Microbiology & Molecular Genetics Department to Honor Paula Fives-Taylor with Symposium

By Diane Meyer

Scientists from around the world will converge at UVM on October 14, 2005 at a symposium in honor of the research career of Professor Paula Fives-Taylor, Ph.D.

The focus of the symposium will be oral pathogenesis, the area of research to which Fives-Taylor is dedicated. B. Brett Finlay, a world-renowned microbial pathogenesis researcher from the University of British Columbia, will present the keynote address entitled "Microbial Disease: Role of the Pathogen and Host". The morning session will include a talk on Streptococcus by Howard Jenkinson of the University of Bristol. In the afternoon session, Richard P. Ellen of the University of Toronto will deliver a talk on Actinobacillus actinomycetemcomitans. The scientific session will be followed by a Meet the Speaker reception to which friends and UVM colleagues of Paula are invited. For more information about the event, contact Debbie Stern at 656-8258 or dstern@uvm.edu.

Most importantly, everybody thought that this was a very interactive event. Consequently, we will try out a similar format again next year: One day, close to Burlington, at a nice site (good food), a unified topic (research or more general) and allowing for many interactions. We believe that such interactions among people from various groups would be made possible if the next retreat focused on a research topic, provided that there would be appropriate formats such as workshops, etc., that allow people at all scholastic levels to fully participate.

Unfortunately, Tom Fowler has left us, so the Retreat Committee is now looking for a replacement. If any faculty member, staff member, student

MMG Annual Retreat 2005

By Markus Thali

MMG's Annual Retreat was held at the Inn at Essex on May 17. Judging by the overwhelmingly positive feedback the retreat was a success. Participants enjoyed Rae Nishi’s opening lecture, “Science is not done in a vacuum: why what you do matters”, and the moderation of discussions by Nick Heintz, Mercedes Rincon and Dave Yandell was greatly appreciated. Most importantly, everybody thought that this was a very interactive event. Consequently, we will try out a similar format again next year: One day, close to Burlington, at a nice site (good food), a unified topic (research or more general) and allowing for many interactions. We believe that such interactions among people from various groups would be made possible if the next retreat focused on a research topic, provided that there would be appropriate formats such as workshops, etc., that allow people at all scholastic levels to fully participate.

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or postdoc is interested in joining our lively discussions, choosing the next topic and the site, as well as joining us in preparation for Retreat 2006, please contact Markus. We need your input and welcome new committee members!

The retreat resulted in several suggestions on how we can improve our daily departmental lives and the Retreat Committee thus encourages people to volunteer and act on the following topics:

- A departmental (i.e. not just grad student) lounge/coffee room would be highly desirable.

- A half-day, late afternoon-evening chalk-talk, poster and/or oral presentation session, pizza and beer event in the fall, where every group shows what they are doing and where they are going. This would be for new students as well as a "must attend" event for all department members (a mini retreat at home, Stafford) to briefly familiarize everybody, not just those attending the respective supergroups, with what’s happening in the department.

- Besides the supergroups, regular presentations (as was once discussed) e.g. of more senior grad students who submit a paper, of new postdocs or of PIs who would like to update us on exciting things. This necessitates someone to coordinate things and work hand-in-hand with those who organize the seminar course (310).

Mentoring and career selection, besides various research topics, were suggested by many individuals as possible topics for future retreats. It appears that a need exists and should be addressed, perhaps sooner than at the future retreat. One idea would be to address this through invited speakers (local or outside) for seminar dates not filled by MMG 310. This would require the 310 coordinator to have speakers arranged early in the semester and that seminar attendance is deemed important so that these speakers are not ignored.

Welcome New Students

Welcome new MMG Undergraduate Students:
- Joey Adams (MGEN)
- Jacob McFadden (MGEN)
- Stephen Lutz (MICR)
- Sarah Nelson (MGEN)
- Brittany Porter (MGEN)
- Adam Pruss (MICR)
- Heather Spain (MICR)

Welcome new MMG Graduate Students:
- Heng Guo
- Jingping Li
- Minmin Liu
- Qing Tang
- Isaac Tirrell

Faculty Awards

Congratulations to Susan Wallace, this year’s recipient of the John B. Little Award, Harvard School of Public Health and honorary inductee into Phi Beta Kappa.

John Burke was elected as a University Scholar 2005-2006. The University Scholar Awards Program annually recognizes distinguished faculty members for sustained excellence in research and scholarly activities. The scholars are selected by a panel of distinguished faculty, based upon nominations submitted by UVM colleagues. Prior recipients from MMG have been: Tom Moehring, 1982-1983, Paula Fives-Taylor, 1989-1990 and Susan Wallace, 1997-1998.
Undergrad Awards

Congratulations to Amy Rogers, the 2005 recipient of the Warren R. Steinbring Outstanding Senior in Microbiology Award, and Alicia Holmes, the 2005 recipient of the Lucille P. Markey Outstanding Senior in Molecular Genetics Award. Alicia also received College Honors for her project, “Escherichia coli Pol V: Solitary Hypermutator or Co-conspirator in Change?”

Joe Pare received the Alexander McMahon Kende Memorial Scholarship Award, given to a junior student who demonstrates academic excellence, an interest in medicine or bio-medical research, service to and caring for others, integrity, personal courage and good humor.

Jessica Schwartz received College Honors for her original research “Exploration of CD4+CD25+T Regulatory Cells in Coxsackievirus B-3 (CVB3) Induced Myocarditis and Effects of TNFa”.

Dov Pechenick was inducted into Phi Beta Kappa.

Congratulations to everyone!

Systems Biology Workshop 2005

The Second US-EU Workshop, “Systems Level Understanding of DNA Damage Responses” will take place at the Stoweflake from September 30, 2005 through October 4, 2005. MMG’s Susan Wallace is on the Programme Committee. The Workshop takes place during beautiful foliage season, right here in our backyard.

The purpose of this Workshop is to develop better collaboration between researchers in the EU and the US in a systems biology analysis of the principal pathways in the area of DNA-damage response. Heretofore, researchers focused on specific cellular compartments with regard to DNA-damage responses, such as cell cycle regulation, induction of apoptosis or DNA repair. Details of the Workshop, including the Agenda can be found on the Internet at: http://www.uvm.edu/conferences/systemsbiology05/index.html

The Workshop is funded and organized jointly by the National Cancer Institute (NCI), the National Institute of Environmental Health Sciences (NIEHS), and the Directorate General Research (DG RTD) of the European Commission. The meeting will host speakers from around the world, on the cutting edge of Systems Biology Research. Thanks to Fisher Scientific and Michael Buccellato for their generous support of the meeting, as well.
Ning Yang received her Ph.D. degree and has accepted a postdoc position at the University of Wisconsin, Madison, Wisconsin.

Wallace lab alums and present lab members and collaborators celebrating a reunion at the International DNA Repair Conference held in Bermuda last November. Celebrants around the table from left to right are: Matt Hogg, Wakako Inoue, Masaaki Inoue, Yin Guo, Amalthiya Prasad, Char Courcelle, Lynn Harrison, Takashi Watanabe, Vishy Bandaru, Kihei Kubo, Susan Wallace, Sylvie Doublié, David Pederson and Justin Courcelle. Hiroshi Ide had just left to help get his student's poster set up. Susan Wallace was the meeting co-organizer along with Graham Walker and Priscilla Cooper who were all found singing the "DNA Repair Blues" at the opening and closing festivities, along with accompanists Errol Friedberg, Rick Wood and Phil Hanawalt.
Sad news. Candi Lampman, wife of Gary Lampman, a former tech in the Wallace lab, passed away on July 28 after a long battle against breast cancer. She was only 48.

**Burke Lab**

By Ken Hampel

Congratulations to Christina Kraemer Chant and Alan Chant, formerly of the Wallace Lab, on the arrival of their new daughter, Juliette Violet Kraemer, born August 2, and weighing in at 10.5 pounds, 21½”.

Dominic Lambert received his Ph.D. degree, defending on August 4, and will be a postdoc in David Draper’s lab in the Biophysics Department at Johns Hopkins. Joonhee Han is scheduled to defend at the end of August, and will be moving to Connecticut to be a postdoc in the lab of Dr. Elisabetta Ullu, Section of Infectious Diseases, Department of Internal Medicine, Yale University School of Medicine. The Burke lab won’t be the same without them!

The Burke Lab welcomes some new people, who will be taking up the slack. They are graduate students Melissa Tinsley and Snidgha Roy and postdocs Andreas Koenig and Iwona Buskiewicz. Andreas and Iwona came to UVM from Europe last September.

Summer Fun! In other news, the skies were clear and the water warm for the annual Burke Lab Mallett’s Bay excursion. Karen and John Burke hosted a day of fun in the sun at their summer camp north of Burlington. All was going well until a freak fishing accident caused Iwona Buskiewicz’s index finger to become impaled on the hook simultaneously occupied by a large mouth bass. Iwona’s husband, Andreas Koenig, was overheard as saying “she’s a keeper, alright, and I don’t mean the fish!” The excitement ended when Karen Burke, a medical doctor, assisted in removing the hook. The unfortunate Bass was prepared and served for lunch.

Vacation News: Karen & John visited the Galapagos Islands last fall and were overwhelmed at the species diversity and desolate beauty of Equador’s prized coastal islands. Keeping an eye on the local wildlife, however, proved difficult. Dr. Burke remarked, "I’m not sure if its middle age or near sightedness, but we lost the trail of two giant tortoises yesterday and today one of those flightless cormorants gave us the slip."

Ken Hampel and family, his wife Stephanie Mueller and their two-year-old son Owen traveled to the Canadian Rockies this spring for a family wedding celebration. For the younger Hampel the long plane trip was a opportunity for adventure. Visibly shaken, Ken commented, "thirty minutes into the flight he learned that he could crawl under the seats and that there wasn’t any way for us to stop him. Three hours later we got off the plane in Calgary, I kissed the ground."

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There was a peregrine falcon sitting on the hand railing of the water tower for three hours on August 22. When Joyce Heckman came here in 1994, and for several years afterward, a peregrine used to hang out there.
for a few hours nearly every day in decent weather. Birding experts like Scott Morrical used telescopes and read the bands on her legs to identify her as an immature female fledged in Pennsylvania. If the current falcon keeps visiting, we’ll try to get a good look and find out whether it’s our old friend.

**Ward Lab**

Two new people recently joined the Ward lab: Jayanthi Garudathri, a second year MMG student, and Whittney Dotzler, an MD/PhD/CMB student - welcome to both of them. Jeralyn Haraldsen, Aoife Heaslip and Gary took a trip to Scotland early in the year to meet with collaborators and walk the Old Course in St. Andrews.

**Doublié Lab**

The Doublié lab has welcomed several new members. Two new postdocs, Pierre Aller and Kayo Imamura, join us from their respective countries, France and Japan. Qin Yang, after his year of rotations, has also joined our lab. Chris Folts, the third technician in the lab who graduated from Essex High School, joined us in May. Karl Zahn, who has worked as an undergrad in the lab for the past year will start Sept. 1 as a technician. We did not know when we hired him, but Karl is an accomplished jazz musician: He played with the Chico O’Farrill Afro-Cuban Jazz Orchestra at the Flynn last Spring and they brought down the house! Speaking of accomplishments, both Molly Coseno and Justin Meyette ran marathons this year.

Leila Sevigny will begin her first year as a graduate student at Tufts University in the fall. We all wish you the best of luck at Tufts, Leila! Rumor has it that Leila chose Tufts in order to be closer to her beloved baseball team. Speaking of which, last year was tough for Dylan Murray, considering that he was the only Yankee fan in the lab. Dylan’s hoping that 2005 will be a better year for the New York team.

**Mintz Lab**

Dr. Gaoyan (Grace) Tang, BDS, MDS, Ph.D. has recently joined our laboratory as a Postdoctoral fellow. Grace received her training at University of Hong Kong, Hong Kong. The laboratory and Chunxiao Yu have received money from the VT DOE EPSCoR for one year to use Electron Microscopy Tomography with Dr. Teresa Ruiz of the Department of Molecular Physiology and Biophysics, to determine the structure of EmaA, a newly discovered protein/structure associated with the surface of Actinobacillus actinomycetemcomitans. On a more personal note: congratulations are in order for Christopher Lenox who was wed to Shannon Granath on August 13, 2005, under a sunny
Vermont sky in Craftsbury, Vermont. A good time was had by all.

Fives-Taylor Lab

We bid adieu to Travis Bellville, who will be attending medical school in the MD/Ph.D. program at the University of Vermont and Kurt Toenjes, a short term member of the PFT lab and longer term member of the Johnson lab, who has accepted a position at the University of Montana in Billings. They will be missed! But in the mean time, we would like to introduce two new lab members; Genevieve Von Walstrom and Maja Sedic. Genevieve and Maja are both recent graduates from UVM. Genevieve completed an internship at Downstate Medical School in NYC and Maja has recently been working at the DNA sequencing facility.

Raper/Fowler Lab

Tom Fowler has accepted a tenure-track faculty position in the Biological Sciences Department of Southern Illinois University at Edwardsville (near St. Louis, MO). The work on the Schizophyllum commune mating system will continue there. This fall he will be teaching two courses and setting up his lab. He received a warm welcome to the area by moving during a week when the temperatures topped 100°F several days in a row. If you are in the St. Louis area, give Tom a call. The St. Louis airport is just 20 minutes from campus and he’d love to have visitors.

Johnson Lab

Kurt Toenjes moved to the Fives-Taylor lab in September and on to the University of Montana - Billings for his new job as an Assistant Professor at the end of July. Jake Koster completed his four years of study at UVM in Biomedical Technology and his four years of work-study in our lab in May. Jake was also the President of the UVM College Republicans, for which he endured much abuse from Karen Cole. Heather McLaughlin, a Biochemistry undergrad and member of the UVM Cross Country and Track teams, joined the lab during the spring. Karen convinced her that Saccharomyces was the cool yeast. Sairy Martocci also joined the lab during the spring. She decided to work on the ‘other’ yeast, Candida albicans, along with Ben Stark and Joy-El Barbour. Joy-El spent the summer in the lab on a HELix Internship. Ben rotated in the lab in the spring, and enjoyed sparring with Karen so much that he decided to stay for his thesis. Karen got married on August 6th, and spent two long weeks lying on the beach in Cape Cod. While Karen was sipping margaritas in the sun, Doug attended the Yeast Cell Biology meeting in Cold Spring Harbor, where he presented a poster and gave a talk.

Bond Lab

The Bond Lab welcomes three new members, Anjanette Watson, Dan He and Bryan Fleming. Anjie came to us last fall from Curagen. She is helping with Microarray data Analysis and outreach. Bryan, a native from Vermont, just started last month and will be working as a programmer. He enjoys sailing and skiing. Dan He is getting his Ph.D. in Computer Science, and is currently working on classification of scientific documents. He loves to play sports, especially soccer. We will miss Sirisha Chundru very much (especially her wonderful cooking). She left for KPMG to work in their corporate tax department, something she is very interested in.

Alumni News

Meredith Dixon (2000) has worked for the past two and a half years in an HIV lab at Massachusetts General Hospital working on developing HIV monitoring tools for developing countries. She is soon to start her first year at the University of Pittsburgh School of Medicine. Meredith writes, “I’ve been wanting very badly to go to medical school for the past few years. I’m overwhelmed with excitement and at the
same time don’t think that the enormity of what I will soon be engrossed in has hit me yet. What else can I say except that I know this is exactly what I want to be doing right now."

Sean Garvey (1999) writes, ”Hello MMG! Greetings from North Carolina! I am just starting my fifth year in graduate school in the Program in Genetics and Genomics at Duke University. Before I started here, I worked for two years with Dr. Greg Cox at The Jackson Laboratory in Bar Harbor, Maine, where I studied several mouse models of neuromuscular disease. Many thanks to Stephanie Phelps for suggesting such a wonderful PI and work environment! Recently, in my thesis work under the direction of Dr. Michael Hauser in the Center for Human Genetics, I have developed a mouse model of limb-girdle muscular dystrophy type 1A (LGMD1A), an autosomal dominant, adult-onset and progressive muscle disease caused by point mutations in the myotilin gene. This mouse model successfully recapitulates the muscle pathology seen in LGMD1A patients (see below). Recent data suggest that these presumably gain-of-function mutations promote aggregation of sarcomeric proteins in myofibers, leading to large myofibrillar plaques, compromised muscle function, and ultimately manifesting in muscle weakness. Though affiliated with the genetics program, I find myself doing much more pathology than I would prefer! In my spare time, I have been running a lot and racing quasi- or rather, pseudo-competitively at the 5-kilometer distance. Maybe I’ll see you at the Thetford Foliage 5-Miler when I visit in October! "

Barbara Robertson graduated with a MS from the Department in 1994, from the lab of Tom and Joan Moehring. She has been at Bristol-Myers Squibb in Wallingford, Connecticut, since 1994, and is currently a Senior Research Scientist, leading a cell culture and expression group that supports Neuroscience Drug Discovery projects. Barbara married Patrick McCann in 1995, and they have a seven-year-old son.

Carrie Smith (1999) writes, “I did one year of bench research after graduating from UVM at the University of Virginia with Ian Macara and quickly realized it wasn’t for me (I don’t think one experiment I did ever worked). So I decided to go to med school and graduated from the University of Connecticut School of Medicine in 2002. I am now living in Chicago with my husband, John Shanley and my adopted golden retriever, Opie, and am in my last year of residency in Obstetrics and Gynecology at Rush University Medical Center. We haven’t decided if we’re going to head back to New England after John finishes his residency in 2007 or if we’ll stick around..."
Chicago for a while longer. Hopefully by that time we won’t have to base our decision on medical malpractice laws! We have been thinking about Burlington a lot lately (it’s really hot in Chicago this summer) and are looking forward to another visit soon.”

**Chad Euler**, B.S. 1998, received the David Rockefeller Fellowship from Rockefeller University. Chad, a graduate student at Rockefeller University in New York and a native of Westminster, Maryland, received the David Rockefeller Fellowship June 8, 2005, at a luncheon preceding the university’s commencement ceremony. The fellowship is given annually to an outstanding third year graduate student.

Chad is studying for his Ph.D. in the Laboratory of Bacterial Pathogenesis, headed by Professor Vincent Fischetti, Ph.D., who describes him as “an excellent and dedicated student who is able to balance his laboratory work and service to his fellow students and faculty.”

Chad’s research focuses on how bacteria infect people and cause disease. He is interested in one of the earliest points of infection, when the bacteria attach to a person’s mucous membranes, like those found in our nose and our lungs. His research uses a type of bacteria called *Streptococcus* that, among others, causes Pharyngitis, Flesh-eating disease and Rheumatic fever, a disease that affects millions of children worldwide.

“The results of Euler’s experiments could have significant medical implications,” says Fischetti.

The David Rockefeller Fellowship was established by Rockefeller University alumni in 1995 on the occasion of David Rockefeller’s 80th birthday, in recognition of his outstanding support of the university and the role he has had in establishing the graduate program. David Rockefeller is the grandson of John D. Rockefeller, who established, among other philanthropic endeavors, The Rockefeller University.

**Jeff McKenna**, a past technician from the Burke lab, is now a Procedural Dermatology Fellow right here at UHC in Burlington, working with Dr. Glen Goldman.

**Hunter White** (1997) a Masters’ student in **Doug Johnson’s** lab, spent a year on active duty with the Army, then a short stint with HHMI at the Southwestern Med Center in Dallas, followed by 3 years at DuPont Pharmaceuticals (now part of Bristol Myers Squibb). Hunter is now involved in an arena of science that is about as opposite as one could get from yeast genetics, leading the scientific arm of early-phase drug discovery parasitology research efforts at Eli Lilly & Company. He has been with Lilly for a little over four years. His lab has had two papers out recently (J Med Entomol 2004, 41:1034 and J Med Entomol 2005, 42:207), with another four in the hopper, so he is quite busy. Hunter and his family (wife Tina, a certified Master Gardner, and daughter Haley, now 13 and an avid swimmer and dancer) live about 25 miles east of Indianapolis in the small town of Greenfield. They all enjoy traveling and gardening. He still runs, and is now training for triathlons. Hunter related this story, “I used to run to the lab from married student housing in Colchester... ask Doug if he recalls **Janet Murray** getting mad at me because I’d...”
come in all sweaty and begin work; her bench was right next to mine...she would immediately banish me from the lab and wouldn’t let me back in the door until I took a shower in the gym)."

Jody (Senter) Sylvia, a 1997 graduate of MMG who worked in Doug Johnson’s lab for her undergrad degree, says, "Hello!" Jody works at Brigham and Women’s Hospital in Boston as a Laboratory Manager in a Genetic Epidemiology Lab. She recently finished writing a book chapter for a Respiratory Genetics book that will come out next year on study design, sample management and genotyping platforms. Jody and her husband have a beautiful 15-month-old girl named Devin Elizabeth. Jody sends her regards to everyone at MMG, and wishes everyone the best.

Graduate Student News

Congratulations to the following graduate students upon successfully defending and receiving their Ph.D. degree:

Heather Kendall – advisor Barry Finette
Krishnan Venkataraman – advisor Greg Gilmartin
Karen Champagne – advisor Chris Francklyn
Ning Yang – advisor Susan Wallace
Dominic Lambert – advisor John Burke
Joonhee Han – advisor John Burke

Retiree News

Warren Schaeffer writes, "As you will see, science is still a part of my life even though retired." Since moving to New Jersey, he has reconnected with the New Jersey Branch of the American Society for Microbiology and was asked to be a judge in their recent meeting to find the most outstanding poster for both graduate students and postdocs. Warren said, "It was fun and I got to re-meet with past acquaintances from the pharmaceutical industry and others I knew when I was a grad student.”

Warren has also become involved with the Rutgers Adult Lifetime Learning Program and last winter taught a Microbiology course. He was also asked to be on the Scientific Advisory Board of a new startup company, in Madison, Wisconsin, involved with nanotechnology. Additionally, Warren has been in contact with the person who will head up the new Stem Cell Institute at Rutgers.

In his spare time, Warren is working on renovations to his home including installing a swimming pool pending an approval permit from the city, and doing a bit of gardening, having taken a landscaping design course.

Future Newsletters

Are you receiving the Newsletter in the most efficient way? Do you prefer e-mail, a PDF attachment in your e-mail, a Word attachment, a link to the Internet version (http://www.uvm.edu/microbiology/newsletters.htm), or snail mail?

Please update your e-mail and regular mail address to keep receiving copies of the MMG Newsletter. There is always room for your news. Please send me your Alumni or Retiree news. The newsletter comes out once a year, usually about Labor Day, in early September. What have you been doing since your UVM MMG days? I can be reached at:

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Burlington, Vermont 05405.
The Department of Microbiology and Molecular Genetics strives to be competitive in the scientific community. The Department funds many activities that bring researchers, students, postdoctoral associates and technicians together in a collegial manner to share research and ideas. These activities include, but are not limited to, graduate student activities, seminars, a departmental library, monthly departmental gatherings and retreats. Annual gifts from alumni and friends help defray the costs that grant money will not cover, and keep the excitement and drive at a high level among the various laboratories.

Please consider making a contribution in support of the Department of Microbiology and Molecular Genetics. You may make your gift in honor of a UVM colleague or co-worker if you would like.

Enclosed is my donation of $ ____________ .

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All gifts are greatly appreciated, no matter how large or small.

Thank you!!!