many fields, including Computer Science. The ability to “see” how an algorithm works or how a data structure is implemented is crucial to understanding how computers operate in general. For most students in CS, visualization is key to mastering the fundamental concepts.

Data structures are one of the fundamental concepts in Computer Science. Arrays, linked-lists, trees and graphs are just a few of the commonly used structures for storing data within the computer. The correct data structure can enable a straightforward and efficient solution to a difficult problem; the wrong data structure can prevent you from solving the problem at all. One of the challenges for students is learning the various types of data structures, their implementations, and their associated algorithms. This is where visualization comes in.

The focus of this research project is to design and implement data structure visualization software for integration into Visual Studio NET. Visual Studio is the primary software development environment used by our students, as well as professionals throughout the world. Visual Studio is designed to allow such integration, but to date very few people have taken advantage of this powerful capability. I would like to change that by developing a set of data structure visualizers for students, faculty and professionals alike. This research project requires programming skills on the level of CS 212 (basic data structures and OOP). Knowledge of computer graphics is a plus, but certainly not required.

## **PHYSICS**

*Professor Michael M. Kash*

**Johnson Science Building-A101**  
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**Feedback and Stability** (1 student)

The room in which you are reading this description is kept warm by some heat source. Ideally, the room is neither too warm nor too cold. Temperature is the signal: when the temperature is below a selected value, a furnace is activated, and when the temperature is above that value, the furnace is stopped. A thermostat is a familiar example of a *feedback* system, in which an *error signal* is used to regulate or *stabilize* a physical property.

Actually, a typical thermostat does not regulate temperature very well, because the only measurement performed by the thermostat is whether the temperature is above or below the set point, and the only outcome of this measurement is to turn the furnace on or off. The temperature will fluctuate somewhat around the set point. A better technique uses *proportional control*, in which the rate at which heat is delivered to the room is proportional to the difference between the actual temperature and the set point. Other strategies can be used to keep the room temperature constant and respond quickly to changing environmental factors.

This Richter Scholar project will explore several examples of feedback that are used to achieve stability. For example, the color, or the wavelength, of the light from a laser depends critically on the laser's temperature. One aspect of this project will be to develop a mechanism to regulate the wavelength of a helium-neon laser. This laser light, in turn, will be used as a reference for determining the wavelength of other lasers.

Projects such as this require patience, tenacity, and the willingness to work in a laboratory for long periods of time. It will be helpful to have studied physics and mathematics. Electronics experience would be ideal, but is not essential.

**Professor Nathan Mueggenburg**  
**Johnson Science Building-A130**  
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**Compaction of Granular Materials** (1 student)

At first glance it may seem that granular materials are rather simple. They are merely a collection of discrete macroscopic particles. We encounter such materials quite often as we go about our daily lives. We use salt at the dinner table, and we walk across the sand at the beach. Farmers store and transport grain and the pharmaceutical industry mixes and packages powdered medicines. Yet, such prevalence in our society does not imply simplicity, and does not imply that these materials are well understood. This project explores one aspect of the unusual behavior of granular materials.

Unlike ordinary solids and fluids, the density of a granular material is not a static property of the material and its current environment, but also depends on the history of the packing. We encounter this phenomenon when we open a new box of cereal, and find the container nearly half empty. Lest we think that we have been ripped off, the side of the box has a disclaimer stating

that some settling may have occurred during shipping. Vibrations during transport cause the particles to rearrange and result in a more compact configuration. The number of particles in the box has not changed, but the density of the packing has increased. This concept of compaction, is ubiquitous in granular materials, and is crucially important in engineering.

A Richter Scholar will explore the phenomenon of granular compaction with controlled laboratory experiments. Using an electromagnetic shaker (similar to a speaker) the student will test the dependence of compaction on the distribution of particle sizes and on dilatancy (the idea that in order for the packing to rearrange, it must be able to expand). Some knowledge of general physics will be useful, but the student does not need to have had extensive experimental or theoretical training. He/She needs only a desire to understand the physics behind this common, but perplexing phenomenon.

## **POLITICS**

*Rachel DeMotts*

*Young Hall 317*

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### **‘Peace’ Parks in Global Perspective (1 student)**

Are peace parks less than peaceful? This project will investigate whether the growing global emphasis on peace parks – or parks that stretch across international political borders – is actually causing human displacement and conflict rather than promoting co-existence with wildlife. As the proposed number of these parks expands to more than 100, this popular strategy is targeting historically contested border areas in which people live and adding wildlife to the mix. Local residents are supposed to benefit from the development and tourism that many hope will follow these new superparks, but it is unclear just how this will happen and who will benefit the most. In many cases, local residents may end up being involuntarily displaced as a consequence of the new park – making peace parks questionable harbingers of peace.

One key example of the inconsistencies in peace parks is found in the Mekong Delta, where the rush to create projects that can be called ecotourist destinations has led one group of developers to make plans for a tri-national golf course that has nine holes in each country – Cambodia, Laos, and Thailand. Golf courses are notoriously hard on the local physical environment, but this one is also located in a pristine forest area – which rather than making it objectionable turns it into an ‘ecotourism project’ because, it is claimed, golfers can watch wildlife while they play. The rush to link conservation across borders, then, has opened up the realm of justification for these projects as unimpeachably good while masking political and ecological inconsistencies and difficulties. Political and economic pressures from international donors, national governments, private businesses, and conservation interests may be exacting a high cost from those people who live in the paths of these projects.

This research builds on my interest in transfrontier parks and conservation areas in southern Africa by expanding it to take a global snapshot of the potential consequences of expanding

conservation beyond boundaries. A Richter student working with me will help me create a list of areas currently slated for peace parks and a basic sketch of possible impact on local residents, including any past conservation-induced displacement in the area, current local populations and potential displacement, wildlife migration in the area and possibility for human conflict, and especially any proposed resettlement plans. Creating this 'database' of the current status of peace parks on a global scale will illuminate whether this strategy is connected to displacement of local residents and direct the selection of cases for more in-depth examination. The Richter student involved in this project needs to have good research skills, initiative, and the ability to think critically about the motives of many political stakeholders.

***Professor James Marquardt***

***Young Hall 421***

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**Transparency and Sino-American Relations since 1989 (1 student)**

This summer research project is an investigation of relations between China and the United States since the end of the Cold War. It focuses on America's calls for China to be "more open and transparent" in the conduct of its military affairs. That is to say, for the sake of lasting peace and security in the Asia-Pacific region, the United States maintains that China must be more forthcoming with its neighbors about its military activities, capabilities, and strategy. China being more open and transparent, America insists, will help clear up the suspicions states in the region have about China's military intentions and, thereby, reduce regional tensions.

I hypothesize that America's transparency policy vis-a-vis China is part and parcel of a strategy to contain China's growing power and influence in the region. A more open China, along the lines suggested by the U.S., would be a China subject to the watchful gaze of the United States and, therefore, constrained strategically and politically. A China that resists military transparency would sharpen concern about China's intentions throughout the region and have the effect of casting doubt on China's claim that it seeks to be a normal, status quo power. In effect, transparency is not a mechanism to improve relations among nations but is rather a tool of American statecraft.

The Richter scholar will assist me in the collection and analysis of primary documents on this subject from American and Chinese (English language) sources. He/she will also survey the literatures on China's international relations and Sino-American relations over the past twenty years.

My goals are a draft chapter for a book manuscript, a conference paper, and a co-authored publishable article.

***Lecturer Jed Stone***

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**Project 1: Study of the Nineteenth Judicial Circuit, Illinois-Delivery of Justice (2 students)**

Students would attend/observe court proceedings in Lake County, Illinois with an eye toward writing a critical evaluation of the judicial process in the Nineteenth Judicial Circuit Court. Students would sit as observers for a number of weeks in the criminal courtrooms of several judges. They would evaluate the lawyers, the judges and the court call--the movement of cases through the process.

In addition students would work with researchers from the New York State Defender Association and the National Legal Aid and Defender Association to develop standards by which the Lake County, Illinois criminal justice system may be fairly evaluated. It is my hope that at the end of the project the students could author, for publication, a paper suggesting changes for one of Illinois' largest court systems.

Students would be asked to read essays on the courts. All of this work would be under my supervision. I would meet with these students formally several times each week and informally as they need at my law office in Waukegan. The students would gain a critical understanding of the justice system. The community would benefit from their documented insights and suggestions.

**Project 2: Review of Environmental Data from Industrial Centers in Waukegan with an Interest in Asbestosis and Silicosis Disease in the Workplace (2 students)**

Congress of the United States has embarked upon hearings to criticize, silence and even penalize persons, including physicians and lawyers, who seek to make legal claims to protect or obtain damage awards for workers who were exposed to asbestos and silica in their workplaces. There is a claim, made by conservative members of Congress and chambers of commerce and manufacturers that asbestosis and silicosis do not coexist in human lungs. Waukegan's foundry and industrial history is a wonderful source of medical-industrial history to either confirm or rebut this Congressional proposition. Students would be asked to research industrial and medical records, obtain anecdotal evidence from workers, health care providers, including nurses and physicians in the community.

In the spirit of full disclosure, Stone & Associates, L.L.C. currently represents a physician who has been subpoenaed to appear before the House Energy Committee's subcommittee on asbestos and silica litigation. While the evidence collected by LFC students might advance the doctor's testimony before congress, it would also be a useful source of research on the wider medical/legal/industrial issues of asbestosis and silicosis litigation.

## PSYCHOLOGY

*Professor Robert Glassman*  
*Hotchkiss Hall 11*  
*Ext. 5257; email: glassman@lakeforest.edu*

**Thinking a Little at a Time. Memory, Language Learning, Brain Waves (1-2 students)**

Our long-term memories are vast - so why is the capacity of immediate memory only about seven independent items - the so-called “magical number  $7 \pm 2$ ”? Indeed, under attention-absorbing conditions our capacity is even smaller – only about three or four. Are we so “narrow-minded” because of limitations of brain function? Or did working memory capacity evolve small because of the logic of cognition, for example in speaking and reading sentences? Is short-

term memory capacity the same in people as in other animals? What are our brain waves doing while we are remembering?

This year the following projects are available:

Computer programming for brain wave recording and analysis. Help develop programs written in LabVIEW, a computer language that is almost entirely iconic, or pictorial. The programs record EEG activity during various memory tasks, and analyze the brain waves to see if they have properties analogous to musical harmonies. (During the summer of 2005 Richter Scholars Jenny Brown and Leland Humbertson worked on a related project. Talk to them!) If you like becoming absorbed in puzzle solving you will love these programming jobs.

Do crayfish have a memory? An animal that has as much brain as a crawdad *must* have a memory! For several years we have tried to demonstrate that, but we still need to figure out “how to think like a mudbug.” Maybe this is the year we will crack this mystery. (During the summer of 2005 Richter Scholar Marina Pinayeva developed new techniques for behavioral testing of crayfish. Talk to her!) If you are also interested in recording brain waves from crayfish, you can put in extra time learning the fine art of microsurgery.

Foreign language learning and working memory capacity. In learning Russian, I’ve been struck by differences and similarities with English and by our recent-memory limitations in sentence construction. For example, after just barely being able to respond to the request (on a language-learning CD) to say in Russian “I have to go downtown” (5 words) I was able to respond correctly to the request to repeat that while adding, in Russian, “...to exchange money at the bank” (6 words in Russian, though the meanings distribute differently than in English). What do language teachers and students observe more generally about how many words they can “hang onto at once” in attempting to organize a sentence while learning a language? To what extent is this impacted by the additional memory load when you need to change the ordering of words in the other language or when you struggle to choose the correct one of two words that sound alike? Are there additional hints about these memory-load questions in the way languages form certain plurals – for example, why are there two different forms in Russian for the plural of the English word “years”? Developing these questions and finding some answers may provide a key to the mind!

*Lecturer Burton F. Krain*

*Hotchkiss 304*

*Ext. 5247; email [krain@lakeforest.edu](mailto:krain@lakeforest.edu)*

(Project Director: Burton F. Krain, Ph.D., CPT Director of Human and Organizational Performance, Human Performance Center, Great Lakes)

**Project 1: Mapping Competencies to Performance: Developing Measures for Officer and Enlisted Personnel in the U.S. Navy (1-2 students)**

This is an exciting program that has just gained nationwide recognition for its pioneering and cutting edge approach to competency development. The Navy has identified 81 core, cross-

functional and specialty competencies that account for all of the work done by the U.S. Navy and is in the process of establishing proficiency levels for the work/worker and determining which of these competencies differentiates between average and successful performers on the job. Our small research team has explored such areas as the relationship between Bloom's taxonomy and affective characteristics needed to be successful in the threshold competencies that account for the Navy's core values of honor, courage and commitment and are compiling a competency data dictionary. We are also looking at "whole person assessment" and mapping the relationship between personality variables and performance on the job. Currently, the Department of Defense is looking favorably toward adopting our methodology for all the Services.

**Project 2: Science of Learning and Human Performance Improvement Initiatives (1-2 students)**

The Navy's Human Performance Center is the largest human performance improvement organization of its kind in the country. The role of the Center is to identify areas for organizational improvement and provide analysis of problems identified. Staffed with behavioral scientists, industrial/organizational psychologists and educators, we tackle such problems as performance qualifications in such areas as swimming qualifications, perishable skills such as marksmanship and CPR, and a range of classroom related challenges to make the Navy's training and education system world class through electronic classrooms and computer-based instruction. Current projects a Richter Scholar might engage in include determining jet pilot/flight officer qualifications; determining the relationship of preparatory programs on success in follow-on officer candidate programs such as NROTC or Officer Candidate School; conducting focus group interviews with recruit drill commanders at the Navy's only boot camp, Recruit Training Command, Great Lakes.

**Role of the Richter Scholar:** The ideal candidate(s) would have an interest in psychology and business and would be provided hands-on experience in data collection, conducting surveys and focus groups, and working with data provided from across the country. We pride ourselves in providing close supervision leading to a very positive summer experience. Our work could result in developing publications, which the Richter Scholar can share authorship in, and also gain experience working with our partners from private industry, including the SkillsNET Corporation, to develop additional tools to analyze competencies.

**Considerations:** The work experience we provide is real-time, applied psychology. We have a "living laboratory" at Great Lakes, which is only a short ten minute drive away from the Lake Forest College campus. Prior students have gone on to stay for additional internships, extending their experiences beyond the summer program and have continued on to major in this subject area. We provide Richter Scholars with a nurturing environment and a team of resources including master's level co-workers that guide them through project completion/publication. We provide an ideal setting to gain experience in psychology as applied to human and organizational behavior and look forward to the contributions that a Richter Scholar can make to this effort..

***Professor David Krantz***

***Hotchkiss Hall 12***

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### **Forgiveness and the Healing of Trauma** (1 student)

With the end of the repressive South African government regime of apartheid, the Truth and Reconciliation Commission was founded in an attempt to "heal" individual and national trauma. The Committee sometimes granted amnesty to some of apartheid's perpetrators and forgiveness by the victims.

I'd like to explore the concept of "forgiveness" in the healing of trauma from psychological, philosophical, theological and political perspectives. Given this rich, multifaceted literature I'd like to shape the summer's project to suit the student's interests and background.

This project should be of interest to students interested in psychology, philosophy, theology, politics and history.

## **RELIGION**

*Professor Herbert Bronstein*

*Reid Hall 3*

*Ext. 5138; email: [bronstein@lakeforest.edu](mailto:bronstein@lakeforest.edu)*

### **Project 1: The Periodization of Historic Time: Ideologies and Social Systems** (1-2 students)

I am proposing continuing research on the thesis that all schemes of periodizing history or "earthly time," such as Ancient/Medieval/Modern, similarly to BC/AD, are ideological in origin and are socially constructed, whether cyclical or linear. Beginning in ancient times and proceeding into our own century, intellectual elites have endeavored to find or impose some order on the flow of time through the segmentation of history or mundane time into eons or epochs with clear-cut divisions. The thesis is that each periodization of the flow of time can be seen as the crystallization of the world view from which that periodization has issued. One or two students could help me very very much to explore various systems of periodization, depending on the interest and background of the student(s). No prior classes are required, though I will ask the student to read certain texts. A value of this research area is the wide scope it provides, allowing for particular student interests; another, that there is one other factor that would be of help to me. Many of the students have a competence with the Internet which I do not (!), and therefore there could be good teamwork involved.

I suppose the entire project could be entitled "The Periodization of Historic Time: Ideologies and Social Systems." After briefly sketching the time-scheme in which the particular student is interested, I can show her or him how to research the ideological correlates and their relations, if any, to social and institutional structures.

Further, an awareness of the ideological determinants of a particular scheme of periodization of history and their social-structure correlates helps to develop critical acumen in cultural and intellectual studies: a perception of the distorting and even damaging effects of variously imposed templates of periodization. And also the student can be helped to see that behind any system of periodization lurk assumptions about causation, that is, about "fundamental" and

"secondary" or "derivative" factors that produce these schemes, or determinants of human culture in history. Various critical methodologies could be demonstrated.

**Project 2: Center Symbolism As A Religious Motif In Shakespeare** (1-2 students)  
In certain of Shakespeare's works ( Othello, Macbeth, etc.) it appears that the center symbolism of ancient religious cosmologies relating to the maintenance of the order of the world and the normal natural cycles is endowed by Shakespeare with moral significance. The student would first read certain of Herbert Bronstein's published articles for background and then work with him to research either renaissance references to this symbolism or correlations in various passages in the Shakespearian texts and/or the commentaries to particular passages in Shakespeare.

I have already published an initial statement on this in a book called *Time, Order, Chaos*, (ed. Frazer, Soulsby) but I want to develop a book-sized work on this project and whoever works with me will, of course, be given credit for the work accomplished in that respect as well.

## THEATER

*Professor Dennis Mae*  
*Hixon Hall 202*  
*Ext. 5141; email: mae@lakeforest.edu*

### Theater Research

#### **Project 1: Visual Research** (1-3 students)

This Richter Scholar would research the historical, political and cultural influences as well as the visual elements as background for one of the 2006-2007 Garrick Players productions. The student would serve as an assistant to the designer. The objective of this project is to generate research documentation and analysis for one or more of the three major productions, each set in a different time period. The student may also assist in the creation of set renderings and costume plates for the production.

A short paper may be presented by the student at the panel discussion after the final performance. Research materials will also be part of a lobby display on the historical period of the play. No special skills are required but an interest or ability in illustration could be a plus.

#### **Project 2: Making a Musical** (1 student)

This project consists of research on and adaptation of an accepted classic stage work into a contemporary musical theater work. Titles under consideration include: "The Would-be Gentleman" by Moliere, "She Would if She Could" by Etheredge, and others, including student suggestions.

Research includes standard dramaturgical inquiry into the literary and production history of the work(s) chosen. Period versus contemporary production options are to be explored.

Student(s) will assist in the selection of songs, song placement in the text, text editing, lyric writing/adaptation, etc.

Performance and/or publication is an expected outcome of this project.

***Professor Richard Pettengill***  
***Carnegie Hall 101***  
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**Wild Shakespeare: Radical Stagings into Film** (1 student)

How is it that some of the most innovative directorial approaches to Shakespeare – often controversial when first put on stage – end up making their way to film and video and long-term critical acclaim? This summer, come help me think about a number of radical film interpretations of Shakespeare’s plays by major British and American directors – including Peter Brooks’ *King Lear*, Julie Taymor’s *Titus*, Richard Loncraine’s *Richard III*, Robert Woodruff’s *The Comedy of Errors*, and Michael Bogdanov’s *Macbeth*. We’ll be tracing not only the genesis of each production concept and the stage to screen process, but also the critical reception of both versions of each production. The result should be a fascinating study of directors working to ensure the cinematic permanence of what might otherwise have disappeared after the theatrical run.

This summer let’s read, discuss, research -- and watch provocative films of -- some of the most incredible plays ever written.

Richard Pettengill is Assistant Professor of English and Theater at Lake Forest College