



*Preparing People to Lead Extraordinary Lives*

LOYOLA  
UNIVERSITY  
CHICAGO

DEPARTMENT  
OF BIOLOGY

NEWSLETTER

## Back in Business in Biology



*Faculty Members, pose with Dr. Rotermund  
(center) at his retirement dinner*

**No. 8: September/October  
2006**

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## A Note from the Chair

Dear Friends,

The new academic year once again brings a number of new faculty and staff to the department. You are introduced to some of them in this issue, and others will be featured in subsequent newsletters. I know you are welcoming them, and that they will soon feel like full members of our departmental family.

This issue also reports on the continued excellent research and teaching activities of our faculty, as well as faculty activity outside the department. I continue to be impressed by the breadth of things in which we are involved.

Thank you all for your dedicated service to our students and the department as a whole, and best wishes for a very productive and enjoyable rest of the semester.

Jeff Doering



Jeffrey Doering, PhD.  
Professor and Chair  
O: 773-508-3620

## Summer Research: Fun, Sun, and Bioinformatics

*Continuing its ongoing efforts to provide students with as much research experience as possible, the Loyola Biology Department held the Research Experience for Undergraduates program this summer. Biology Department faculty member Dr. Howard Laten tells us a little about the program, its successes and its future.*

Dr. Howard Laten received a three-year, \$300,000 grant from The National Science Foundation (NSF) to offer summer research fellowships to talented undergraduates from across the U.S. The Loyola Research Experience for Undergraduates (REU) program is focused on Bioinformatics and the first cohort of eleven students from as far away as Gonzaga and Clark-Atlanta Universities spent the summer here working on a wide range of exciting projects. The group also included four exceptional Loyola undergrads. The program kicked off with an opening dinner reception on June 11 and a welcoming presentation by Dr. Nancy Tuchman, Professor of Biology and Associate Provost for Research. During the first week, students attended a series of workshops on genomics, proteomics, statistics, simple computer programming, and bioinformatics software given by Loyola faculty.



Armed with these basics, the students moved on their projects which they designed with the assistance of their designated faculty mentor. Drs. Boussy, Kelly, Laten, Pickett, and Williamson mentored five of the students, while the six other students worked with faculty members in Chemistry, Computer Science, and Statistics.



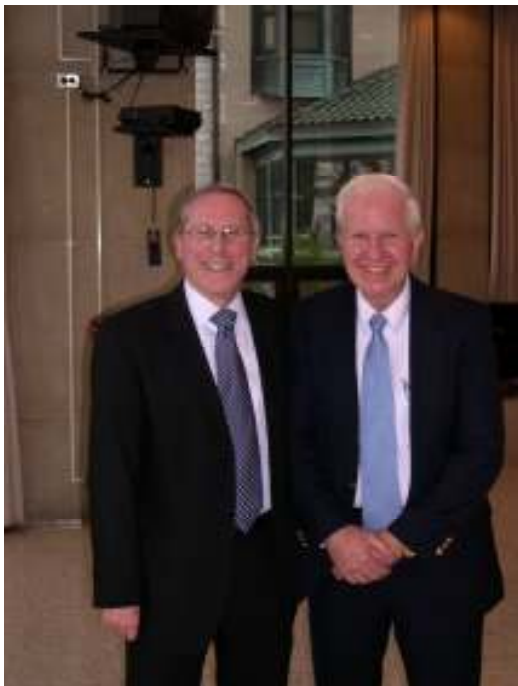
*Photos (top, right) REU student Nick Gundry presents his findings at the mini-symposium. (Above) REU students pose with their faculty mentors.*

Each student received a \$3,600 stipend, full room and board, and travel expenses, including a personal, full-day tour of the National Center for Biotechnology Information on the campus of the National Institutes of Health in Bethesda, Maryland. During that trip, the students were also treated to a day of sightseeing on The National Mall in Washington, D.C. Other program highlights included a visit to the Advanced Photon Source at Argonne National Laboratory and lunches with area bioinformatics scientists. At the end of the summer, students and mentors convened at a mini-conference where the students presented poster displays of their data and explained their findings to the group. A new cohort of students will be selected next April and will begin their fellowships in early June.

*For more information contact Howard Laten or visit <http://reu.cs.luc.edu>*

## Hello From Retirement

*Dr. Albert Rotermund's retirement at the beginning of the summer hardly qualifies as a goodbye. Here, the good Doctor gives us an update on what he's been up to, how he's pitching in and how he keeps involved with his Loyola students.*



Being part of Loyola, and a faculty member of the Biology Department, has certainly been one of the highpoints of my life. This holds true for my family as well, with all three of our children proudly graduating from Loyola. And all three have gone on to successful careers, then marry, and give us six happy grandchildren. As Ray Ulbrich says, "time flies when you're having fun". And the past 36 years have been wonderful and fun-filled, and have passed as quickly as if they were only 36 months. My colleagues on the faculty, from the early 1970's to the present, all of the staff, and close to 10,000 students have been all that one could wish for. God has blessed us repeatedly over the years and for this and I am truly grateful.

How am I spending retirement? For the past three months certainly there has been much more time for my wife and family. Carol and I have traveled thrice since July by auto to Buffalo, NY, about 60+ hours of driving time. There we joined her parents, family, and friends in celebrating their 70th wedding anniversary, helped out as they then underwent triple and double hernia operations, then returned to help with their 22 inch snow-shoveling and providing food and supplies during the weeklong power outage to much of Buffalo. In late September Carol and I also enjoyed a mid-week stay in a secluded log cabin at Starved Rock Park in Illinois, and hiking through the autumn-colored forests along the river.

The many chores that over the years I had to put off "to the weekend, or to the summer vacation", are finally catching up with me. In the future I'm looking forward to further service at church, in the community, and of course, to Loyola. Since July I've had time to write over 30 letters of recommendation for aspiring Loyola M.D.'s and Dentists. Most contact me through GroupWise. The retirement dinner, the preparation, the flowers, the catering, and the fond memories and very kind thoughts shared by colleagues and former students touched me deeply. My family and I once again wish to thank everyone for being part of this wonderful dinner. Needless to say, I'll forever be grateful to God for having allowed us to become part of the Loyola experience. May God continue to bless all of you in Biology in all of your daily endeavors, especially handling the new record influx of students. Looks like Loyola has once again returned to its 1990 levels, but with a lot of new faces, whom I'm sure will also become part of Loyola's second century of superlative education and service to the worldwide community.

*Photo: Chairman Dr. Jeffrey Doering (left) standing with Dr. Rotermund at his retirement in June.*

## Meet The New Faculty and Staff

**Name:** Bree Surges, M.S.

**Title:** Instructor

**Originally hails from:** St. Charles, Illinois, it's a western suburb. I grew up there and was there my whole life until I went to college at the University of Illinois in Urbana. I got my Bachelor's degree in Biology and from there and then went on to Graduate school at Iowa State University.

**Where she's joined us from:** Actually this is my first job, my first real job, since getting out of school. I took time off in between my graduate and undergraduate work to do internships so I could get an idea of what kind of research I wanted to do.

**Outside interests/hobbies:** Well, I'm getting married on Cinco de Mayo. Mostly we picked that day because we wanted to do it in the spring, before it got too hot, and that's when we could book the hall. Also, it's cool to say, "I got married on Cinco de Mayo." Other than that, I'm kind of an outdoor person.

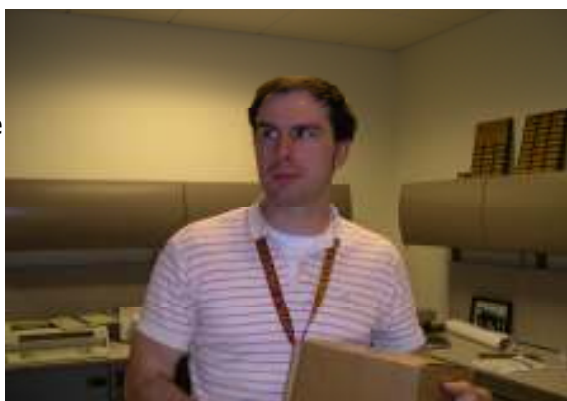


When I go on vacation I like to go to National parks; I've been to places like Yellowstone, the Grand Canyon. One of my goals is to hike the length of the Appalachian Trail, all the way from Georgia to Maine. Oh, and I ran the Chicago Marathon once. I'll never do it again though. It messed up my knees.

**Name:** Brian Norton

**Title:** Office Assistant

**Originally Hails From:** The Southside of Chicago. I went to a Catholic grade school, and then a Catholic High School, before I took a break by attending a state University, in the form of UIC. At the end of my time there, it would seem that I became nostalgic for my Catholic School upbringing and so here I am.



**Where he joins us from:** All through college pretty much I worked for Misericordia home, a home for developmentally disabled children. After leaving there I worked on my writing and worked temporary positions including substitute teaching in the Catholic school that I graduated from eleven years ago. I waited tables at Dave and Buster's for three months and that felt like an eternity. Now, I am here and I plan to stay.

**Outside hobbies/interests:** The sort of hard hitting journalism readily apparent in the pages of this newsletter. Other than that, modern literature, movies that involve huge explosions, anything related to Star Trek or my lovely girlfriend.

## Meet The New Faculty and Staff Continued

**Name:** Eric Schroeter, PhD.

**Title:** Assistant Professor

**Originally hails from:** I'm from Minnesota originally. I grew up in Rochester, MN in the southeastern part of the state.

**Where he's joined us from:** I've been in St. Louis for the last twenty years. There I got my Masters, my PhD and did Post-Doctoral work. I've been married all that time. I have two kids, five horses, a house and five acres. They're all still there waiting for the house to sell. I've lived in St. Louis a long time, but I still consider myself a Minnesotan.

**What are his research interests:** You're asking a scientist to describe his work briefly? Yeah, good luck. Basically, my research deals with the developing vertebrate nervous system. I work with zebrafish because they mature rapidly and their transparency allows direct observation of development. Specifically, I'm trying to learn how retinal neurons differentiate and find their synaptic partners.

**Name:** Chris Calderaro

**Title:** Lab Coordinator

**Originally Hails From:** Mom and Dad met in high school. They got married and had me. I grew up in Chicago, and went to college at Northeastern Illinois University where I got my Bachelor's in Biology with a minor in Chemistry. Now I work at Loyola University Chicago. The End.

**Where he joins us from:** I worked for Blyth Inc. proud owner of PartyLite and Sterno. First, I spent time developing candles and then later I worked on the Sterno brand of products. Basically, I've been setting things on fire my entire professional career.

**Outside hobbies/interests:** I'm married and a father of three: boy, girl, boy. I have an enormous comic book collection, complete with corresponding action figures. And I am an amateur Horror Sci-Fi writer. I scuba dive whenever I get the chance. That says it all.



**Outside interests/hobbies:** So, you're asking if I have a life? I don't know, science is my hobby. That's why I picked it for a career. Besides that, I am a big Cardinals fan and a Viking's fan when it comes to football. I love music, and I play guitar very, very badly. I also love science fiction and am usually reading something in the genre.



## Profiles: Dr. Emma Rosi-Marshall

*Dr. Emma Rosi-Marshall tells how sometimes the first thing you always wanted to leads you to the next thing you always wanted to do. And it all goes back to bugs.*

### **Tell us about your background. Give us birth to Loyola in six moves.**

I come from Northern Michigan; that's where I grew up. I went the University of Michigan for my undergrad, and then to the University of Georgia for graduate school. I got my masters in entomology and then my PhD in Ecology. Then I went to Notre Dame for a Post-doc. After that I came to Loyola. That's five moves, I think.

### **Tell us a little bit about how stream ecology became your focus.**

I was one of those nerdy kids that was really into bugs and wanted to be an entomologist. Of course, I was always told, "You can't be an entomologist; you have to be a doctor or lawyer." And I guess I listened a little bit at first, until I got to college and realized that I could be an entomologist. So, I got an undergrad in anthropology/zoology, which allowed me to take courses in entomology. Then before going to grad school I did research over the summer in Oregon and fell in love with rivers. For my masters research I worked on riverine food webs and for my PhD. I studied stream ecosystems. But I still work with bugs in rivers.



### **Can you tell us about your current big project?**

I currently have four big projects. I'm working on a project that I worked on as a post-doc, which is an experimental addition of wood to streams in Michigan's Upper Peninsula to examine the effects wood has on ecosystem function. I have another project examining the effects of agriculture on Midwestern stream ecosystems in Indiana. And then I have another project in the artificial stream facility measuring the effects of pharmaceutical compounds on stream ecosystems. I have a couple undergraduates and two graduate students working with me on that project. We are using thirty of the forty-eight available streams, and the experiment has been going for four months. And my other big project is working in the Grand Canyon, in the Colorado River. I am working with 3 collaborators to reconstruct the food web to see if the endangered humpback chub is limited by food resources.

### **You have been recognized for excellence in graduate education, what do you think drives you to teach?**

I think that teaching is what drove me to become a professor. Obviously, I love the research, but also I love teaching others how to do research; how to ask the right questions. I like guiding my graduate students – and my undergraduates as well, I have four Mulcahy scholars working with me – to ask interesting questions and design experiments to answer those questions. I feel that's what really keeps me going. I have students working with me on all of my projects on what I think is very exciting research. So part of that excitement for me comes from that collaboration with my students. Working with students is one of the great motivators for me. If I couldn't work with students I don't think I would enjoy working in rivers nearly as much. And that's why I take a sort of open door policy with all of my students. They can always come and ask me questions. I may not always have the answer, but they can always ask.

### **Tell me one thing people probably don't know about you.**

Oh I don't know. I have two kids, but I think everyone knows that. I paint. When I'm out in the field I always lug out my art supplies. Painting uses another part of my brain when I am in the field.

## Talk

*Announcements, greetings and miscellaneous news bits*

### Don't Forget!

Just in time for registration for the Spring '07 semester, Biology Department Chairman, **Dr. Jeffrey Doering** invites all majors to attend the **Meet the Majors** meeting. Here Dr. Doering and other Biology Faculty will answer any and all questions related to the major, including but not limited to: course selection, major and requirements, graduation, research opportunities, and scheduling. The event is recommended for everyone seeking a degree in the department especially the hopelessly confused.

Tuesday, November 7, 2006

4:00pm-5:00pm, Life Sciences Auditorium (LSB 142)

### Biology Takes a Walk

Loyola students, faculty and staff came out in droves for the fight against AIDS, forming the largest team in this year's AIDS Walk/Run Chicago. Team Loyola joined the more than 5,000 participants that strolled, jogged, and sprinted in order to raise over \$300,000 to benefit the AIDS Foundation of Chicago and other local AIDS services. Biology faculty member Dr. John Kelly ran the course with Team Loyola, while Drs. Pat Duffie and Diane Jokinen walked with the team for the Global Alliance for Africa, an organization that provides health and educational services to African children orphaned by AIDS. Congratulations to all who participated. We are so proud.



**Special Thank to the following faculty member who have volunteered at the admissions open houses this fall:** Pat Duffie, John Kelly, Bob Morgan, Laurel Nida, Hunter O'Reilly, Emma Rosi-Marshall, Jan Savitz, Bree Surges, and Diane Suter.

### Biology Goes Sci-fi

Many of our new faculty and staff are admitted Sci-fi geeks, if you are too, then check out then you might want to check these out:

**In Print:** [Never Let Me Go](#) by Kazuo Ishiguro. Here the author of [Remains of the Day](#) tries his hand at science fiction with sometimes chilling, sometimes heartbreaking results. Ishiguro tells the story of a group of clones in the not so distant future growing up together in a boarding who simultaneously must work through adolescent drama, and the horrific fate waiting for them in adulthood.

**On Screen:** [A Scanner Darkly](#), director Richard Linklater's live action animation adaptation of Philip K. Dick's story of a group of addicts to a fictional drug, and the undercover cop who infiltrates their gang. Robert Downey Jr. gives a brilliant and hilarious turn as a fast talking druggie, turned informant.



## Submission Guidelines

- The newsletter will be used to promote and be devoted to covering the activities, seminars and events; initiatives and developments; faculty, student and staff awards. Creative works by our Departmental members, announcements and profiles will be covered.
- **The newsletter is circulated within the department and will be made available on the Internet via the Biology website. Our goal is to publish online on a bimonthly basis throughout the year.**
- Authors/contributors should keep in mind that readers may not specialize in their particular area of work.
- Articles vary in length between about 50 and 600 words.
- We welcome photographs and images to accompany articles; please provide captions when submitting the photographs/images. Either hard copy or digital formats of the images are acceptable.
- Articles may be submitted by any method; however, the preferred transmittal is electronic format via e-mail.

## Questions? Contact Us.

Should you have any questions, please do not hesitate to contact us at [biologydept@luc.edu](mailto:biologydept@luc.edu) .

The Department of Biology newsletter is prepared and edited by Audrey Berry, Pam Bradley, Brian Norton and Jeff Doering.

Hard copies of articles, images, etc. may be forwarded to us at LSC, LSB, Rm. 317, Attn: Newsletter.

**Submittal Deadline for  
Newsletter No. 6:**

**Friday, 12/15/06**

**E-mail:  
Biologydept@luc.edu**