

## Faculty Projects Maple Scholars 2009

The faculty projects that have been funded for the summer of 2009 are provided in the table below. The professors' names are listed alphabetically, followed by an abbreviated title of the project, and the academic department or affiliation.

Detailed descriptions of the proposals follow the table.

**Students interested in becoming a Maple Scholar for the summer of 2009 may apply to up to three of the projects. Application forms for 2009 are available on this website.**

### Steps in the application process process:

1. Identify the project or projects in which you are interested.
2. Speak with the professor's responsible for each of the projects that interest you.
3. Fill out and submit an electronic copy of the application form **available on this website** not later than Monday, **February 2, 2009**, to Marilyn Bayak. [marilynlb@goshen.edu](mailto:marilynlb@goshen.edu)

Successful applicants will be notified by campus mail during the first week of March, 2009.

### Faculty Projects for 2009:

Proposer	Title	Department
Beth Martin Birkey	Costa Rican Women's Stories	English/Women's Studies
Carl Helrich	Investigations of Cholesterol	Physics
David Housman	Fair allocation	Mathematics
Carol Jarvis	Amish Participation Ryan's	Social Work/Sociology
Paul Keim	Vengence/Forgiveness	BRP
Paul Meyer Reimer	Multimedia News Service	Communication
Duane Stoltzfus		
Robert Reyes	CITL Educ Need and Assets	Sociology/Social Work/CITL
Ryan Sensenig	Effects of Deer Herbivory	Biology/Merry Lea
Doug Schirich	Amino Acid Residues	Chemistry
Dan Smith	Genetics of Domestic Pigeons	Chemistry
Bob Yoder	Mennonite Youth Ministry	Campus Pastor/Youth Ministry

### Description of Projects:

This section contains descriptions of each of the projects available for the Maple Scholars in the summer of 2009. Each description follows the same format outlined here.

## **Title of Project**

Professor

Academic affiliation

Email

## **Description of the Project:**

### **Student Background Expected:**

### **Anticipated Results:**

The projects appear alphabetically by professor's name.

## **Costa Rican Women's Stories of Collective Action**

Beth Martin Birky, Ph.D.

Professor of English and Women's Studies

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**Description:** The Costa Rican women's movement reflects the country's democratic ethos and women's commitment to working collectively for change. Since 2001, I have had the opportunity to visit grassroots women's organizations as well as government agencies and academic women's studies programs in many different parts of the country. I have observed a rich canvas of women's collaborative work and heard recurring phrases that distinctive values: words: *capacitar* (to enable; to empower), *apoyar* (to support, to hold up another), *recursos* (providing resources), and *educación* (offering formal and informal education for everyone). Through women's stories, I have learned about the way that solidarity and collaboration strengthen women's organization and empowerment in any community.

Through the Maple Scholars program, I hope to work with a student to research key issues in Costa Rican women's experiences: economic development, legal status of women, domestic violence, education, political representation, governmental definitions of *collectives*. The final project will be a scholarly essay on the distinctive characteristics of the women's movement in Costa Rica and its place in the larger global women's movement.

In addition to traditional qualitative research methodology, the project will include analysis of video footage and personal interviews with Costa Rican women in 2007.

**Background Expected:** The student should have an awareness of women's issues and Latin American culture, as well as strong writing and communications skills. A key skill will be working collaboratively with me in planning the project but should also be able to work independently. I hope a student will be able to take initiative to follow leads found in research, suggest new directions for work, and to make connections between our work and her/his discipline. Spanish skills are a benefit.

**Anticipated Result:** By analyzing Costa Rican women's values and strategies, the student and I will be able to present research and stories that could inform a more collective and community-centered feminism in our own communities. Part of the results will become part of an existing

website (see <http://www.goshen.edu/wost/costarica/>). The research will also result in a paper that can be presented at an undergraduate research conference or at the National Women's Studies Association annual conference in November 2009. The work will also contribute to my own scholarship of Costa Rican women and teaching about the global women's movement.

## **Investigations of Cholesterol Structures in Biological Membranes**

Carl Helrich  
Professor of Physics  
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**Description:** The exact role played by cholesterol in mammalian biological membranes is a major topic of research at this time. It is possible, for example, that incorporation of some proteins in membranes is facilitated by cholesterol structures in the lipid bilayer that forms the membrane.

There is growing experimental and theoretical evidence, some of it from the Goshen College biophysics group, that cholesterol forms regular geometrical lattice structures (superlattices) in lipid bilayers. Our work has been both experimental and theoretical. Our experiments have been to study the formation of ion channels by the antibiotic nystatin in the presence of a sterol. This provides insight into the role of the sterol, since the action of nystatin in bacterial membranes is to form channels. Our experimental work provided the basis for the development of a model of the sterol structure, which incorporates superlattices. We have published these results in *The Biophysical Journal*.

Our theoretical work involves Monte Carlo (computer) simulation, which is a widely accepted technique. To date our computer simulation has given us a unique window on the membrane and the nystatin channel dynamics. We have gained understanding of the role of the various lattice structures.

In addition to comparison with our own work on channel dynamics we have been able to demonstrate that our model explains the fluorescence work of a colleague at Temple Medical School. There is an apparent disagreement between those results and chemical reaction studies at Texas Tech. Our most recent work has been an attempt to reconcile these two results. We have very promising, but inconclusive results from summer 2008.

In the summer of 2009 we will continue experimental work on channel dynamics. We plan to change our lipid base and to encompass a wider range of sterol concentrations. Our techniques at this time allow us to perform rather precise measurements of parameters and dynamics involved.

Our theoretical studies will be directed toward solidifying the reconciliation of the concentration results from the fluorescence work at Temple with the chemical kinetics work in Texas. We believe that the answer may lie finally in the fact that our model predicts a mosaic of superlattices. Our chemical potential studies have not yet adequately incorporated this. Students may apply to either the experimental or theoretical aspect of this proposal. The experimental work will be based on artificial planar phospholipid bilayers. This is a technique which has common application in biophysics and neural and medical sciences. The specific studies will be of the incorporation of vesicles containing the sterols and nystatin

channels. These studies were originally designed as models of vesicles containing neurotransmitters.

The theoretical studies will continue to be, in part, of models of channel dynamics to compare with the experimental work. However a primary direction will be toward understanding the role of the mosaic of sterols structures in defining the chemical potential.

**Background:** There are two aspects of the project experimental and theoretical.

*Experimental* - In principle a student can begin experimental work from scratch. Interest in the topic, some experimental dexterity, and a dose of patience are very helpful. But no specific coursework is required. Applicants will be helped by actually working in the biophysics laboratory in the Spring Semester.

*Theoretical* – An understanding of thermodynamics and statistical mechanics will be very helpful. Mathematical ability and some familiarity with Maple (software package) is also helpful. However, the primary requirements are interest in the subject, enthusiasm for theoretical physics, and a desire to learn.

First year students are encouraged to apply to the experimental aspects of this project.

**Anticipated Results:** From a scientific point of view we hope that the summer will provide a deeper understanding of the dynamics of nystatin channels as we change the sterol concentration systematically over a wide range. We hope that will be coupled with a deeper understanding of the energies involved in the sterol interaction with the membrane.

We regularly present our work at the annual meeting of the Biophysical Society and the National Conference on Undergraduate Research. We anticipate that our work from the summer of 2009 will result in presentations at each of these meetings. We must also begin to prepare a publication for a journal as well.

## Fair Allocation

David Housman  
Professor of Mathematics  
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**Description:** By collaborating, several cities can save money on upgrading their water treatment facilities. What is a fair way of allocating the savings? Several people have inherited an estate, but they differ in their opinions about the worth of each item in the estate. What is a fair way of allocating the estate? Different sportswriters have different rankings for college football teams. What is a fair way of melding these different opinions into a single ranking? In these situations, do the agents involved have incentives for stating their true costs, valuations, or rankings? In this research, students develop a mathematical model of a situation, define fairness properties, suggest allocation methods, and determine whether suggested allocation methods satisfy the defined fairness properties.

**Background Expected:** An ability to read, critique, and write mathematical proofs.

**Anticipated Results:** Development of new mathematical results communicated via a written report and an oral presentation at one or more professional meetings. The Scholar will obtain a better understanding of the creative process.

## **Examining factors leading to the Amish community's participation at a local grief center (Ryan's Place)**

Carol Jarvis, LCSW, Doctoral Candidate  
Associate Adjunct Professor of Social Work and Sociology  
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**Description:** Families experiencing grief become members of “the club no one wants to join” (Schuurman, 2004, para 1). An increasingly popular model of bereavement care to assist these families is the self-help/mutual aid group. Ryan's Place, a non-profit grief center located in Goshen, Indiana, is one such self-help group that provides volunteer, peer-led bereavement services to families free of charge (Ryan's Place, n.d.). The model of bereavement care offered by Ryan's Place is based on one established by The Dougy Center, a non-profit grief center in Portland, Oregon, which was founded in 1982 (The Dougy Center, 2004). The Dougy Center's approach to bereavement care (referred to as The Dougy Center model) was developed in response to a Eurocentric/Western view of death and dying in which grief is an issue that is dealt with in private and is only allowed to be expressed for a brief period of time (D. Schuurman, personal communication, February 16, 2006). In addition, the model was developed in Portland, Oregon, which at the time of the model's development, was a predominately a White/non-Hispanic community (D. Schuurman, personal communication, February 16, 2006).

Goshen, Indiana, the site of Ryan's Place, is a small, Midwestern city that in recent years is becoming more racially and ethnically diverse (U. S. Census Bureau, 2007). In addition to an influx of Latino/a residents, other ethnic and racial minorities are represented in this town as well as in the surrounding communities (U. S. Census Bureau, 2007)<sup>1</sup>. Of all of these culturally diverse groups, the primary one that Ryan's Place currently serves is the Amish. The Amish community's use of Ryan's Place is somewhat surprising, considering the fact that they traditionally use services offered outside of their community reluctantly and typically in crisis situations. The success in reaching out to the Amish community has led the staff at Ryan's Place to consider ways they might extend their services to other groups. Of particular interest are the Latino/a and African American communities, both of whom are currently underserved by Ryan's Place.

Using case study research, this project will examine what factors lead to an independent and distinct community such as the Amish to utilize the bereavement support services offered by Ryan's Place. Relying on multiple sources of evidence (as is customary with case study

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<sup>1</sup> In 1990, Indiana's Latino population represented 1.8% of the state's population. By 2000, the Latino population had more than doubled, representing 3.5% of the state's total (Aponte, 2002, p.1). Elkhart County, the county in which Ryan's Place is located, ranks third highest in the percentage of Latino residents for the state (Aponte, 2002, p.3).

research), such as interviews, observation, and review of archival data, this study seeks to understand how the Amish community became involved with Ryan's Place and why they have chosen to utilize the services offered by this agency. Understanding this phenomenon better may help grief centers develop outreach strategies that can be utilized with other underserved populations, including hard-to-reach populations such as Native Americans residing on reservations.

**Background Expected:** While prior experience conducting research is not necessary, it is preferred that students participating in this research project will have taken a course in research methods. Students will receive training in carrying out a case study research project, including training in conducting interviews.

**Student Role:** Students will be involved in data collection, including the selection of items for the semi-structured interviews and the conducting of interviews with Ryan's Place staff, volunteers, board members, and current and past participants from the Amish community. Once the data collection is complete, students will be involved in data analysis, and will assist in writing the study report. If feasible, students will present the study's findings at a meeting of the board of directors of Ryan's Place.

**Faculty Role:** I will oversee and mentor students throughout the research process. I will be available for debriefing following the interviews, and will serve as a liaison between the research team and Ryan's Place in assisting in arranging for meetings and interviews.

**Anticipated Results:** Results of this research project will be compiled and submitted as a report to Ryan's Place board of directors. In addition, the study report will be submitted for presentation at the 14<sup>th</sup> Annual National Symposium of Children's Grief Support.

#### **References:**

Aponte, R. (August 2002). Latinos in Indiana: Growth, distribution, and implications. *Statistical Brief No. 14*, the Julian Samora Research Institute.

The Dougy Center. (2004). *Welcome to The Dougy Center for grieving children and families*. Retrieved February 11, 2006 from <http://www.dougy.org/default.asp?pid=7736932>

Ryan's Place. (n.d.). *Mission statement*. Retrieved February 11, 2006, from <http://www.ryans-place.org/mission.htm>

Schuurman, D. (2004). *The club no one wants to join: A dozen lessons I've learned from grieving children and adolescents*. Retrieved May 2, 2006, from <http://www.dougy.org/default.asp?pid=4985010>

## **The Vengeance/Forgiveness Project: Reading Texts from a Talionic Perspective**

Paul Keim

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**Description:** The Vengeance/Forgiveness Study is an interdisciplinary effort initiated several years ago to examine the interface of vengeance and forgiveness strategies from biblical, theological, eirenological and anthropological perspectives, in order to strengthen Christian peace theology and practice. Two previous Maple Scholars projects have contributed to the study through exploration of talionic cultures and the ethos of gifting in patronage systems. This year's project will build on this solid foundation, using the analytical framework developed in the study to read and analyze selected texts through the lens of vengeance considerations.

The textual corpus under consideration – all in translation – have been carefully selected from ancient (biblical, classical) and modern literary works in which the themes of vengeance and forgiveness appear. We will work our way systematically through the texts in the course of the summer, discussing their meaning and significance, and compiling an analytical document of annotations, glossaries, concordances and interpretive essays.

**Student Qualifications:** Students who are strong and avid readers and who have had extensive work in literary and/or biblical/theological interpretation are especially encouraged to apply. Organizational and technical (computer apps) skills are also important assets of a successful candidate.

**Expected Results:** Apart from the pure joy of reading interesting and significant texts and regularly discussing their meaning in relation to the overall vengeance/forgiveness study will be reward enough for most serious prospective participants. However, as mentioned above, a companion volume of analytical annotations, a bibliography of secondary sources, and a series of interpretive essays will embody the tangible results of the project.

## Designing an Optimal Multimedia News Service

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Adviser to the Goshen College Record  
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**Description.** The walls separating traditional forms of media are collapsing. We see that while traditional newspaper companies like The Goshen News or The New York Times still publish on paper according to daily deadlines, they have online sites that operate as a

continuous news service and with information presented in many forms. Journalists are telling news stories using a seamless blend of text, images (still and moving), sound and design.

The focus of the research project will be [www.goshen.edu/record](http://www.goshen.edu/record), the online site of the college newspaper. Until now, the site has largely served as a reproducer of content already published on paper. We intend to create a site that will be a complete multimedia experience (including written text from The Record, audio from 91.1 the Globe and video from GC Journal). A key addition to the site will also be an archival system so that in time visitors to the site will be able to do complete word searches to access articles published over decades.

The initial work will include a review of potential publishing platforms as well as online systems developed by collegiate and professional news organizations. Then comes the task of building a new converged media entity to better serve students, faculty and staff, as well as parents, alumni and other followers of Goshen College news.

**Background expected.** The student should have advanced competencies in Web design and construction. The ideal candidate will also have served on the staff of The Record.

**Anticipated Results.** The student selected will help to design, implement and test a multimedia news site during the summer of 2009. Beginning in the fall, it is expected that this site will be operational for the incoming staff of The Record.

## **CITL Education Need and Assets Study (Elkhart, Goshen & Ligonier)**

Dr. Robert Reyes, CITL Research Director  
Sociology, Social Work Department and CITL  
Scholars: 2  
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**Background – CITL Initiative:** The Center for Intercultural Teaching and Learning aims to understand and disseminate findings on the nature and process of intercultural education as it relates to Latino students and their families in the Midwest. As part of this initiative the center will study both the curricular/co-curricular experience of Latino students on campus as well as the social context from which these students come.

**Background on the Overall Project (Community Study):** This study is a year long three part study. First it will examine the demographic and socioeconomic information of the Latino community in three counties in north eastern Indiana (St. Joseph, Noble and Elkhart counties). Second, it will compile a historical account of the settlement and adjustment of Latinos to this part of Indiana. Finally, it will provide a need and asset based assessment of the educational need and resources of Latino students and their families in representational cities found in these counties. The study will be conducted over the span of the 2008-2009 academic year between Goshen College (CITL) and two centers at the Institute for Latino Studies at the University of Notre Dame. These centers are the Center for Borders and Migration and the Center for the

Study of Latinos in Indiana. Through this process, CITL will be able to expand existing notions of the adjustment, needs and contributions of the Latino immigrant community in northeastern Indiana. It is the goal that the findings of this study will influence the development of more effective service delivery practices in the community. Specifically we hope to understand more clearly how current educational systems serve or not serve Latino students and their families.

**Description of the Project:** *Education Needs and Asset-based Assessment:* By the summer of 2009 we will have completed the demographic/socio economic profile as well as the historical analysis of the demographic shift of Latino into this area. We will be completing the assessment of educational needs and assets of students of four schools in Elkhart, South Bend and Ligonier.

In collaboration with the Institute for Latino Studies (ILS) we will conduct a series of interviews, surveys and focus groups. The interviews will be with key Latino leaders and school officials. While, the focus groups will be conducted with Latino students and parents. As part of this process we envision maple scholars being able to assist in as follows:

- Planning and organization of interviews of key informants and focus group participants.
- Screening potential participants for the focus groups by using a short questionnaire.
- Making observational notes of school visits.
- Transcribing interviews.
- Participating in the analysis by identifying themes that emerge from the interview and focus group transcripts.
- Mapping of community needs and assets for the cities of Elkhart and Ligonier.
- Reading a common text and participating in a weekly seminar that will discuss the students' impressions of the reading and their relationship to the material being researched.
- Developing a research report and power point presentation(s) that summarizes these findings.

**Background Expected:** We are seeking students at the sophomore or junior level that has taken one or more of the following courses; principles of sociology, intro to psychology, inclusive schooling and intro to research methods. Prospective candidates should have interest in learning more about Latino families, and studying the social, economic and educational needs of this group in our community. Knowledge of Spanish is encouraged but is not required for participating in this project. Finally, students should also be able to work independently, have strong organizational skills as well as knowledge of Excel and Power Point.

**Anticipated Results:** At the completion of this experience students will be asked to generate a research report that summarize the information gathered through out the summer as well a series of power point presentations that depict visually the key findings of the study.

## Effects of deer herbivory on Tallgrass prairie forbs

Ryan Sensenig

Assistant Professor of Biology, Lindsey Fellow at Merry Lea

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**Description:** Ten to twelve thousand years ago, a Serengeti-like multitude of Pleistocene grazers lived in North American grasslands, which included equids, camelids, peccaries, elk, goats, and deer to name a few. Research in modern grasslands in East Africa suggests that the coexistence of grazers of varying body size is because each species has a unique forage quality preference related to their body size. In Tallgrass prairies, this should mean that smaller herbivores (like deer) should prefer high quality forbs, while larger grazers (like horses) should forage on poor quality, but abundant grasses. These grazing preferences likely have large effects on plant diversity.

While restoration of America's Tallgrass prairie is currently a growing priority, most prairie restoration projects have not included grazers, and if included, have been limited to cattle or bison. We therefore lack an understanding of how an entire assemblage of grazers of varying body sizes may have structured Tallgrass prairie systems. To what extent are modern prairie systems missing intermediate and small-bodied grazers? Can our current agricultural grazers (horses, cows, goats, and sheep) serve as useful surrogates to test these ideas?

As a first step in a larger Tallgrass Grazing Project, we have begun a grazing "exclusion" experiment at Merry Lea to test the effect of white tail deer browsing on prairie forbs. In the summer of 2008, we erected two 20 m X 20 m exclosures that prevent deer browsing in order to quantify which plant species deer preferentially select. In the spring of 2009 we will burn the prairie and collect a set of plant data.

**Background Expected:** While there are no requirements needed, students should come with interests and commitments to the following: a) *ample* field work identifying Tallgrass forbs and grasses, quantifying white-tail deer herbivory, and assessing deer presence through fecal counts and/or infrared motion cameras, b) data entry and analysis (learned on "the fly"), and c) literature searching, reading, and general scholarly conversation about the relevance of grazer body size to grassland systems.

We seek students committed to engaging the research questions and helping us grow this pilot project into an interdisciplinary, multi-year restoration and research project. Previous coursework in Ecology is helpful, but high motivation is more important.

**Anticipated Results:** We anticipate using these data for a number of writing projects in which student scholars could participate. Firstly, we'd like to use these data to write a larger, more comprehensive National Science Foundation Grant (NSF) with the aim of testing how larger-

bodied grazers affect Tallgrass prairie systems. Secondly, our goal is to present our findings at the fall Indiana Academy of Sciences (IAS) conference, as IAS funded this project. Lastly, students will help write a paper for publication.

## **The Role of Amino Acid Residues in the Folding of *E. coli* Serine Hydroxymethyltransferase**

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**Description:** Current research on the enzyme serine hydroxymethyltransferase (SHMT) from *E. coli* aims to elucidate which amino acids play critical roles in the folding of the enzyme.

Colleagues at the University of Rome (Italy) have made mutations in several amino acid residues believed to be important in the folding mechanism.

The Maple Scholar(s) will determine if one or more of these mutations have altered the catalytic and folding properties of SHMT. They will determine this by conducting enzyme assays, looking at enzyme rates at various temperatures, and studying the effect of the denaturant urea on enzyme activity and structure.

The Maple Scholar may also do organic syntheses and purifications to make a variety of reduced pyridoxal phosphate – amino acid analogs that will be used by our colleagues in Rome to probe other features of the folding mechanism. The structures of the organic products would be determined by FT-NMR.

**Background Expected:** Students who do this research should know how to make buffers, do enzyme assays, and run polyacrylamide gels. Experience with organic syntheses and FT-NMR would also be required.

**Anticipated Results:** Students should collect and analyze enough data to be able to make a presentation at an undergraduate research conference. It is expected that the results will be published in a peer-reviewed journal once all the mutants have been analyzed and the pyridoxal phosphate – amino acid analogs used in related experiments.

## **Color Genetics of Domestic Pigeons**

Dan Smith  
Professor of Chemistry  
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**Description:** This is an on going research project investigating the genetics of color in domestic pigeons. This project involves both phenotype (appearances) and genotype (DNA) characterization of primarily homing pigeons. A significant amount of work has been done by

other persons in the field concerning phenotypes of the birds but essentially nothing is known about their genotypes outside of our previous results.

The work in my laboratory is to attempt to define and sequence DNA codes related to the color of the birds. I have access to rare colored pigeons in my loft and the lofts of acquaintances thus enabling the sequencing of DNA of a large variety of phenotypes.

We have completed the sequence of the melanocortin-1 receptor (mc1r) and have found it to be associated with the dominant phenotype known as dirty (V). A linkage study has been initiated to confirm or reject the apparent association. I anticipate this portion of the MC1R project will continue through the summer. In addition I have recently obtained several new phenotypes that cause a global reddening of the birds. Since mc1R is known to cause red phenotypes in other organism these new phenotypes will also have there mc1r sequences determined

The primary work this summer will be with the sex-linked color genes of which only four loci are known. The four sex-linked color loci are known. We have access to birds with mutations in each of these loci and have already collected samples for at least one allele at each of the loci. A chromosome painting experiment has demonstrated that the location of genes on chicken and pigeon chromosomes are nearly identical. A search of the published chicken genome has resulted in several candidate genes for color on the sex chromosome. My research group has already conducted preliminary studies on the first of these candidates, tyrosinase related protein-1 (tyrp-1). In mice, tyrp-1 is known to be causative for a brown phenotype. It is possible that tyrp-1 causes the brown / ash red mutations or the dilute phenotypes observed in pigeons. The tyrp-1 protein is a one of three proteins in the tyrosinase family (tyrosinase, and tyrosinase related protein-2 being the other two) and is expected to be approximately 537 amino acids long. The DNA sequence coding for the protein is expected to be approximately 1770 base pairs and has several intron/exon sequences. We will therefore need to isolate mRNA from feathers, synthesize, amplify and sequence cDNA. An ongoing part of the work is to continue the search for “candidate genes”.

**Expected Background:** Students should have had introductory chemistry and biology. Experience with DNA isolation and amplification (PCR) and purification via gel electrophoresis will be helpful but not absolutely necessary.

**Anticipated Results:** I have two goals for this summers work. First, I want to complete the MC1R study and prepare a paper for publication in a peer reviewed journal. Second, we should make significant progress in sequencing the tyrp-1 gene, this work will also be targeted for a peer reviewed journal.

## **Researching the History and Practice of 20<sup>th</sup> Century Mennonite Youth Ministry**

Bob Yoder  
campus pastor, assistant professor and director of youth ministry  
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**Description:** Little has been documented or analyzed regarding the lived out faith practices and programmatic efforts of 20<sup>th</sup> century Mennonite youth ministry. This project will continue some of the work done by Bob Yoder as part of his doctoral work that began to formulate a survey of such findings, as well as work from 2008 Maple Scholars program. The hope is that this work will lead, in a few years, to a published book of edited essays on this topic.

This project will involve original archival research in various places, including The Mennonite Church USA archives in Goshen, The Mennonite Historical library, and possibly other locations including Bethel, Kansas, Harrisonburg, Virginia, or other conference archives. This project will also involve collecting stories of people who have served in facets of Mennonite youth ministry at congregational, conference, denominational, and agency levels through face-to-face and phone interviews. Some assigned readings will help provide some context for the Maple Scholar, as well as regular meetings with Bob throughout the eight week experience.

**Background Expected:** It is hoped the student will have a passion for the recent history of the Mennonite Church and have interest in exploring the youth ministry arm of the church. It will also be helpful if the student has taken some courses in these either or both of these areas, though this is not a requirement.

**Anticipated Results:** The student scholar will prepare a 25-30 page academic essay of their findings. The collected information will be placed in The Mennonite Historical library so others can build on this research for years to come. A secondary hope is that this work by the student will lead to some sort of publication of the findings in book form and/or an appropriate academic journal such as *Mennonite Quarterly Review*, *Journal of Youth and Theology*, or *The Journal of Youth Ministry*, as well as other popular Mennonite publications. For example, the two 2008 Maple Scholars students and Bob have each been invited to each prepare a 1,200—1,500 word article for an upcoming edition in *The Mennonite*. An overall hope, however, is that this research and work will lead to a published book of collected essays, each in the 25-30 page range, covering this topic.