The Health Connection at Cedar Crest College

The Second Annual Conference on Health and Wellness: The Art and Science of Wellness

- Presentations by Students and Faculty
- Workshops, Posters and Exhibits

May 4 - 5, 2005
## CONFERENCE SCHEDULE

### WEDNESDAY, MAY 4

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
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<tbody>
<tr>
<td>6:30 p.m.</td>
<td>Flute Ensemble</td>
<td>Harmon Hall</td>
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<td></td>
<td>Elaine Martin, Director</td>
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<tr>
<td>7:00 p.m.</td>
<td>Welcome: Dr. Dorothy Gulbenkian Blaney President, Cedar Crest College</td>
<td>Miller 33</td>
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<td>Keynote Speaker: A Long View of Wellness</td>
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<td></td>
<td>Dr. Alex Rae-Grant</td>
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<td></td>
<td>Clinical Professor of Neurology</td>
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<td></td>
<td>Chief, Division of Neurology, Lehigh Valley Hospital</td>
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<tr>
<td>7:45 p.m.</td>
<td>Poetry Readings: Erin Louise Furstnau ’08, Christa Joy Hagan ’08, Amanda L. Skelton ’05, Jennifer M. Woytach ’07, Cedar Crest College Students</td>
<td>Harmon Hall</td>
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### THURSDAY, MAY 5

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<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
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<tr>
<td>9:00 a.m.</td>
<td>Welcome: Dr. Carol A. Pulham Provost, Cedar Crest College</td>
<td>Samuels Theatre</td>
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<td>Performance: The Fragmented Self</td>
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<td></td>
<td>Written by: Dr. Micah Sadigh</td>
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<td></td>
<td>Assistant Professor of Psychology</td>
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<td></td>
<td>Directed by: Linda A. Baas, M.A.</td>
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<td></td>
<td>Assistant Professor of Theatre and Speech</td>
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<td></td>
<td>Actors: Amanda J. Laigle ’06 (Mindy), Allison T. Kazaras ’07 (Kardia), Joanna E. Craig ’07 (Drak), Karen M. Babson ’05 (Mother), Melissa A. Donigan ’05 (Boss), Cedar Crest College students Nicolette Amico (Child), Moravian Academy Student</td>
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<td></td>
<td>Speaker: The Meanings of Symptoms</td>
<td>Samuels Theatre</td>
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<td></td>
<td>Dr. Micah Sadigh</td>
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<tr>
<td>10:00 a.m.</td>
<td>Posters/Papers/Workshops</td>
<td>College Center</td>
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<td>12:00 p.m.</td>
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<tr>
<td>Time</td>
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<tr>
<td>11:30 a.m.</td>
<td>Wisdom of the Women of My Family</td>
<td>1867 Room</td>
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<td>12:00 p.m.</td>
<td>Vignettes: Karen M. Babson ’05, Beth Anne Ciccolella ’05, Melissa A. Donigan ’05, Cedar Crest College students</td>
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<td>12:00-1:00 p.m.</td>
<td>Speaker: What We Have Accomplished</td>
<td>1867 Room</td>
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<td>Joan M. Laffey, R.N., M.S.N.</td>
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<td>Dean of Student Affairs, Cedar Crest College</td>
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<tr>
<td>1:00-4:00 p.m.</td>
<td>Posters/Papers/Workshops</td>
<td>College Center</td>
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<td>3:45-4:30 p.m.</td>
<td>“Visions for the Future”</td>
<td>Samuels Theatre</td>
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<td>Moderator: Suzanne Weaver, M.S.W., A.C.S.W.</td>
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<td>Professor of Social Work, Cedar Crest College</td>
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<td>Panelists: Maynard L. Cressman, M.S.W.</td>
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<td></td>
<td>Chair of Social Sciences and Associate Professor of Social Work</td>
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<td>Dr. Audrey J. Ettinger</td>
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<td>Assistant Professor of Biology</td>
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<td>Dr. Kent K. Fitzgerald</td>
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<td></td>
<td>Director of Neuroscience Program and Associate Professor of Biology</td>
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<td>Dr. Stephen Shechtman</td>
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<td>Assistant Professor of Education</td>
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<td>Jane E. Zeigler, M.S., R.D.</td>
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<td>Director of the Allen Center for Nutrition and Assistant Professor of Nutrition</td>
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<tr>
<td>4:30-4:45 p.m.</td>
<td>Slowly Getting There Fast</td>
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<td>Choreographer: Robin M. Gerchman, M.Ed., Instructor and Director of Dance Program</td>
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<td></td>
<td>Elizabeth Bach ’05, Devon L. Caraballo ’06, Kristina M. Dennis ’07, Ellen C. Doyle ’06, Patricia Egner ’07, Amanda J. Laigle ’06, Mary Jo F. Moninghoff ’07, Aki Morimatsu ’07, Sarah Ricketts ’07, Bethany Ann Roberge ’06, Angela Romano ’06, Jamie Swartwood ’06, Cedar Crest College Students</td>
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<td></td>
<td>Awakenings</td>
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<td>Robin M. Gerchman in Collaboration with Nicole Hockenberry, Adjunct Dance Instructor</td>
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<td>Devon L. Caraballo ’06, Kristen Kuloy ’05, Sara B. Mahoney ’05, Nicole Hess ’06, Angela Romano ’06, Jamie Swartwood ’06, Cedar Crest College students</td>
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<td>4:45 p.m.</td>
<td>Closing Remarks</td>
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<td>Marie E. Wilde, M.S.</td>
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<td>Associate Provost and Director of Mathematics and Information Sciences</td>
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<tr>
<td>4:50 p.m.</td>
<td>Madrigal Singers</td>
<td>Samuels Theatre Lobby</td>
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<td>Choral Director: Charles R. McAnall, M.F.A.</td>
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<td></td>
<td>Professor of Fine Arts and Performing Arts</td>
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<tr>
<td>Times</td>
<td>Title</td>
<td>Presenters</td>
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<tr>
<td>10:00-10:15 a.m.</td>
<td>Art and Epidemics – Paper/Exhibit</td>
<td>Erika F. Ventura ’08, Student Dr. Alan B. Hale, Mentor</td>
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<tr>
<td>10:00 a.m.-4:00 p.m.</td>
<td>10:00-11:00 a.m. Everything You Wanted to Know About Energy Healing But Were Afraid Who to Ask: Reiki, Shiatsu, Tai Chi and Thee!</td>
<td>Dr. Stephen A. Shechtman</td>
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<tr>
<td>10:00-11:00 a.m.</td>
<td>Plants and People: Therapy Through Horticulture</td>
<td>Dr. Kelly Austin, Curator</td>
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<td>10:00-11:00 a.m.</td>
<td>Where to Place the Blame: Investigating Genetic and Environmental Health Risks for Cancer</td>
<td>Tiffany M. Barnes ’06, Stefanie L. Harrington ’06, Cherie M. Haubois ’06, Stephanie H. Nowotarski ’06, Anjali K. Raval ’05, Devika Rawal ’06, Morgan S. Schroock ’06, Elaine M. Steinke ’06, Nani M. Watimar ’06, Lynn M. Wilson ’06, Teresa M. Yax ’06, Students Dr. K. Joy Karnas, Mentor</td>
</tr>
<tr>
<td>10:00 a.m.-12:00 p.m.</td>
<td>Posters</td>
<td>Students and Faculty</td>
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<tr>
<td>10:00 a.m.-4:00 p.m.</td>
<td>Arts in Motion</td>
<td>Arts Society, Jill K. Odegaard, M.F.A.</td>
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<tr>
<td>10:30-11:30 a.m.</td>
<td>The Modern Fight</td>
<td>Patricia E. Stroud ’05, Choreographer, Devon L. Carabalbo ’06, Kristina M. Dennis ’07, Ellen C. Doyle ’06, Sarah B. Farney ’06, Amanda J. Laigle ’06, Sara B. Mahoney ’05, Bethany Ann Roberge ’06, Krista N. Murawski ’07, Mary Jo F. Moninghoff ’07, Students Fernando Quinones, Student, Lehigh Valley Charter High School for Performing Arts Robin M. Gerchman, M.Ed., Mentor</td>
</tr>
<tr>
<td>11:00-11:15 a.m.</td>
<td>Emergence of Infectious Diseases on Cruise Ships</td>
<td>Stefanie J. Frace ’07, Student Dr. Alan B. Hale, Mentor</td>
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<tr>
<td>11:15-12:00 a.m.</td>
<td>How Life Causes Death: Spurious Correlations and Health and Wellness</td>
<td>Dr. Richard M. Kliman, Dr. John A. Cigliano</td>
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<td>1:00-1:15 p.m.</td>
<td>The Effects of Cats on Human Physiological Reactivity</td>
<td>Megan Kees ’05, Student, Dr. Kerrie Quinn Baker, Dr. Kent K. Fitzgerald, Dr. Micah Sadigh, Mentors</td>
</tr>
<tr>
<td>1:00-2:00 p.m.</td>
<td>Spa Cuisine</td>
<td>Martine I. Scannavino, M.S., R.D., Jane E. Ziegler, M.S., R.D.</td>
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<tr>
<td>1:00-4:00 p.m.</td>
<td>Posters</td>
<td>Students and Faculty</td>
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<tr>
<td>2:00-3:00 p.m.</td>
<td>Walk on the Wellness Side: Tour the William F. Curtis Arboretum</td>
<td>Dr. Kelly Austin, Curator</td>
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<tr>
<td>3:00-3:30 p.m.</td>
<td>Healing Through the Visual Arts</td>
<td>Jill K. Odegaard, M.F.A.</td>
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### THURSDAY, MAY 5

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<tr>
<td>7:30-8:30 a.m.</td>
<td>Aqua Aerobics</td>
<td>Rodale Aquatic Center for Civic Health</td>
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<td>Heidi Hashagen, B.S.</td>
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<tr>
<td>10:00 a.m.-2:00 p.m.</td>
<td>Blood Pressure Screenings and Body Fat Analyses Nursing Students and Fitness Center Staff</td>
<td>Tompkins College Center Room 300</td>
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<tr>
<td>11:00 a.m.-2:00 p.m.</td>
<td>Massages Awakening Arts</td>
<td>Tompkins College Center South Annex</td>
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<tr>
<td>1:15-2:15 p.m.</td>
<td>Hatha Yoga Christi Rutkowski, R.Y.T.</td>
<td>Lees Memorial Chapel, Alumnae Hall</td>
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<tr>
<td>6:00-7:00 p.m.</td>
<td>Yoga Awakening Arts</td>
<td>Lees Memorial Chapel, Alumnae Hall</td>
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**Schedule of Healing Arts for Thursday, May 5**
WORKSHOP
Dr. Stephen Shechtman
Education
10:00-11:00 a.m. Tompkins College Center Alcove A

Everything You Wanted to Know About Energy Healing But Were Afraid Who to Ask:
Reiki, Shiatsu, Tai Chi and Thee!

This workshop will combine theoretical issues and experiential applications for mind, body and spirit development. The presenter is a psychologist and educator who has developed a combination of traditional psychotherapy (over twenty years experience with children, families, and elders) with skill development and application of Tai Chi, Reiki and Shiatsu to the training and renewal of teachers in the Master’s Program at Cedar Crest College. The System Developed is called Integrated Psychology where the total person (social, emotional, cognitive, physical, spiritual, financial, and creative expression) is assisted in the process of change. There are applications and implications to professional training of teachers and professionals with the goal of renewal as the optimal outcome. The major impact is providing tools for teachers to diminish stress from the current demands of the teaching profession and modern life.

WORKSHOP
Dr. Kelly Austin, Curator
William F. Curtis Arboretum
10:00-11:00 a.m. Tompkins College Center Alcove C

Plants and People: Therapy Through Horticulture

Horticultural therapy uses plants and garden-related activities to promote well being of the mind, body and spirit. In this workshop, you will learn about the field of horticultural therapy, and how gardening – whether it’s just tending a few flower pots in your room or a few flower beds in your yard – has wonderful health benefits. Learn about opportunities to volunteer in the gardens of the campus arboretum, and finish up the workshop by potting up an herb plant to take home.

The goal of horticultural therapy is to promote health and wellness by providing environments conducive to relaxation, conversation, meditation, physical activity and stress reduction. The first horticultural therapy program was established at Friends Hospital in 1879 after a physician discovered that patients were calmer, even cured, after working in the psychiatric hospital’s fields and flower beds. Presently, many botanical gardens, hospitals and rehabilitation facilities offer horticultural therapy programs.

Horticultural therapists have discovered that gardening provides a form of emotional expression and release, and it helps people to connect with others. Gardening stimulates all the senses - providing interesting sights, sounds, textures and scents – and kindles memories and connection with the past. The psychological benefits of gardening outdoors, working in the sunshine and fresh air, are also clear. Even tending a few houseplants or pots of herbs indoors has wellness benefits. You don’t need a green thumb – come enjoy the benefits of gardening!
Where to Place the Blame: Investigating Genetic and Environmental Health Risks for Cancer

An estimated 72,590 cases of cancer and 29,910 cancer-related deaths were reported in Pennsylvania for 2004. News media often attempts to heighten cancer awareness by informing the general public as to health risks and current research efforts in the field of cancer biology. One of the complications in relaying accurate information about cancer prevention arises from the fact that there are both hereditary and environmental factors that contribute to a person’s susceptibility. For example in 2004, acquired cancers such as lung cancer and skin cancers accounted for approximately 246,000 cases of cancer across the nation, while hereditary cancers, such as ovarian and breast cancers, were responsible for about 245,000 diagnoses. This session will be an informative seminar of various acquired, pediatric, and gender-related cancers by which attendees will learn, debate, and test their knowledge of current material. In addition, an investigation of the Cedar Crest community and their perspective on cancers, treatments, and prevention will be explored.

Prayer Tie Project

This workshop will involve the making of fabric bundles or amulets that will hold the wishes, hopes, dreams and prayers of each participant. The bundles will be made of colorful fabrics that are decorated with beads, imagery and symbols that reflect the interest and the diversity of everyone involved in the project. The finished bundles will be strung together and displayed as a testament of a community coming together to share their dreams, hopes and prayers. The workshop will be ongoing over the course of the day. This workshop is a continuation of last year’s workshop in hopes of adding to the bundles and creating a larger installation of the community project.
How Life Causes Death: Spurious Correlations and Health and Wellness.

You hear it all the time. Scientists determine that there is a correlation between two factors. The immediate suggestion is that one causes the other. But does it? The most commonly recognized scientific approach to identifying causative agents of phenomena of interest involves three steps: development of a cause-and-effect hypothesis, design of an experiment to test that hypothesis, and analysis of the data. A variety of statistical methods are used to test the null hypothesis that the agent assumed a priori to cause the phenomenon is unrelated to the phenomenon. Many of these methods fall into the general category of Analysis of Variance. It is commonly accepted that rejection of this null hypothesis provides sufficient evidence that the agent does, in fact, cause the phenomenon. In this workshop, we will discuss the pros and cons of such logic. Through hands-on exercises and using real-life examples, we will show how spurious correlations can easily arise. We will also discuss, in relation to health and wellness, the dangers of making an assumption of cause and effect when the correlation is spurious. We will also show why the commonly accepted rule-of-thumb, that replication of an experiment should increase one's confidence in a hypothesis, is not as straightforward as it might appear.

Spa Cuisine

The nutrition department will take you on an hour long tour of health promoting, gustatory splendor as we explore the world of SPA cuisine. Whole grains, fruits and vegetables, low fat dairy products and nature’s most aromatic treasures will be transformed into exquisite culinary delights.
WORKSHOP
Dr. Kelly Austin, Curator
William F. Curtis Arboretum
2:00-3:00 p.m. Harmon Hall Lobby

Walk on the Wellness Side: Tour the William F. Curtis Arboretum

Walking and wellness go hand-in-hand! Add trees, shrubs and flowers and you have an added bonus: research has shown that just looking at trees and plants reduces stress, lowers blood pressure and relieves muscle tension. Take advantage of a great opportunity to practice wellness on campus by taking a walking tour of Cedar Crest College’s William F. Curtis Arboretum.

Walking helps prevent cardiovascular disease, diabetes, and some cancers, and helps heal injuries and sustain mental health. Within minutes of entering a natural space stress levels are reduced – blood pressure goes down, the muscles in the brow relax and perspiration decreases. Learn more about the health benefits of walking while visiting some of the trees from all over the world planted in the arboretum. We’ll also visit the butterfly garden and native plant garden. Field guides and maps will be provided; please wear comfortable walking shoes and sun protection, and bring water if needed.

DANCE
Patricia E. Stroud ’05, Choreographer: Devon L. Caraballo ’06, Kristina M. Dennis ’07, Ellen C. Doyle ’06, Sarah B. Farney ’06, Amanda J. Laigle ’06, Sara B. Mahoney ’05, Bethany Ann Roberge ’06, Krista N. Murawski ’07, Mary Jo F. Moninghoff ’07, Students Fernando Quinones, Student, Lehigh Valley Charter High School for the Performing Arts Robin M. Gerchman, M.Ed., Mentor
Dance
10:30-11:30 a.m. Samuels Theatre

The Modern Fight

The Modern Fight explores the life of a woman after she has been diagnosed with cancer. The choreography also reflects the perspective of the family, friends and care givers of the patient and how this disease affects them. This choreographic study was developed through personal experiences and discussions with survivors and loved ones of those who have succumbed to cancer. The movement was applied to the research in order to further develop a societal awareness of this disease. This composition gives tribute to those who have passed away as well as those who have survived this Modern Fight.
Emergence of Infectious Diseases on Cruise Ships

The upcoming summer cruise season begins shortly, and it is extremely important to be aware of possible dangers on a cruise ship. Many hundreds of people are kept in close quarters from a few days to a week. Cruise line sanitation has been responsible for small, isolated outbreaks of several diseases in recent years. Diseases such as measles, mumps, rubella, respiratory influenza, and certain gastrointestinal illnesses (noroviruses) are common, contagious diseases that may be aboard cruise ships. Traveler’s diarrhea and viral gastroenteritis are the most common outbreaks during cruise season. It is imperative to discuss noroviruses, enteric bacterial, viral, and parasitic pathogens responsible for cruise line diseases. Everyday techniques are available to minimize a person’s risk of contracting the mentioned diseases. Hand washing, proper handling and preparation of food, and clean drinking water are the best prevention options. Lastly, infectious diseases are central to the Center for Disease Control and Prevention (CDC), especially when it comes to cruise lines. It utilizes a program, VSP, Vessel Sanitation Program, to protect passengers and crew health by lessening the probability of gastrointestinal illness. The essence of finding and controlling cruise line infections is not only necessary for U.S. citizens, but everyone who wants to enjoy their summer on a wonderful cruise ship.

Art and Epidemics

There are so many diseases and epidemics going on in the world that it is difficult to keep up with all the information. In addition, geographically you would like to be able to know where most of these outbreaks occurred. For the course project, I am proposing a painting. Art and science is a beautiful combination. The painting will be approximately 18 by 24 in, or maybe even larger. The painting will be of the world, the flat version of course. I will research some of the major outbreaks that plagued our world and using this information I will apply it to the painting. What I mean by this is that I will be painting the "bug" responsible for the outbreak over the area where it caused the problem. A magnified version of the disease agent itself will be painted over the area where it caused a significant outbreak. The information I obtained will be used to give a little history on each, or a few, of the many outbreaks/epidemics across our world, or my painted version of it.
The Effects of Cats on Human Physiological Reactivity to Stress

Stress reduction has been a major focus of scientific research for the last 50 years. Previous studies have suggested that the presence of a pet may lower the stress response. The current study was conducted to determine whether the interactions between a person and a cat would lower the psychophysiological measures of stress, such as heart rate and systolic blood pressure. Human-cat interactions were observed under several conditions using 40 female subjects whose ages ranged between 18 and 23 (M = 19.75). Participants were randomly assigned to either a control group or an experimental group. Psychophysiological measures of the stress response were measured in each group under four conditions (condition 1: presence; condition 2: petting; condition 3: purring; condition 4: petting and purring). The control group experienced a no stress condition, while the experimental group was exposed to a stressor (i.e., counting backwards). No significant difference was found between the control and the experimental groups for psychophysiological measures of stress. There was a significant effect between the conditions experienced and the measures of the stress response in the experimental group. This effect occurred between conditions 1 and 2, and 2 and 3 for the systolic blood pressure measurement and between conditions 1 and 2, 2 and 3, and 3 and 4 for the heart rate measurement. The study supported previous findings that the presence of a pet can reduce psychophysiological measures of stress. Additionally, the study suggested that the type of interaction between the participant and the pet influenced stress reactivity.

Healing Through the Visual Arts

This presentation will focus on artists who have used their art making as a vehicle for channeling emotional, psychological and physical unrest. By drawing attention to the individual artist and their inspiration I will speak about the role of the artist as a filter as they respond to the world around them and (re)present their experiences, impressions and sensation for the viewer to share in their perceptions.
POSTERS
TOMPKINS COLLEGE CENTER • 10:00-12:00 NOON AND 1:00-4:00 P.M.

Maureen Ann M. Lutz, Student
Dr. Kathleen Boland,
Sociology

Physical Therapists Perceptions of Evidence-Based Practice

The physical therapy profession has begun a shift away from traditional treatment approaches which use education, experience, continuing education, and expert opinion to one that bases treatment approaches on scientifically proven evidence. This concept is termed evidence-based practice (EBP). Previous literature shows that little research exists in regard to physical therapists perceptions of EBP. However, myths and misconceptions about EBP are well documented. Several studies have suggested that EBP is essential and necessary for good patient care. The use of EBP has many positive implications for the physical therapy profession. This study is examining physical therapists perceptions about EBP using a sample from the Lehigh Valley area. The implications of physical therapist’s attitudes toward using this style of practice will be discussed based on the study findings.

Carolyn Castello Snyder,
Lisa M. Meister ’06, Tamara F. Shaheed ’06,
LaCrisha A. Vasquez ’06, Students
Dr. Kathleen Boland, Mentor
Social Work

Domestic Violence Intervention: Providing a Way Out

Domestic Violence is a crime that threatens to destroy the very core of our society leaving many of its victims feeling that there is no way out. This study is designed to answer the question “What is the impact of intervention on victims of domestic violence?” An evaluation and analysis of a Domestic Violence counseling intervention program in Northeastern Pennsylvania will be made. The goal is to determine if this type of intervention is an effective method to use in the case of domestic violence victims, and increase the knowledge base of the social work profession and the agency involved in the study. This will be done by assessing and evaluating responses on a fifteen-question test given to counseling participants prior to receiving counseling intervention, and evaluating the responses to the same questions after at least three weeks of participation in the program. Implications and results will be discussed.
Women Returning to Higher Education:  
The Impact of Life Changing Events and Academic Choices

There has been an increasing amount of women re-entering college at a later age. Research has suggested multiple reasons for the return. The average life span for women has been increasing over time. Women now have more time to fulfill personal goals or accomplish personal objectives that they may have set aside for familial obligations. Children leaving the home, marriages ending in divorce or death or moving to a new location can all create the atmosphere that drives women back to college. The learning environment can be considered a coping strategy for individuals overcoming stressful or traumatic life events (Kasworm, 2003; Aslanian & Brickell, 1980). Additionally, life-changing events can lead women to search for a new identity (Blaukopf, 1981). This research study will present a demographic profile of the returning woman college student as well as explore the impact of life-changing events and how they may be related to a woman's academic choices.

Factors that Influence Placement after Foster Care

Foster care is a major part of the Child Welfare System. It provides a way to protect children from abuses and neglect. Foster care provides for children whose families cannot or will not take care of them. The concept of foster care is to care for children, help the families provide a safe and healthy environment, and then return the children home. This is not always the case. Sometimes families are unable to provide for the children and then the children need to be cared for in foster homes. This study is being conducted to evaluate what factors contribute to where a child is placed when leaving the foster care system. A data collection sheet will be used for documentation. Information will be collected from closed records of 100 children who have left the foster care system. Implications of these study results concerning child placement will be discussed.
The use of alternative therapeutic modalities is constantly changing to combat helplessness and loneliness associated with residents in long-term care facilities. Studies of animal-assisted therapy programs have discovered benefits and improvements in patients, physically, psychologically, and socially. This study is designed to explore specific variables, namely problem behaviors, depression, communication, and socialization, in long-term care that may be affected by pet therapy. The data for this study will be collected using a one time, post test survey design, distributed to social workers of long-term care facilities in Northeastern Pennsylvania. Results and implications will be discussed upon completion of the study.

Positive Psychology is an exciting development in the field of psychology, which emphasizes human strengths, virtues, and our innate potentials and propensities for positively contributing to life and humanity. During the past century, the study of psychology focused on mental disorders, psychopathology and an over emphasis on the “disease model” versus a healthy view of human consciousness, behavior and experience. Two of the prevailing schools of psychology, namely behaviorism and psychoanalysis, have emphasized a deterministic view of human functioning. With the advent of humanistic psychology, greater attention was paid to concepts such as creativity, choice, and inborn positive potentialities. In recent years, we are seeing a concerted effort to bring about a shift in viewing psychology from a discipline that is preoccupied with mental disorders to that which emphasizes positive capabilities within all of us. This presentation explores the roots and the recent contributions of Positive Psychology and how it may transform individuals and humanity as a whole. This presentation explores the roots and the recent contributions of Positive Psychology and how it may transform individuals and humanity as a whole.
Rainie L. Bruno, Student  
Dr. Kathleen Boland, Mentor  
*Social Work*

Female College Student Perceptions of Eating Disorders

Attempting to alter the physical body and an unhealthy obsession about weight have been a part of women's lives for many years. When an individual’s dissatisfaction with appearance, particularly body weight and shape, causes considerable distress, he or she will take steps to ameliorate the feelings of anxiety which can result in anorexia and bulimia. Because it sometimes seems and the literature agrees that the college experience is tailor-made for the development of eating disorders, it seems a relevant topic in the realm of social work. This study, using a one time, post descriptive survey design will focus on the attitudes and beliefs of female college students regarding eating disorders. The participants were randomly selected from a single sex institution in Northeastern Pennsylvania. Results and implications of the study will be discussed.

Donna M. Kapes, Cheryl A. Morgan,  
Paul M. Wright ’07, Students  
Sandra K. Leh, R.N., M.S.N.,  
Mae Ann Pasquale, M.S.N., Mentors  
*Nursing*

What are the Best Practices to Promote Breastfeeding in the NICU?

Purpose: Breastfeeding the premature infant can be a challenge for both mother and infant due to numerous barriers encountered during transition to oral feedings. Traditionally, when transitioning from nasogastric feedings to oral feeding, bottle-feeding is utilized. This practice is based on assumptions that bottle-feeding is physiologically superior and that the preterm infant can easily be breastfed once bottle-feeds are established. However, research reveals that as few as 10% of infants discharged from the neonatal intensive care unit (NICU) were breastfeeding two weeks after discharge. Given the enormous benefit that results from breastfeeding, the following question arose: “What are the best practices to promote breastfeeding?”

Method: An in-depth literature review was conducted from 1980 to 2004, utilizing six databases: MEDLINE, Cumulative Index of Nursing and Health Literature (CINAHL), PubMed, OVID, LexisNexis, and WorldCat was completed. Using the Key words, “breastfeeding”, “NICU”, “preterm”, “premature infant”, and “oral feeds” resulted in over 100 research studies, of which twenty-five were critiqued and classified.

Results: The literature findings revealed that preterm infants, transitioning to breastfeeding using only nasogastric supplementation, without bottle feedings, are 9.4 times more likely to be fully breastfeeding at time of discharge. Breastfeeding provided the preterm infant with a higher oxygen saturation and temperature, and was concluded to be physiologically superior.

Conclusion and Implications: This literature synthesis clearly demonstrated that preterm infants can transition successfully from nasogastric feedings to breastfeeding. By encouraging practitioners to use scientific evidence vs. assumptions, best practices can be translated into clinical interventions.
Job Satisfaction in Human Services Agencies

Job satisfaction among social workers has become a very important issue in the past fourteen years. Because the social work profession contains a considerable amount of stress, there have been many studies to determine the main factors of job satisfaction. In previous research many different factors were introduced as being determinants of the level of job satisfaction such as age, gender, years of experience, education level, and annual salary. Therefore the research question in this study is “Does age, gender, education, salary or years of experience affect job satisfaction of Human Service Agency staff?” The data for this will be collected using a descriptive survey design. The population being studied is all staff members of selected human service agencies in the Lehigh Valley area. Results and implications of the study will be discussed.

Silent Suffering: Educating Women on the Biopsychosocial Aspects of Premenstrual Syndrome

Premenstrual syndrome (PMS) is an inaccurate term used to describe a wide range of menstrually related changes that occur in the luteal phase of the menstrual cycle (Cronje & Studd, 2002). To date, a universal etiology, and effective treatments are absent from the scientific literature (Marvan, 2001). Even though a high percentage of women experience this natural, but misunderstood phenomenon, professionals and the lay community have remained insensitive to a woman’s experience with PMS (Cronje & Studd, 2002). Traditional PMS research has been performed within a biomedical framework. Current studies suggest that biological factors of PMS intertwine with psychological and social factors to characterize this multifactorial phenomenon (Anson, 1999). Premenstrual changes have been shown to impair and lower a woman’s quality of life, as well as, elevate global health care costs. Strict DSM-IV criteria for Premenstrual Dysphoric Disorder (PMDD) exclude many women who genuinely suffer from premenstrual symptoms, therefore restricting them from seeking medical care or research participation. Scientists are now beginning to acknowledge that each woman’s experience is unique and women no longer need to suffer silently while enduring the effects of these cyclic symptoms. Educating women, professionals, and the lay community as to the biopsychosocial factors that occur during premenstrual phases is the beginning of understanding, diagnosing, and treating this ill-defined phenomenon.
Drug and alcohol addiction has been a major social problem in the United States for many years. The government’s answer to this problem is to eliminate the illegal drugs that exist and provide long term consequences to offenders who have been caught selling and using illicit substances (Bryant, 2001). However, there are other alternatives such as drug and alcohol treatment. The purpose of this research study was to explore the relationships which may exist between a substance abusers drug of choice and their age, gender, and ethnicity in a residential treatment facility. Since each addict and alcoholic is unique, this research will be helpful in providing additional knowledge on the substance abuse population and may be used to provide the most beneficial treatment plan for the individual seeking treatment. The data will be collected from one hundred closed client files from a residential treatment facility for substance abuse. Results and implications will be discussed.

Volunteer Work and its Effects on One’s Happiness and Life Satisfaction

Previous research findings have revealed a significant rise in the frequency for volunteer work at all age levels, especially for those who are more religiously inclined to participate (Serrow & Dreyden, 1990, Thoits & Hewitt, 2001). The current study hypothesized that volunteer work would be positively correlated to happiness and life satisfaction. One hundred sixty two college members (143 students, 11 staff, 7 faculty) of which 61.1% of the participants ranged from 18-22 years of age, completed four surveys, including a questionnaire from Americans’ Changing Lives Study (Thoits & Hewitt, 2001), Subjective Happiness Measures (Lyumbomirsky & Lepper, 1999), a Satisfaction with Life Scale (Diener, Larsen & Griffin, 1985) and a Brief Life Satisfaction Scale (Huebner, 1997). A positive Pearson’s correlation of .254 (p<. 01) was found between overall volunteer participation and total Life Satisfaction and a positive Pearson’s correlation of .234 (p<. 01) was found between overall volunteer participation and happiness. The independent t-tests also revealed significant effects for increased volunteer participation, life satisfaction and happiness. The independent t-tests also revealed significant effects for increased volunteer participation, life satisfaction and happiness. However, place of volunteering (religious vs. non-religious) had no significant effect on life satisfaction or happiness. These results, thus, suggest that type of volunteering does not play a role in an individual’s overall life satisfaction and happiness but the amount of hours does. Implications for the study will be discussed.
Dr. Micah Sadigh  
*Psychology*

The Effects of Multi-Techniques Verses Single-Technique Relaxation Training on Stress Management: Is the More the Better?

The purpose of this study was to determine the effectiveness of a single-technique relaxation approach (i.e., autogenic) verses a multitechnique relaxation approach (i.e., progressive, imagery, breathing) in reducing stress and anxiety in college students.

Sixty-three undergraduates were randomly assigned to either a single-technique approach (STA), a multitechnique approach (MTA), or delayed treatment control (DTC). Subjects in the treatment groups received six, 50-minute sessions of training. All subjects were pre-tested and posttested after the completion of training. Criterion measures were the SCL-90 and the State-Trait Anxiety Inventory (STAI).

Results of the ANOVA on the General Severity Index of the SCL-90 showed significance (F=15.52, p<.001). Post hoc analysis showed both STA (M= -4.84) and MTA (M= -5.28) experienced fewer symptoms than DTC (M= 5.41). ANOVA findings on State-Anxiety showed significance (F=9.90, p<.001). Post hoc analysis showed both STA (M= -4.50) and MTA (M= -4.50) experienced less anxiety than DTC (M= 4.0).

The results indicated both treatment groups experienced less anxiety and stress, while the control group showed no changes. No significant differences were noted between STA and MTA. This suggests that a single relaxation technique may be as effective as an elaborate, combination of techniques.

Dr. Micah Sadigh  
*Psychology*

Survivors’ Beliefs as a Coping Response to Grief and Bereavement

Grieving the death of a loved one is one of life’s most stressful events. Some people seem to handle grief better than others. This paper is a review of the current literature regarding religiosity and spirituality as a coping response to grief. It has been hypothesized that people with strong religious and spiritual beliefs are better able to cope with grief than those with no belief systems. Current studies clearly indicate that spirituality and religious beliefs play a beneficial role in the process of coping with and adjustment to grief, and that many people see a strengthening of their beliefs following the death of a loved one. While many studies showed a positive relationship between religiosity, spirituality, and coping with grief and bereavement, they were not without limitations. Most of the studies were lacking diversity, for instance, and in many of the studies the majority of the participants were white females and Christian. The paper explores these and other limitations. It also examines the scope of the current research and provides some direction for future studies.

Jeannette L. Orso ’06, Student  
Dr. Micah Sadigh, Mentor  
*Psychology*
Rebekah Simonds ’05, Student  
Dr. Kerrie Quinn Baker,  
Dr. James A. Scepansky, Mentors  
Psychology

Comparison of Dynamic and Static Feedback in Computer Generated Instruction

Video games are increasing in popularity across all age groups. One element that seems to be important is the dynamic, immediate feedback provided when playing. Would including dynamic feedback make Computer Generated Instruction (CGI) more compelling? The current study investigated the effects of feedback type on learning and motivational perceptions. Participants were 47 female undergraduates, ages 18 – 50, from a small southeastern liberal arts college. Students received CGI with static feedback, a positive or negative response to user input, or dynamic feedback, which had the same elements, but included color and animation. All participants completed a posttest and the Intrinsic Motivation Inventory (Ryan, 2004). Contrary to the hypotheses, CGI with dynamic feedback did not promote higher levels of learning or motivation than did CGI with static feedback. The results from this study have further implications regarding the utilization of dynamic verses static feedback in CGI instruction.

Cortney M. Capen ’05, Student  
Dr. Kerrie Quinn Baker,  
Dr. Jane Tyler Ward, Mentors  
Psychology

Parental Conflict and Divorce and Their Impact on Adult Relationships

This study examined if family structure (whether an adult child comes from an intact or divorced family) and levels of parental conflict (either high or low) affected adult relationships (i.e., attitudes towards marriage, relationship commitment and sexual encounters). Ninety-six students from a small women’s liberal arts college in Pennsylvania, ranging from 18 to 25 years old from intact and divorced families, were surveyed using three questionnaires (Individual Participant Survey-Demographics Questionnaire “IPS-DQ”, Individual Participant Survey-Close Relationship Questionnaire “IPS-CRQ”, and the Individual Participant Survey-Parental Relationship Questionnaire “IPS-PRQ”). From this participant pool, the hypotheses were not supported. Results showed that conflict and family structure may have some effects on the relationships of adult children. However, the effects found from this participant pool were not significant. Implications for this study will be discussed.
SARS

The most recent outbreak of severe acute respiratory syndrome (SARS) ended in April 2003 after claiming 774 lives. SARS is now recognized as a global threat as this last outbreak affected 8,098 people in several countries including eight cases in the United States. Respiratory secretions containing the SARS-associated coronavirus spread SARS from person to person. Incubation is two to seven days until symptoms appear. Symptoms of SARS may include diarrhea and dry cough in addition to the characteristic symptoms of headache, discomfort, and body aches, and high fever of greater then 100.4°F. Treatment for infected individuals is the same as for any serious community-acquired atypical pneumonia. To help prevent the spread of SARS common sense practices, such as frequent washing of the hands and keeping unclean hands away from the face, should be performed. The outbreak of 2003 was ended by government agencies dedicating their resources to the understanding and prevention of the spread of the disease. The CDC played a critical role in preventing the spread of the disease in the United States by providing assistance to state and local agencies in identifying and treating possible cases of SARS. In addition, the CDC sent specialists around the world to aid in the investigation and containment of the disease. For the time being there are no reported cases, but a plan has been put into place by the CDC for rapid identification and control if a suspected SARS case appears.

The Effects of Work Environment and Color on Task Performance and Mood

This study examined the effects of work environment on mood level and task performance. The subject pool consisted of randomly selected undergraduate females, ages 18 and older, from a liberal arts college in southeastern Pennsylvania. Participants were assigned to either a non-aesthetic room consisting of only a desk and chair, or an aesthetic room with decorated walls and full furniture set (chairs, table, bookshelves, etc.), and then given a series of problem solving tasks to carry out. A research design was set up using a formulated questionnaire to assess a participant’s mood, asking participants to perform several puzzle tasks, and then re-assessing mood using a second questionnaire. It was hypothesized that participants in the aesthetically pleasing room would exhibit a more positive mood and a higher completion rate during task performance, whereas participants in the non-aesthetically pleasing room would experience lower levels of mood and have lower completion rates during task performance. Task performance and questionnaire responses were then analyzed to determine if there was a significant change in mood and performance across both groups of participants. The results indicated that, in both groups, task performance (as measured by completion rate) was high. Mood was recorded and found to be lower after the experiment for both groups. Therefore, the hypothesis was not supported. The results of this study could be used to help design a more productive work environment, by boosting employee’s moods through the use of room aesthetics.
It is often assumed that those without health insurance or access to health care will only have the capacity to harm themselves. However, with more than 43 million people in the United States without health care the threat on public health is a reality and must be recognized. This project illustrates the effects of uninsured people on public health and the presence of communicable diseases. The project also focused on the lack of funding for health care in addition to the lack of funding of disease control infrastructures. The combination of the two leads to a multitude of issues. The lack of funding for disease control leads to a loss of surveillance of communicable diseases. Also, with a large part of the population not having access to regular medical services there is an increased vulnerability to reemerging diseases such as Tuberculosis and measles. Along with the discussion of finances, the project examined the benefits of a universal health care system including the reduction of financial and social costs of communicable diseases and other illnesses. Finally, the project addressed the spillover effects on the entire community from the lack of a universal health care system. These issues include but are not limited to the weakened ability to respond to mass causality events and delays in detecting and treating communicable diseases.

The public knows that bacteria and viruses cause diseases and after the outbreaks of Mad Cow disease, many have heard of prions. Most people either forget or do not know that fungi can cause diseases as well. This project presents information on fungal infections. The main diseases described are aspergillosis, candidiasis, cryptococcosis and pneumocystis. The information provided includes the mode of transmission, symptoms, treatment, incidence and other beneficial information. They are commonly spread through the inhalation of spores but in the case of candidiasis, the body contains natural flora. Fungal diseases can infect the young, old, healthy and ill.
The Relationship Between Personality, Trauma and Career Choice

This study examined a possible relationship between one’s personality, trauma she may have experienced, and her choice of college career. A total of 50 Cedar Crest College students were recruited through campus organizations to voluntarily participate in the study. All subjects were required to complete three inventories: the NEO Five Factory Inventory (FFI) (Costa & McCrae, 2003) to assess personality, the Self-Directed Search (fourth edition by John Holland to assess occupational suitability, and the Trauma Experience Questionnaire (TEQ) (Lauterbach, 1999). It was anticipated that those who had experienced relatively more trauma (mental or physical) and whose personality could be described as having a “need for stability” and “accommodating and adaptable” would gravitate toward a care-giving or helping career. In contrast, those who experienced no or minimal trauma in their lives and whose personality could be described as more introverted and challenging would choose a career that is related to the physical sciences. The results supported these hypotheses. There was a significant difference in the number and type of traumatic events experienced by students; those who experienced more incidences of trauma tended to major in a social science. Also, students’ personality impacted their choice of major. Specifically, those students with an investigate type of personality chose a major and corresponding career (e.g., biologist, chemist) related to a physical science, while those students with a social type of personality chose a major and corresponding career related to a social science (e.g., social worker, psychologist). The implications of these results will be presented.

Adult-Onset Diabetes: Its Etiology, Prevention, and Cognitive-Behavioral Interventions

National statistics suggest that in recent years there has been a steady rise in the prevalence of adult-onset diabetes (Type 2 diabetes) in the United States, which may be due to growing rates of obesity, poor diet, and sedentary lifestyles. Other contributing factors include age, ethnicity, and genetic predispositions. Our best estimates reveal that each year over 200,000 deaths are due to diabetes and over 90% of them are due to Type 2 diabetes. Because of the serious complications that can result from diabetes, it is important to be aware of its symptoms and implement proper and immediate interventions when necessary. Recent studies have suggested that diabetes is a significant contributor to cardiovascular disease, which is the number one cause of death in the country, particularly among women. This presentation explores the etiology, prevention and cognitive-behavioral interventions of adult-onset diabetes. It also emphasizes the importance of lifestyle changes as a way of preventing this form of diabetes.
Antimicrobial Resistance and its Implications on Emerging Infectious Diseases

The National Institute of Allergy and Infectious Disease has reported, “More than 70 percent of the bacteria that cause hospital-acquired infections are resistant to at least one of the drugs most commonly used to treat them.” These antibiotic resistant bacterial strains, which were once considered treatable, now can lead to serious disease and death, even in healthy individuals. Resistance to antibiotics is gained through mutation, efflux, conjugation, transformation, transduction, and destruction or inactivation. Microbes are gaining these methods of resistance as the direct result of doctors feeling pressured to prescribe medication, patient misuse of antibiotics, as well as agriculture overuse of these drugs. The most threatening bacterial species and diseases due to microbial resistance include multi-resistant Mycobacterium tuberculosis, penicillin-resistant Streptococcus pneumoniae, methicillin-resistant Staphylococcus aureus, hospital-acquired infections, gonorrhea, malaria and HIV. Preventable measures can be taken to stop the development of such resistance and currently the Center for Disease Control and Prevention has developed a program to try and prevent the spread of antimicrobial resistance. The CDC has placed antibiotic resistance as one of its top concerns due to the implications that it can have on treating emerging infectious diseases in the near future.

The Effects of Religious Orientation on Spiritual and Self-Identity at a Liberal Arts College

The purpose of this study was to investigate the differences of one’s spiritual and self-identity by determining one’s religious orientations. The concepts of spirituality and religiosity often overlap which makes it difficult to define them. Religious orientations were used to classify individuals in order to analyze one’s spirituality. It was hypothesized that intrinsic religious subjects would have higher scores on the three levels of spiritual-identity than extrinsic religious subjects, followed by the indiscriminately pro-religious and the non-religious subjects. Intrinsic subjects were predicted to have spirituality as the central factor for self-identity and extrinsic subjects were predicted to have social/personal as their central factor. It was also hypothesized that pro-religious and non-religious subjects would have other different central factors for self-identity. This study examined religious orientations of 122 students, faculty and staff at a women’s liberal arts college. The religious orientations were categorized into intrinsic, extrinsic, indiscriminately pro-religious and non-religious groups. Subjects’ religious orientations were explored in terms of spiritual and self-identity, by using three questionnaires: Allport and Ross’s Religious Orientations Scale (1967), The Who Am I? Scale (Pedersen, 1994), and the Spiritual Transcendence Scale (Piedmont, 1999). Results indicated that intrinsic and pro-religious orientations are similar when compared to spiritual-identity as were extrinsic and non-religious orientations. Intrinsic subjects expressed a spiritual central self-identity factor and extrinsic subjects expressed a personal/social central self-identity factor. The results also revealed differences between pro-religious and non-religious subjects on self-identity. These findings will help support research in the Psychology of Religion by defining characteristics of religion and spirituality.
College Student’s Perceptions Toward Rape

Rape is not a new phenomenon in the United States. Throughout time women have been victimized by men. Women are raped more often than men. Approximately 371 women out of 100,000 will become a victim of rape in one calendar year. College students have the greatest risk than the general population to become victims of rape. Rape is a serious problem within college communities. Rape acceptance and victim blaming is a major concern. Individuals have more acceptance or tolerance toward rape if they accept rape stereotypes, adversarial sexual beliefs, and traditional sex role attitudes. The primary focus of this research is to acquire knowledge about college student’s attitudes toward rape. The purpose of this study is to assess rape attitudes among a single sex institution of higher learning. The knowledge acquired from this study can help provide understanding of college student’s attitudes toward rape. The population being studied is female undergraduate students attending a small single sex institution in Northeastern Pennsylvania. The subjects were contacted through their campus mailboxes. The implications of these results will be discussed.

The Healthcare System in Denmark Under the Microscope

The basic principle of the Danish welfare system is that all citizens should have equal rights to healthcare and education. The Danish welfare system is completely subsidized by the state, which explains why the income taxes in Denmark are among the highest in the world. The system covers all the basic healthcare needs of all citizens completely, and even partially covers some types of cosmetic surgery. The downside of this healthcare system is that there are long waitlists for surgery and specialist visits. Because of this downside, health insurance is becoming increasingly popular among companies since health insurance will allow their employees to go to a private hospital for faster treatment, which will result in a speedier return to work. Even though this is a costly social system, it is likely to remain popular for many years to come because the preservation of the system has a high priority for most people despite the high taxes and the inconveniences. These and other aspects of the Danish healthcare systems will be discussed.
Mary L. Rish ’06, Student
Dr. Micah Sadigh, Mentor
Psychology

Childhood Cancer: A Biopsychosocial Approach to Diagnosis and Treatment Options

It has been estimated that 1 in every 330 children in the US develops cancer before the age of 19. Each year, cancer kills more children between the ages of 1 and 20 than asthma, diabetes, cystic fibrosis, and AIDS combined. Although research in the development of effective new treatments and cures for childhood cancer has been promising, there seems to be even a greater need for more effective diagnostic and preventative measures. This paper explores the etiology of several different types of childhood cancer and suggests a biopsychosocial approach to the diagnosis and treatment of this malady.

Katelyn Alyce Burgett ’07, Emily B. Truax ’05, Students
Dr. Amy J. Reese, Mentor
Biological Sciences

Art in Microbiology and Microbiology in Art: Past and Present

Ever since scientists could first see miniature organisms with the help of microscopes, there has been a fascination with their structure, function, and growth patterns. The mystery of how these invisible-to-the-eye creatures can cause enough disease, death, and destruction to wipe out entire civilizations and severely impact others has intrigued writers, artists, and scientists alike. This fascination has translated into artistic expressions using microbes as the focus or background of several pieces. Likewise, from the scientists’ perspective, the beauty in the variety of microbial colors, shapes, and patterns has inspired some to create art from the microbiology. This presentation combines an art history and an “art current” approach to the cross inspirations of art and microbiology. We explore the uses of microbiology in some classic and historical works of art. We also present some current applications of microbiology in some unconventional artistic expressions. And finally, we present some expression pieces of our own creative overlaps of microbiology and art.
Cindy J. Lett, 
Leigh G. Yocum ’06, Students 
Sandra K. Leh, R.N., M.S.N., Mentor 

Nursing

Get Active! Getting Fit to Beat the Blues

Depression, the most common mental illness, affects an estimated 340 million people in the world. Depression is one of the most preventable and curable illnesses. People suffering from depression experience the following symptoms: hopelessness, helplessness, fatigue, frustration, altered sleeping habits, anger, hostility, mood swings, irritability, and chemical imbalances. An excellent way to prevent depression is through aerobic exercise and a healthy diet. Exercise helps people regain control in their lives, elevates beta-endorphins, increases brain serotonin, plus numerous other benefits. Getting exercise can be as simple as taking the steps at work, or as involved as getting a personal trainer. Begin by making exercise a priority in your life. Make exercise fun and you will be rewarded on many levels. The poster will outline the preceding topics, as well as other pertinent information regarding exercise and depression.

Sharon F. Smith ’05, Student 
Dr. Micah Sadigh, Mentor 

Psychology

Body Image Dissatisfaction and Women in Midlife: An Exploration of Psychosocial and Cultural Influences

There has been little research on how women perceive and feel about their bodies at midlife. Body image dissatisfaction, once thought to be a problem that only affected younger women, is now a health issue for midlife women. Body image dissatisfaction can influence psychosocial functioning and quality of life in women. This can contribute to the experience of anxiety, depression, and low self-esteem. Some midlife women are undergoing radical medical procedures as a way of trying to improve their negative body image. Researchers are examining how society’s view on aging and the media’s portrayal of beauty contribute to body image dissatisfaction for midlife women. This paper examines the impact of body image dissatisfaction in women during midlife. The psychosocial and cultural influences that contribute to body image dissatisfaction and how to limit their negative impact will be discussed.
The Effects of Age on Perceptions of Interracial Relationships

Although interracial relationships are becoming more frequent and more visible in American society, it is questionable as to whether they are yet perceived as being as equally acceptable as intraracial relationships. The current study explored the changing status of interracial relationships by looking at the perceptions of two age groups, those 18 to 22 years old and those 55 and older. Two types of interracial relationships were looked at: a white/hispanic couple and a white/black couple. An intraracial (white/white) couple was also used for comparison. Within both age groups, it was hypothesized that interracial relationships would be rated less socially acceptable than intraracial relationships. It was also hypothesized that between each group, there would be a difference in perceptions: the younger individuals would view interracial relationships as more socially acceptable. Eighty-five participants, 62 within the 18 to 22 age group and 23 from the 55 and older age group, read one of the three possible relationship scenarios paired with pictures depicting the races of the partners in the scenario, and then responded to an eleven-item questionnaire. Both hypotheses were partially supported. Main effects were observed for both age of the respondent and the races of the hypothetical partners in the scenarios, indicating significant differences in the levels of acceptability reported by the respondents. The differences become more significant as the level of social distance between the respondent and the hypothetical couple decreased. Implications of the study’s findings are discussed.
Kristen M. Kuloy ’05, Student  
Dr. Kerrie Quinn Baker,  
Dr. Kent K. Fitzgerald,  
Dr. Diane M. Moyer, Mentors  
*Psychology*

**Exploration of Operant Learning in the *Hirudo Medicinalis***

Behavioral studies have proved that leeches can be trained and tested to demonstrate operant learning just as well as other invertebrates (Sahley, 1995). This research was conducted to further demonstrate operant learning in the leech and determine whether performance is better in an environment with high intensity lighting or low intensity lighting. It was hypothesized that leeches will learn better in an environment with low intensity lighting and during testing will show more of a preference to the direction of the maze they were trained in. Twenty leeches were trained and tested to find a mechanical relay that set off a vibration. Once trained, the leeches were tested to see if they learned where the vibration was. Results showed that leeches spend more time in the untrained arm and take less time to get there. No significance was found for the preference of high intensity lighting or low intensity lighting.

Jennifer Amaral ’05, Student  
Dr. Kathleen Boland, Mentor  
*Social Work*

**The Battle for Adequate Care***

Managed care is a complex health and behavioral health care services delivery system. Under managed care, third party payers review the requests for the initial delivery of services, determine the volume of the services provided, by which provider, and at what reimbursement rate, and review any subsequent requests for continuation of services. The literature showed that clients under managed care have shorter lengths of stay and are not receiving appropriate services once discharged from a mental health facility.

The purpose of this research is to determine what factors in mental health influence discharge planning process. This study will examine whether or not clients are receiving adequate care and proper resources once discharged from a mental health facility.

The implications and results of the study will be discussed.
Sensory Integration: How Sensation Affects Functional Behaviors in Autistic Children

Autism is a developmental disorder, which is diagnosed in childhood. Children with autism present with significant impairments in social and communication skills, and restricted behaviors. Current research is focused on environmental and biological factors to determine the cause of autism. Impairments in sensory integration appear to have a significant impact on autistic behaviors and function and sensory integrative therapies play a large role in treating these sensory deficits. The socioeconomic cost of caring for autistic individuals is great throughout their lifespan. More research needs to be conducted to find a cause and to explore effective treatment strategies to combat this devastating disorder.

From the Disease Model to the Health Model

The new field of positive psychology focuses on people’s positive qualities such as positive emotions, optimism and resilience, and their impact on health. For many decades, most of the research that has been conducted emphasized the effects of negative emotions on health. Although there has been a shortage of research on how to promote positive emotions, it has been shown that people with positive moods have more psychological resources available to deal with health problems. Positive emotional states can also lead to positive affect, better health behaviors, good social relationships and strong psychosocial resources. Additionally, optimism has been linked to a strong immune system and desirable outcomes. Resilience has been defined as a good outcome despite difficult circumstance. Attributes that contribute to resiliency are strong social support, cognitive and self-regulations skills, positive views of self and motivation. Additional studies similar to a recent experimental study that showed the positive effect of mindfulness meditation on affect and immune function need to be conducted.

Spirituality and Intrinsic Religiosity: How They Compare in Overall Wellness

Religiosity and spirituality have a wide variety of definitions that are often combined or mislabeled in research. Correctly defining a term is crucial to the focus and understanding of the research, and to the accuracy of empirical results. This paper reviews the current literature in the realm of intrinsic religiosity and spirituality by specifically focusing on how these faith-based constructs relate to wellbeing, identity, and morality. On the topic of wellbeing, studies suggest that while religiosity relates to the development of involvement in the community, spirituality relates to personal development. A study by Maltby (1999) found religiosity and obsessional tendencies to be positively correlated, while they found that religiosity was negatively correlated with psychotic tendencies. Spirituality was found to be positively related to self-esteem and negatively related to neuroticism. Morality and identity were found to be related to intrinsic religiosity but not spirituality. Spiritual and religious implications of such findings in the practice of psychotherapy are discussed. The paper also addresses recommendations for future research.
Job Satisfaction in the Mental Health Field

Over the years there has been an increased awareness that mental illness is a disease, and is looked at as any other medical condition that people are diagnosed with, something that is out of that person’s control. With this increased awareness professionals on various levels have begun to assist these individuals in attempting to live enjoyable lives to the greatest extent possible. This population seems to be a difficult population to work with, as evidenced by the high turnover rate of the staff. Research has shown that job satisfaction is an essential part of retention. It also has shown that employers, who monitor the level of satisfaction on a regular basis, are more likely to have greater retention. Additionally, employee satisfaction is an indicator of employee motivation, performance and impacts on employee absenteeism. The study examined the level of satisfaction of staff by using the following variables: age, gender, religion, education level, job position and years of experience. A self-designed survey will be used to collect data, which is related to job satisfaction. The sample population will be staff from at least three different departments at a local mental health agency. Results and implications will be discussed.

Stress and Job Satisfaction of Mental Health Workers

Today, mental health workers face new challenges because of increased client load, decreased funding, low salaries, continuous overtime, and limited opportunities for advancement. Mental health workers also have to endure long hours, interruption to family life, and increased demands by patients and relatives. Due to these problems, other factors have developed, such as the stress and satisfaction of one’s job as a mental health worker. Several studies have demonstrated that stress and one’s job satisfaction has many predictors such as; age, gender, years experience, and educational level, but there is not a consensus of what actually causes stress and one’s job satisfaction. Stress and job satisfaction is neither a new nor isolated phenomena but, it seems that the problem of stress and job satisfaction may be exacerbated among individuals working in emotionally demanding environments.

The data for this study will be collected using a one time, post test descriptive survey design. The population being studied is all staff members from agencies in the Lehigh Valley area working with people with mental illness.
Psychology of Cyberspace: Examining the Emerging Psychosocial Effects of the Internet on College Students

In 1992, the World Wide Web was released, and since then it has exploded into almost every household in the United States and around the globe. The Internet has changed the world in fundamental ways and is quickly becoming a natural part of everyday life. Electronic communication is not conducted face-to-face and it lacks the non-verbal features of traditional communication. Because of its inherent lack of face-to-face communication and the ability to maintain relative anonymity, it is important to explore whether the Internet impacts the interpersonal skills of its users. Researchers and social scientists are debating whether the Internet is enhancing or harming participation in community life and social relationships. Some studies have found that the relative anonymity aspects of the Internet encourage communication and that online communication can enhance and reinforce social interactions. At the same time, the Internet has been found to contribute to a decline in social involvement and an increase in loneliness, depression, and possible “Internet addiction.” This paper will review the impact of the Internet on college students from a psychosocial perspective. It is suggested that more research is needed to determine whether the way in which students choose to use the Internet has an effect on their overall psychological well being.

The Difference in Psychological Stress Levels in College Athletes Versus Non-Athletes

Previous research indicates that stress is abundant in the lives of many college students. However, minimal research has been done concerning the difference in stress levels of college athletes and non-college athletes and the coping mechanisms used to deal with stress. It was hypothesized that college athlete experience lower psychological stress than non-athletes due to an outlet to relieve stress (athletic participation/exercise). It was also hypothesized that freshmen students (predominately freshmen non-athletes) would have higher stress levels than senior students because of the new environment they are experiencing. An interaction between class status and athletes was expected. To test these hypotheses, the Cold Pressor Test (Zeltzer, Fanurik, & LeBaron, 1989) was used to gauge competitiveness and hardiness of the participant. Secondly, the State Trait Anxiety Inventory (Spielberger, 1984) was administered to measure anxiety/stress. Additionally, the Coping Operations Preference Enquiry was used to measure coping strategies. Participants (N = 38) were traditional students from a small, all-women, liberal arts college on the east coast. Results indicated there was no significant difference between class status (freshmen, senior), athletic participation (athlete, non-athlete), and stress levels. Though the data yielded no significance, a trend was discovered. Findings indicate that further research is needed to investigate the emerging trend. Implications for this study will be discussed.
Reactive Feedback from the Healthy U Program Participants at Cedar Crest College

The Healthy U Program is a 10-12 week program that encourages participants to develop behaviors that will contribute to a lifetime of health. Each participant sets personal goals and tracks their progress towards goal achievement. Participants enroll in the program as individuals or in small groups within 1 of 3 different categories depending upon their interests. A survey designed to capture participant’s attitudes toward Healthy U is administered at the beginning and conclusion of the program. This systematic evaluation of the Healthy U program is designed to determine its effectiveness in encouraging faculty, staff, and students to develop healthy lifestyles. Survey data collected from faculty, staff, and students across the last three semesters will be presented. Participants provided reasons why they joined the program, their intended goals and expectations, and their biggest challenges and motivators for the program. In addition, information was gathered concerning what they liked most and least about the Healthy U program. Implications of these findings on the design of the Healthy U program will be discussed.

A Longitudinal Study of the PsychoSocialSpiritual; Health Needs of Cedar Crest College

At the college level, there is the opportunity to make a difference in the lives of students by providing them with the best possible means of learning about health, healthy practices and knowledge about health interventions. Understanding traditional freshman, sophomores and juniors attitudes, lifestyles and behaviors related to food choices, sleeping patterns, risky behaviors and mental health can aid in developing initiatives for promoting psychosocial, social and spiritual health. To achieve this, a longitudinal health survey has been developed to assess individuals during their college years to monitor changes that are expected to occur through participation in Cedar Crest College programs (e.g. Healthy U, Rodale Aquatic Center, speaker series). It is expected that students who receive information and resources while at Cedar Crest College will decrease risky behaviors and develop steady, positive behavioral patterns that will prevent disease in the short-and long-term. Further, this study is expected to demonstrate a positive relationship between a healthy lifestyle and academic success. Findings from the sample over the last two years will be presented.
The literature has suggested that college students represent the largest available group of potential healthy organ donors. The question was posed as to when such potential donors will or will not donate. To answer that question, a four-page closed-ended survey was developed to measure college students’ knowledge about organ donation in general and their attitudes toward organ donation. In addition, students were asked to respond to four different case scenarios in which two variables were manipulated: whether an individual has a signed donor card, and whether the family would receive money for a donation. A total of 389 surveys were collected at a small women’s college in eastern Pennsylvania. Results indicate that student’s knowledge about organ donation is minimal and additional education is necessary. It appears that the dissemination of information may positively affect their attitudes toward organ donation and increase the likelihood of donating. Findings also indicate that the presence of a signed donor card positively affects their decision, while compensation for donating does not affect their willingness to donate. The implications of these results will be discussed.

Medical Microbiology in the Media

Have you ever watched a commercial and wondered if the advertised treatments would really work as reported by the smiling people in the ad? What about those TV programs that show doctors determining the microbial causes of infectious disease – could they really make that diagnosis from the information presented and would those be the tests they would run? How dangerous are certain medical procedures? Can you catch germs from simply applying cosmetics? What is anthrax and what is the bioterrorism threat it presents? These and many other every day medical microbiology questions like these will be summarized in this presentation. This is part of an in-depth look at some of the portrayals of microbiology in the public media, the science behind them, and the information that the general public needs to understand them. The project includes a poster of the summaries of these topics and the accompanying full-length reports, as prepared by the Biology 382 Microbial Pathogenesis class of Cedar Crest College, spring 2005.
Why Women Stay in an Abusive Relationship

Domestic Violence in United States is an ongoing and continuous problem that many women face as an aspect of their relationships. Although recent static’s indicate that domestic homicides have decreased since the 1970’s over 1,100 women died in 2001 at the hands of their abusers (Silent Witness National Initiative, www.slilentwitness.net <http://www.slilentwitness.net/>).

Respectively, Women have greater risk then men of being victims of domestic violence. In fact the bureau of Justice Statistics reports that “women are 7 to 10 times more likely to be injured in acts of intimate violence than are men”. (Silent Witness National Initiative, www.slilentwitness.net <http://www.slilentwitness.net/>).

The purpose of this study is to understand the factors such as the presence of children, substance abuse, perception of fear and housing status that influence abused women stay in an abusive relationship. The research design being done will be a descriptive study using secondary data, based on closed records in one domestic violence agency to provide information about the issues that influence women to remain in abusive relationship. Results and implication of the research will be discussed.

The Effects of Music on Memory

Previous research has shown that music (i.e., classical music, jazz music, and no music) can have a profound effect on memory during memory performance tasks. Seventy-five traditional and non-traditional students from a small women’s liberal arts college in Allentown, Pennsylvania were recruited for this study. This study examined the effects of different music while performing a short term memory task. The subjects in this study were given earphones and asked to listen to classical, jazz, or no music for three minutes, during which they examined a list of words. When time was up, participants were given two minutes to recall as many words as possible. It was hypothesized that the type of music will affect how they will perform on the task. A one-way ANOVA was used to test for significance. There was a significant difference in recall with jazz music. Several significant interactions were found between classical/no music and jazz/no music. Differences were found in each subject according to listening to music or having no music. There were some implications to this study because only females participated. There could be a certain bias towards the type of music that was selected for this study. Does having musical training play an effect in the amount of recall on a memory task? What made this study unique in the real world is how we use various kinds of music in different situations of our life. The hypothesis was supported that music will have a profound effect on a memory recall task.
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