

SMC BIOLOGY

NEWSLETTER

Summer, 2002

Edited by Richard Jensen

THE YEARS IN REVIEW

by Richard Jensen and Thomas Platt

2000-2001 Academic Year

I have to admit I am amazed by all that my colleagues have accomplished. All of us taught a normal schedule of classes (Tom Platt was on sabbatical leave for the fall semester) with a great deal of energy and enthusiasm. In addition, each of us (except Tom P.) was advisor for at least one student's senior comprehensive and, as a group, we supervised 14 students in Biology 310 (Laboratory Teaching Experience), directed 12 independent study students, and sponsored four internships.

Our faculty are making greater use of available classroom technology. PowerPoint presentations, accessing information on the web, and/or the use of CD/Laser Disk materials were components of almost every course we taught. It takes time to incorporate technology into a course and to make sure that it is done effectively. Our faculty are to be commended for their wise and effective use of these technologies. There are three "advanced technology" classrooms in the Science and they are in constant use by Biology and Chemistry/Physics faculty.



The 2000-2001 academic years was very productive and successful for both students and faculty. In addition to their normal teaching responsibilities, the faculty as a whole served in a variety of roles in College governance, published at least seven papers in scientific journals, and participated actively in professional organizations (as officers, editors, committee members, and paper or poster presenters). Several of our students also attended professional conferences and the majority of them were successful in gaining admission to post-baccalaureate programs and/or being hired into

positions that they had a real interest in. We couldn't help but feel a great deal of pride as we watched these students make their formal presentations at our end-of-year Senior Research Symposium.

At the end of the year, we held our annual exit interview with the graduating seniors - an hour of open discussion about their perceptions of our program, the experiences they found most valuable (e.g., the senior comprehensive), and areas that they believe need attention or rethinking - and our annual departmental retreat in Riedinger House. We covered a lot of ground with respect to short-term and long-term matters affecting our departmental programs. We remain dedicated to our goal of providing our students, both majors and non-majors, the very best educational experiences we can develop.

2001-2002 Academic Year

The highlight of every year is the Senior Comprehensive Research Symposium. Due to the large numbers of majors graduating this year (27), we were forced to divide the seniors into two groups with half presenting in February and the other half in April. The students performed marvelously. With next year's senior class equal in size (26) and talent, 2002-2003 should yield many excellent research presentations as well.

Our faculty were active in publishing the results of original research and presenting papers at scientific conferences. Department members were responsible for 10 publications in refereed journals with Dave Sever leading the way with seven and Doris Watt, Richard Jensen and Tom Platt with one each. Dave Sever was also the first author or co-author on three presentations at scientific conferences. Tom Platt and Richard Jensen co-authored a paper and Lisa Ganser was the first author on a presentation. Kara Eberly co-authored three papers with students, based on the results of their senior research, at the meeting of the Indiana Branch of the American Society of Microbiology. One of the students, Julia Fletcher, was awarded the prize for best undergraduate paper.

Mrs. Susan Duff accompanied three Saint Mary's students, including a senior biology major, Teresa Lorenz, to the "Conference on Cleaner Production and Sustainable Development" which was held at the University of Sonora, Hermosillo, Mexico. Ms. Lorenz presented a paper, in conjunction with two students from Alma College, Michigan, comparing sustainable usage at the two schools.

The Department and the College will benefit from continued access to external funds to support our activities. Dave Sever was co-author on a successful grant application to the Savannah River Ecology Laboratory and was given a 3-year award of \$246,410. Tom Fogle and Kara Eberly worked with Mary Currey from development in writing a successful grant application to the Alden Trust for \$25,000 for the purchase of equipment for work in molecular biology. Nancy Nekvasil received word that the Lilly Endowment graciously extended the CoSTEP grant to the end of 2002.

Virtually all members of the department utilize technology in their courses in one way or another. Most faculty use PowerPoint in their lectures to a greater or lesser extent and include various combinations of CD-ROMs and web sites to access animations and/or videos as a supplement to present complex concepts or material in formats not available through more traditional sources. I have not done a comprehensive survey, but most textbooks in use for our courses come with either CD-ROMs or web site subscriptions for students to supplement the printed material.

Our department met with Dr. Pat White, Associate Dean of Faculty, and Dr. Pat Pierce, Professor of Political Science (our Assessment Committee representatives) to review our assessment plan. Through that conversation we were pleased to learn that our plan is meeting the goals set forth by North Central Accrediting Association. We are making use of information gathered from students and alumnae in conjunction with self-examination through annual retreats to fine-tune the curriculum. The recent approval from the Dean to add a new faculty position in molecular biology for the 2003-2004 academic year will serve as the springboard for a reevaluation of the structure of the major.

Next year sorts for biology. We search for a molecular search process and candidates will occupy time, the ramifications necessity, require a major. More than a our last substantive for the major. The time who we are, what we want our students to accomplish, and how we can best serve the needs of our majors.



represents a watershed of will be initiating a biologist. While the screening and interviewing significant amounts of of this addition will, of thorough review of the decade has passed since change in the requirements is ripe for a new look at

CoSTEP PROJECT: A Model of Success

by Nancy Nekvasil

In October 2000, the National Research Council issued a study proclaiming that America's school children would be more literate in science, math, and technology if K-12 schools could coordinate programs with colleges. The report suggested that science, math, and technology education be "seamless" from kindergarten through graduate school. The study, sponsored by the National Science Foundation, also suggested that teachers of these subjects be continually educated and trained through the course of their employment, that colleges and universities be held more responsible for the training of their teachers, and that teachers be taught by scientists, mathematicians, and engineers.

The **CoSTEP Project**, begun in January, 1999, encompasses three programs: the **Eureka Science Academy**, the **Teacher Science Institute**, and the **Science↔Power Lab**. The overall focus of the project is for Saint Mary's College to partner with students and educators from grades K-12 in order to enhance both the learning and the teaching of science. The project also strongly encourages parents of participating students to submit feedback whenever appropriate. Thus, the CoSTEP Project, in its third year, has attempted to improve science literacy through its three programs. By contributing to the CoSTEP Project we have, as scientists and educators at the college level, invested in young students from grades four through twelve and in teachers of elementary and middle school children. We are taking seriously the suggestion that colleges get involved with K-12 schools.



According to our outside evaluation, Eureka Academy students from summer 1999 showed a significant increase in the number of positive adjectives used to describe how they feel about science while the parents of those same students rated the Eureka Science Academy as positive to overwhelmingly positive. Students from summer 2000 showed no change in the number of positive adjectives used.



Teacher Science Institute, 2001: Doris Watt (first from left, back row) and Carrie Ferkenhoff (SMC '99; front row, center) with a group of participating teachers.

For the second year in a row, teachers who participated in a Teacher Science Institute demonstrated increasingly positive attitudes toward science, beliefs about inquiry-based learning, and feelings of being a member of a science community. Evaluations for summer 2001 are not yet complete.

Science↔Power Lab students showed a very large gain in knowledge of science and a small, positive gain in attitude toward science. Parents of

the Science↔Power Lab students reported their involvement in their child's education increased following the Power Lab experience. Interest in science and student inquisitiveness were reported by parents to have increased significantly in these same students.

To date, one hundred sixty-nine students in grades 4-6 from eleven public and nine private schools have participated in the Eureka Science Academy. One hundred thirty-eight teachers from twenty-seven public and twenty-one private schools have participated in a Teacher Science Institute, and two hundred sixty-four students from public, private, and home schools have completed a Science↔Power Lab. We have conducted a total of fourteen Power Labs to date. Seventy-seven Saint Mary's College students have contributed to either the Eureka Science Academy or the Science↔Power Lab. And eighteen faculty from the Departments of Biology, Chemistry/Physics, Education, and Psychology at Saint Mary's College have contributed to the CoSTEP Project.

Interested in learning more about CoSTEP? Visit the website at

<http://www.saintmarys.edu/~costep>

FACULTY AND STAFF ACTIVITIES

Kara Eberly attended the meeting of the Indiana Branch of the American Society of Microbiologists (IB-ASM) at Brown County State Park, April 6-8, 2001. As president of the Indiana Branch, Kara was actively involved in organizing the meeting. Kara and several students attended the IB-ASM meeting April 5-7, 2002 at Clifty Falls State Park. **Julia Fletcher ('02)** won the first place undergraduate award for her poster presentation titled "Nitric Oxide Production in Knock-Out Murine Macrophage Cell Lines Stimulated by LPS and Interferon." At the conference **Hope Amm ('02)** presented a poster titled "TNF Production by Macrophage Cell Lines from Different Murine Strains." **Erin M. Schenz ('02)** and **Angela K. Cederquist ('02)** presented a poster titled "Comparison of Superoxide Production by Knockout and Normal Murine Macrophage Cell Lines Upon Stimulation with Bacterial Products and Interferon." Kara was research adviser for, and co-author with, the students. Also attending were junior biology students, **Emily Storer** and **Meghan Hajduch**.

Tom Fogle attended the Conference of the Association for Biology Laboratory Education, June 5-11 2000, at Clemson University. He served as a committee member for mini-workshops. Tom taught "The British View of Nature" (Biology 237) as part of the 2001 SMC London Program.

Lisa Rania Ganser attended the International Congress of Zoology in Athens, Greece, 2000, and presented a paper titled "Sperm Storage in the Class Amphibia." Lisa also attended the Herpetologists' League and the Society for the Study of Amphibians and Reptiles meeting 27-31 July, 2001 in Indianapolis. She presented a paper titled "Cytology of the liver of *Nerodia fasciata* following a diet of As and Se contaminated fish from a

coal ash site". The paper was co-authored with **Shannon Hasse ('01)**, **Lauren O'Neil ('02)**, **Shea Murphy ('02)**, **David M. Sever** and William A. Hopkins, Savannah River Ecology Laboratory, Aiken, SC.

Dick Jensen, has been elected to a second three-year term on the Board of Directors of the International Oak Society. He attended the Third International Oak Conference, held October 28-31, 2000, at the North Carolina Arboretum in Asheville, NC. During the conference he chaired a paper session and presented a paper, "Hybridization between *Quercus ellipsoidalis* and *Quercus rubra* in northern Wisconsin: Are whole tree silvic characters reliable?", co-authored with Patricia Tomlinson and James Hancock. In addition, he was reappointed Membership Chair and Webmaster for the Society. Dick attended the Botany 2001 Conference, August 12-16 in Albuquerque, NM. During the Conference he participated in the American Society of Plant Taxonomists Council meeting (as an elected Council member) and served as a judge for the annual Cooley award for the best Paper in Plant Systematics. He also presented a paper, co-authored by **Kristen Ciofani ('99)** and **Lydia Miramontes ('01)**, titled "Morphometric analyses of red maple (*Acer rubrum* L.), silver maple (*Acer saccharinum* L.), and their hybrid (*Acer Xfreemanii* E. Murray)". He was appointed Chair of the ASPT Awards and Honors Committee for 2001-2002 and to an ad hoc committee to negotiate a new printing contract for the Society's journal, *Systematic Botany*.

Nancy Nekvasil attended the NAAHP (National Association for Advisors for the Health Professions) Conference June 27-July 3, 2000, in Orlando, Florida. On July 31, 2000 she presented "The CoSTEP Project - College Science Outreach to Precollege Students and Teachers" at the 16th Biennial Conference on Chemical Education in Ann Arbor, Michigan. Nancy attended a meeting at the Lilly Foundation on 26 September, 2000 in Indianapolis and provided an update on the CoSTEP project.

Tom Platt attended the 76th Annual Meeting of the American Society of Parasitology in Albuquerque, New Mexico, 29 June-3 July, 2001. He presented a poster, co-authored with **Dick Jensen**, titled "Are *Aptorchis aequalis* Nicoll, 1914 and *Dingularis anfracticirrus* Jue Sue and Platt, 1998 (Digenea: Plagiorchiidae) the same thing?"

Dave Sever gave a presentation at the annual meetings of the American Society of Ichthyologists and Herpetologists, the Herpetologists League and the Society for the Study of Amphibians and Reptiles at Universidad Autonoma de Baja California Sur, LaPaz, Mexico June 14-20, 2000. The presentation, titled "Reproductive Biology of the Internal Fertilizing Frog *Ascaphus truei* (Anura: Leiopelmatidae). I. Sperm Transport and Storage in Females," was co-authored by **E. C. Moriarty ('00)**, **L. C. Rania ('94)**, L. V. Diller, and W. C. Hamlett. Dave also attended the International Congress of Zoology in Athens, Greece, 2000, and presented a paper titled "Sperm Storage in Class Reptilia." Dave attended the International Congress of Vertebrate Morphology, July, 2001 in Jena, Germany where he presented one talk, "Seasonal variation in the ultrastructure of the sexual segment of the kidney of a natricine snake," and co-authored a second presentation, "Male cloacal anatomy of *Triturus palmatus* (Amphibia: Salamandridae)," with R. Brizzi, R., G. Delfino, and S. Jantra.,

Doris Watt attended the Wilson Ornithological Society (WOS) annual meeting April 26-30, 2000 at Galveston, Texas. As treasurer of the WOS, and thus member of the committee of OSNA (Ornithological Societies of North America), she attended special fact-gathering visitations to Allen Market and Management in Lawrence, KS the end of May and Burke Associates, Arlington, Virginia mid-July. Doris attended the American Ornithologists' Union meeting St. John's, Newfoundland, Canada, August 14-19, 2000. She also attended the AOU (American Ornithologists' Union) annual meeting 15-18 August 2001, at the University of Washington, Seattle. She represented the WOS at the annual OSNA meeting that week. Also with several colleagues she organized and will chair a symposium on "Ornithology in Education" at the next WOS meeting. She attended the WOS meeting 3-6 May 2001 at the University of Arkansas, Fayetteville. After 10 years as Treasurer, she resigned and took up the office of 2nd Vice President (in four years she will ascend to presidency). Doris attended the WOS and the Association of Field Ornithologists joint meeting in Ft. Myers, Florida, April 11-14, 2002. As Second Vice President of the WOS, she served as program chair and organized a symposium on the Red-cockaded Woodpecker.



Susan Duff taught Environmental Science in the Advanced Placement Institute July 23-28 2000. On January 16-18, 2002, Susan, along with three Saint Mary's students representing the Student Environmental Action Coalition (SEAC), attended the "Conference on Cleaner Production and Sustainable Development: Inside Stories" held at the University of Sonora in Hermosillo, Mexico. At the conference, **Teresa Lorenz** (Biology '02) presented a paper titled "Campus Sustainability in a Liberal Arts Setting: A Comparison of Two Small Liberal Arts Colleges in the Midwest." Teresa co-authored the paper with two students from Alma College in Michigan. Also attending the conference from Saint Mary's were Teresa Stone and Jennifer Vojtko, SEAC members.

ALUMNAE NOTES

Compiled by Anne Susalla

CATHARINE TALBOT CORBETT ('66) lives in Ottawa, Ontario and teaches adult interest courses in quilt-making. After graduating from Saint Mary's, Catharine was involved in medical research at Northwestern University Medical School.

MARILYN SUSKO DRNEVICH ('67) is a high school teacher at Kenmore West High School in a suburb of Buffalo, NY.

JANE SHEEHY KRAMER ('72) is the Director of Pediatric Emergency Services at Rush-Presbyterian-St. Luke's Hospital in Chicago and Associate Professor of

Pediatrics at Rush Medical College.

ELLEN WALSH LAWRENCE ('76) is job-sharing her Budget Manager position at St. Francis Hospital in Hartford, CN.



EVA MARIE CEKAITIS DUFFY ('80) has retired from the practice of optometry to be a full-time mom.

MARY EILEEN REVORD SCHRICKER ('80) is a pediatrician and is taking a "family sabbatical" from her practice in Raleigh, NC.

BARBARA RAFALCO REO ('84) works for Quest Diagnostics in Teterboro, NJ where she has been for the last nine years. Last year she was trained to do thin-prep smears.

TERESA MCGINNIS ('85) is a Senior Project Scientist with ATC Associates, Inc. in Lexington, KY, an environmental consulting firm. Teresa has worked with ATC for eight years handling Phase I/II environmental assessments, soil and groundwater investigations, and underground storage tank closures in the central Kentucky area.

ANNIE SAWICKI HAXBY ('85) is a 15-year pharmaceutical representative for Abbott Labs in Anchorage, AK, where she sells therapies in ulcers, antibiotics and CNS diseases.

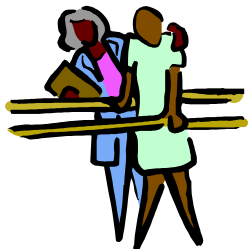
KATHI MILLER HOYER ('86) works in the toxicology department at Celsis Labs in St. Louis, MO.

JEAN SOFRANKO REINHOLD ('86) is in private practice as an OB/GYN.

MARY FISHER VIGLIETTA ('87) received her doctor of optometry degree at Southern California College of Optometry in 1991 and did a residency in secondary ophthalmic care in Phoenix, AZ in 1992. She is currently in private practice in Tempe, AZ. Mary is past-president of the Arizona Optometric Association and a current member of the Arizona State Board of Optometry.

MARY LUNNEEN ('87) is a sales representative for a medical supply company.

ANNA MARIA D'AMICO STANFIELD ('88) is a urologist in Evansville, IN, specializing in female and general urology. She took her training at the University of Alabama in Birmingham and had a fellowship in female/neuro-urology.



ANNE PARKS WILKIN ('89) graduated from Washington University in 1991 with a Master's of Science degree in physical therapy. She has worked in various rehabilitation settings since then and is currently at Manor Care, a skilled nursing and long-term care facility in Cincinnati, OH.

GINA CLEMENTZ ('91) worked at Abbott Laboratories for four years after graduation from Saint Mary's. She then obtained a medical degree and is currently in a practice specializing in clinical and surgical dermatology in Chicago.

CYNTHIA COULTER ('91) has worked in basic science research at the University of Minnesota and is currently a law student.

PATRICIA GREIPP ('91) completed an internal medicine residency in June, 2001 at Temple University in Philadelphia, PA. She is currently a Fellow in the Hematology/Oncology Program at Mayo Clinic in Rochester, MN.

SUSAN GRIFFIN ('91) is an operational team leader in drug development at Genentech BioOncology in South San Francisco, CA.

REBECCA MEEHAN ('91) is a senior research scientist in social science at Myers Research Institute at Menorah Park Center for Senior Living in Beechwood, OH. She has a Master's degree in sociology and a Ph.D. in sociology/gerontology. Her research deals with aging and dementia.

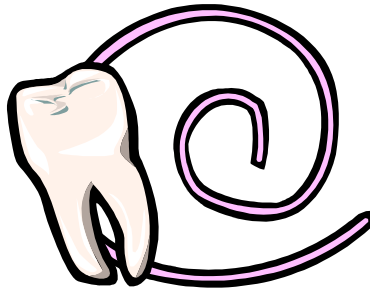


CLAIRE RATHNAU MINNELLA ('91) is a pediatric nurse practitioner at Northwestern Memorial Physicians Group in Chicago, IL. She has a Master's degree in pediatric nursing and a Doctor of Nursing degree in pediatrics with a subspecialization in genetic health. Claire is the author of "The ABCs of Genetics," published by the National Association of Neonatal Nurses.

CAPTAIN CAROL GROBNER ('92) spent two weeks on a humanitarian mission in Suriname in March, 2001. She graduated from Family Practice Residency in July, 2001. Her new duty station is Misawa Air Force Base in Japan.

JANET LIBBING PRENDERGAST ('92) is doing a family practice residency in Sandusky, OH.

SUZANNE LARGURA BENEDICT ('92) graduated from Indiana University School of Dentistry in 1998. She completed one year of a three-year specialty program in prosthodontics also at Indiana University and maternity leave. She is now in private practice in general dentistry but will consider re-entering the prosthodontic program.



KELLY COOK COLLINS School of Dental currently a resident at Dentistry - Department thesis was on the the diagnosis of vertical root fractures in teeth.

('92) graduated from Harvard Medicine in 1998 and is Ohio State College of of Orthodontics. Her Master's effectiveness of CT scans in

MARGARET (PEG) ZAINEA BAKER ('93) is teaching high school chemistry at Cooperville, MI.

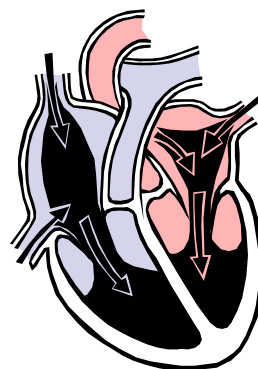
NICOLE BRUNETTE ('93) finished her residency in emergency medicine at Methodist Hospital in Indianapolis, IN in June 2001. She has moved to South Bend and has joined Elkhart Emergency Physicians.

SISTER DOMENICAH NYAMU ('93) is a teacher in Kenya, Africa.

SHELLY MYSLEWSKI KILAR ('94) received her MBA in international business from Lynn University in Boca Raton, FL in August, 1999. She now lives in Los Angeles, CA and is an education manager for AdExchange.com (an Internet start-up). Shelly is a technical writer and manages training programs.

MAUREEN CALLAHAN ('95) practices general dentistry in Buffalo, NY.

REBECCA ROBINSON DAVIS ('95) completed her second year of a three year periodontology residency at Case Western Reserve University in Cleveland, OH. Becky earned her D.D.S. degree from Ohio State University in '99. She has begun work on a Master's degree thesis which will examine the association of periodontal disease and coronary artery disease; specifically she will be looking at the level of C-reactive protein in the blood of patients undergoing cardiac catheterization.



HEATHER ROBINSON ('95) completed dental school at Northwestern University in 2001 and is doing a general practice residency in Chicago.

TARA BELDEN ('95) received her Pharm. D. from the University of Michigan. After her four year program, she did a general practice residency at Duke University Medical Center. She is currently a pediatric resident at the Medical University of South Carolina where she instructs pharmacy students, medical students and residents in pediatric medication/dosing/formulations/indications. She also is involved in nutrition support, discharge counseling, and rounding with medical teams. For next year, Tara has accepted a position at Duke University Medical Center to work in general pediatric wards with teaching responsibilities at the University of North Carolina Pharmacy School.

ERIKA MOEN JANUSCHKA ('95) received her optometry degree from the Illinois College of Optometry and is currently practicing in Minneapolis, MN.

NICOLE RIES ('95) is a Pharm. D. candidate ('03) at the University of Minnesota College of Pharmacy.

BRANDI ROSE PATCHEN ('95) is an adjunct faculty member in chemistry at Northwestern State University in Shreveport, LA while pursuing a second Bachelor's degree in nursing.

KATIE ROSE ('96) is an allied health professional as an orthoptist. She is an eye-muscle specialist who works with children with eye misalignments and with adults who have eye movement disorders and double vision.

COLLEEN ANDREWS ('96) completed her first year of medical studies at Loyola University Chicago, Stritch School of Medicine in Maywood, IL.

JILL COOPER ('96) is a student at the National College of Naturopathic Medicine in Portland, OR.



CYNTHIA EXCONDE BENDER ('96) earned a second Bachelor's degree (in nursing) and is currently a registered nurse in a cardiovascular interventional care unit at Northwest Community Hospital in Arlington Heights, IL.

MAUREEN HEALY GAYNOR ('96) earned a Master's degree in physical therapy and is a full-time physical therapist.

MICHELLE WENNER ('96) is a family practice resident at United Hospital in St. Paul, MN.

MARY MAYKA ('96) worked four years for DSM Desotech, a chemical company in Elgin, IL. She now is a graduate student on a Ph. D. track at the University of Illinois at Chicago in the Biomedical Engineering program, focusing on Biomedical Imaging.

MEAGHAN DRISCOLL ('97) is in dental school at the University of Illinois at Chicago.

SAMEENA HUSSAIN Wafa ('97) is a third year medical student at Creighton University, Omaha, NE.

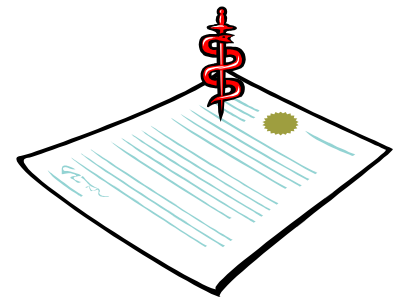
MADELINE WAHL ('97) is a student in the physician assistant program at Chatham College in Pittsburgh, PA. Previously she worked in the surgical oncology lab at the University of Pittsburgh and the juvenile diabetes lab in the Division of Immunogenetics at Children's Hospital of Pittsburgh.

ERIN LUEDECKING ZIMMER ('97) is studying the genetics of Alzheimer's Disease at the University of Pittsburgh and will finish her Ph. D. in human genetics in 2001.

KARA MASUCCI ('97) worked in medical triage at Ground Zero in New York City following the terrorist attacks on September 11, 2001.

JENNIFER MARINELLI ('97) graduated with the degree of Doctor of Osteopathy from Ohio University College of Osteopathic Medicine in Athens, OH in June, 2001.

JENNIFER GREEN ('97) received her degree as a Doctor of Osteopathic Medicine from Lake Erie College of Osteopathic Medicine in Erie, PA in June, 2001.



GENIFER TARKOWSKI ('97) is a graduate student at Tulane Law School in New Orleans, LA.

PAULA KIVINEN GILL ('97) is a nurse in South Bend, IN.

DESIREE LEAK ('97) is working at an Indianapolis, IN hospital as a hematologist and chemist.

HOLLIS JANOWAK MERTENS ('98) completed an accelerated nursing degree at Marquette University in Milwaukee, WI and is currently in a Master's program to obtain a neonatal nurse practitioner degree.

MEG KELLY ('98) is a supervisor in a gene targeted mouse resources group at Genentech, Inc. in South San Francisco, CA.

COLEEN FITZSIMMONS ('98) spent three months teaching biology at Geelong College in Melbourne, Australia.

HEATHER NASH ('98) is at Texas Scottish Rite Children's Hospital as a holoprosencephaly (HPE) research assistant working on an international HPE patient database to further understand this birth defect. She also takes part in monthly clinics with HPE patients and plans conferences.

MARYANN SCHWOYER ('98) completed a Master's degree in environmental and forest biology at SUNY College of Environmental Science and Forestry in Syracuse, NY. She is currently nearing completion of a Master's degree in Education.

BETH NORDBY ('98) presented her adult sheep cytokinine data at the FASEB/American Physiological Society Conference in Orlando, FL in March, 2001 and received the Suden Award for meritorious research. Her research involved using Western Blot to quantitate the pro-inflammatory cytokines in lung tissue. In April 2001, she presented preterm cytokine data at the Society for Pediatric Research Conference in Baltimore, MD.

SARAH GILLEN ('98) is applying to graduate schools for a Master's degree in public health to combine her knowledge of biology and her interest in social justice. As a volunteer in Haiti, she witnessed the need for local response to health problems to engage individuals in their personal well being. As an AmeriCorps VISTA member in Baton Rouge, LA, she worked on several grants for an AIDS resource center. She recently learned that the organization received a \$650,000 HUD grant, that she wrote, to provide education and housing for individuals infected with HIV/AIDS.



SANDRA GASS ('98) is a veterinary student at Ohio State Veterinary School in Columbus, OH.

BLYTHE GRESSER ('98) is enrolled in the Clinical Exercise Master's program at Northeastern University in Boston, MA.

MARGARET (MEG) FISCHER ('99) is a student at the University of Minnesota Medical School in Minneapolis, MN.

CHARISE DESMARTEAU ('99) is enrolled in the Physician's Assistant program at Wichita State University.

KAREN KELLNER ('99) is in the final phase of the physician assistant program at Marquette University in Milwaukee, WI and is on track to complete her Master's degree in May, 2002.

JENNIFER LEMLER ('99) works for J. F. New and Associates in Walkerton, IN as a field supervisor specializing in native wetland and prairie restorations.

MELISSA MAYKUTH ('99) is a student at the University of Cincinnati Medical School in Cincinnati, OH.

KERRY PUGLIESE ('99) completed her second year teaching science to seventh graders at Still Middle School in Indian Prairie School District in Aurora/Naperville, IL.

JOANNE WAGNER ('99) completed her second year in the ACE program in Florida and is now teaching in Buchanan, MI.

KAREN FURROW ('00) is a medical student at Indiana University Medical School in Indianapolis, IN.

RITA KLEIN ('00) completed a Master's degree in Biology at Eastern Illinois University and is now in the physician assistant program at the Medical College of Ohio in Toledo.

ALLYSON TRELOAR ('00) is teaching high school biology in the state of Washington.

EMILY MORIARTY ('00) is in the doctoral program in evolutionary biology at the University of Texas at Austin.

MELISSA SAKALEY ('00) will begin a Master's degree program in microbial ecology this fall at Central Washington University.

STACY CANTOR ('00) is in the physician assistant program at Chatham College in Pittsburgh, PA.

SHANNON SWOFFORD ('00) spent last summer (2001) as an intern with the California Department of Fish and Game at the Upper Newport Bay Ecological Reserve. She has been taking marine science and ecology courses and hopes to move into a graduate program in some aspect of marine science.



KATHY KASMER ('00) is studying optometry at the Illinois College of Optometry in Chicago.

HEATHER SCHNEIDER ('00) is in the accelerated nursing program at Saint Mary's College.

NICOLE STAAB ('00) finished her first year of teaching 7th grade in Clarkston, MI.

VICTORIA BUTCKO ('01) has completed her first year of optometry school at the Illinois College of Optometry in Chicago, IL.

KRISTIN FRAZER ('01) is enjoying her graduate studies in the Genetic Counseling Program at the University of South Carolina in Columbia, SC.

JENNIFER CHAMBERLIN SOWELL ('01) is a project coordinator at Amgen, a biotechnology company in Thousand Oaks, CA.

CHRISTINE DIANA ('01) is working for the Little Traverse Bay Bands of Odawa Indians in the Fisheries Department of the Natural Resources Division in Charlevoix, MI. She is heading a study on round gobies and their effect on lake trout spawning. She is privately contracted through the Great Lakes Fishery Trust and works with several investigators in the area on different projects. Chris gave a presentation at the meeting of the Michigan Chapter of the American Fisheries Society in March, 2002 and is preparing two other papers for publication.

JULIE GLUD ('01) is beginning her studies at the University of Michigan Dental School in Ann Arbor, MI.

LYDIA MIRAMONTES ('01) is conducting conservation work at the Indiana Dunes National Lakeshore.

EMILY PATTERSON ('01) is attending Boston University in Boston, MA where she is pursuing a Master's degree in occupational therapy.

STEPHANIE SHEVIK ('01) spent the summer after graduation as a Scholl Science Fellow at Lincoln Park Zoo in Chicago, IL, working on flamingo conservation. She is currently a Master's student in education at Valparaiso University.



REBECCA STEPHENS ('01) has completed her first year as "the only" biology teacher at Kouts High School in Indiana.

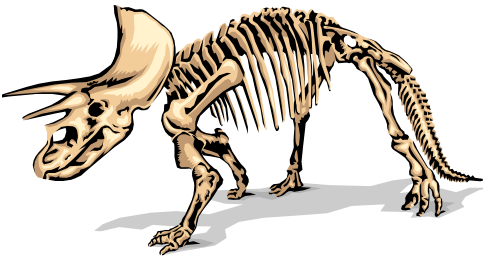
BONNIE ARENDS ('02) has been accepted into the College of Osteopathic Medicine at Michigan State University.

ELIZABETH WARBURTON ('02) is in a Master's program with a concentration in parasite ecology at Emporia State University in Emporia, KS.

JULIA FLETCHER ('02) is in the Accelerated Nursing Program at Saint Mary's College.

ERICA BURKET ('02) is in the Accelerated Nursing Program at Johns Hopkins University in MD.

KELLEE FONFERKO ('02) is in the Master's of Forensics Program at National University in San Diego, CA.



ERIN McDERMOTT ('02) is in graduate school studying vertebrate paleontology at Murray State University, KY.

ROBYN LORD ('02) has been awarded an Indiana Primary Healthcare Scholarship and will attend medical school at Indiana University.

CHRISTINE WALKER ('02) is in her first year of medical studies at Loyola Stritch School of Medicine in Chicago, IL.

PUBLICATIONS

Carol Grobner ('92) co-authored with Ann M. Nardulli and Dawn Cotter: Estrogen receptor-induced DNA bending: Orientation of the bend and replacement of an estrogen response element with an intrinsic DNA bending sequence. 1995. *Molecular Endocrinology*: 9(8): 1064-1076. Research was done in the Department of Physiology and Biophysics at the University of Illinois at Urbana-Champaign, Urbana, IL.

Mary Dugan ('03) has developed a chronological/adjusted age "wheel" for the Regional Center for Children at Memorial Hospital in South Bend, IN. The "wheel" is referred to as "The Dugan" and is used to determine a premature infant's adjusted age for developmental assessment.

Watt, D., Jennifer Fahey ('93), Eileen Hackett (92'), Melissa Maki ('94), Amy McCourt ('94), Heather Robinson ('95), and Jody Stafford ('92). 1998. The effects of color manipulations on captive flocks of house finches. *Proceedings of the Indiana Academy of Science* 107: 181-196.

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Silva O. 2001. Allozyme diversity in endemic flowering plant species of the Juan Fernandez Archipelago, Chile: ecological and historical factors with implications for conservation. *American Journal of Botany* 88: 2195-2203.

Crawford, D., M. Tago-Nakazawa, T. F. Stuessy, G. J. Anderson, G. Bernardello, E. Ruiz, **R. J. Jensen**, C. M. Baeza, A. D. Wolfe, and M. Silva O. 2001. Intersimple sequence repeat (ISSR) variation in *Lactoris fernandeziana* (Lactoridaceae), a rare endemic of the Juan Fernandez archipelago, Chile. *Plant Species Biology* 16: 185-192.

Platt, T.R. and Brooks, D.R. 2001. Description of *Buckarootrema goodmani* N. G., N. SP. (Digenea: Pronocephalidae), a parasite of the freshwater turtle *Emydura macquarri* (Gray, 1830) (Pleurodira: Chelidae) from Queensland, Australia, and a phylogenetic analysis of the genera of the Pronocephalidae Looss, 1902. *J. Parasitol*, 87: 1115-1119.

Brizzi, R., G. Delfino, S. Jantra, B.B. Alvarez, and **D.M. Sever**. 2001. The amphibian cutaneous glands: some aspects of their structure and adaptive role. Pp. 43-49 *In* Lymberakis, P., E. Valakos, P. Pafilis, and M. Mylonas (eds.), *Herpetologia Candiana*. National History Museum of Crete, Irakleio, Crete, Greece.

Delfino, G., R. Brizzi, S. Jantra, B.B. Alvarez, and **D. M. Sever**. 2001. Secretory granules with repetitive substructure in serous cutaneous glands of anurans. Pp. 51-55 *In* Lymberakis, P., E. Valakos, P. Pafilis, and M. Mylonas (eds.), *Herpetologia Candiana*. National History Museum of Crete, Irakleio, Crete, Greece.

Hopkins, W.A., J.W. Snodgrass, B.P. Staub, B.P. Jackson, **L.C. Rania ('94)**, **D.M. Sever**, and J.D. Congdon. 2001. Effects of chronic dietary exposure to trace elements on banded water snakes (*Nerodia fasciata*). Society of Environmental Toxicology and Chemistry, Baltimore, November 2001.

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Jensen, R. J. 2002. The oaks of Land Between The Lakes: biodiversity and hybridization. Pages 323-334 *In* E. W. Chester and J. S. Fralish (eds.), *Land Between The Lakes, Kentucky and Tennessee*. Miscellaneous Publication Number 16 of the Center for Field Biology, Austin Peay State University, Clarksville, TN.

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AWARDS & HONORS

Each year the Department of Biology recognizes students who have made outstanding contributions to the Department or who have performed exceptionally well in certain areas. Awardees for 2000 are

MOTHER ROSE ELIZABETH AWARD

Victoria Butcko 2001
Sarah Hoshaw 2002

GEORGE & JUANDA BICK NATURE AWARD

Chris Diana and Stephanie Shevik 2001
Teresa Lorenz 2002

SISTER M. ROSALEEN DUNLEAVY ALLIED HEALTH AWARD

Emily Patterson 2001
Hope Amm 2002



In addition, several graduating seniors were selected each year as recipients of a Sigma Xi Prize for Undergraduate Research:

2001

Christine Diana
Stephanie Shevik

2002

Hope Amm
Teresa Lorenz
Elizabeth Warburton

The prize consists of a certificate of Associate Membership in Sigma Xi and a one-year subscription to The American Scientist.

Kara Eberly has been promoted to the rank of Associate Professor and **Tom Platt** and **Doris Watt** have been promoted to the rank of Professor.

David Sever received a grant for \$246,410 for 2001-2003. The grant, titled "The Fine Line Between Essentiality and Toxicity: Investigating the Selenium Paradox," is sponsored by the University of Georgia Savannah River Ecology Laboratory and was submitted with W. A. Hopkins and L.G. Talent.

ALUMNAE UPDATES

One of the things that is most enjoyable about preparing this Newsletter is learning what our alumnae have been doing. Please keep us updated on educational and professional achievements and career changes in your life. Use the form below to provide material for a future Newsletter.

Name _____
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