http://cellbio.emory.edu/pdf/newsletter_spring2006.pdf

Spring 2006

KOWALCZYK LAB JOINS CELL BIOLOGY

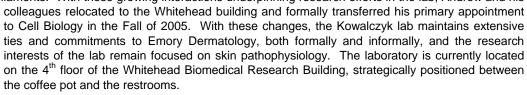
Andrew Kowalczyk was born and raised outside of Amsterdam NY in the beautiful Mohawk Valley region of upstate NY. This region of New York became well known in the mid 1900's as the carpet capital of the world – the rug city - before most of the carpet mills and textile companies moved to Dalton and other North Georgia venues. The Mohawk valley is also a region rich in Native American and Revolutionary War history, and was once considered the gateway to the frontier regions of Western NY and Ohio. Andrew attended college at a SUNY

school in Plattsburgh NY, just south of the Canadian border region of Northern NY and Vermont. It was here that he met his future wife, Patricia Kelly. In the summer of 1987 Andrew joined the graduate program in the Physiology Department at Albany Medical College and pursued thesis studies with Paula McKeown-Longo in the field of fibronectin matrix biology and endothelial cell-matrix interactions. Tricia also joined Albany Medical College in 1988 and worked for most of the next 5 yrs with Dr. Fred Minnear on the regulation of endothelial barrier function by thrombin. During this period (1988) Andrew and Tricia married, mostly as a mechanism for continued financial support for Andrew's studies and his unwillingness to 'get a real job". In 1992 Andrew and Tricia moved to Chicago

to pursue studies at Northwestern University Medical School in the magnificent mile region of Chicago's north side. Andrew worked with Dr. Kathleen J. Green on desmosome assembly while Tricia worked with Rex Chisholm (aka Kathy Green's husband) on myosin structure function using a Dictyostelium model system. Several important and life changing experiences occurred while Andrew and Tricia resided in Chicago, including the famous 3-peats by the Chicago Bulls and Michael Jordon, and the arrival of Paul Kowalczyk in the winter of 1996. Also, it was at Northwestern that Andrew developed a "more than skin deep" interest in epidermal biology. In 1998 Andrew and Tricia both joined the Department of Dermatology here at Emory, with Andrew holding a secondary appointment in Cell Biology.

At Emory, Andrew developed a laboratory focused on the regulation of cadherin mediated adhesion by endocytic membrane trafficking pathways using endothelial and keratinocyte model systems. The Kowalczyk lab established a number of collaborations with members of the Cell Biology department since joining Emory, particularly with Victor and his colleagues

in the Faundez lab. These interactions led to a number of joint publications on the mechanisms of cadherin endocytosis and on the interplay between adaptor proteins and intermediate filaments. With these growing interactions underpinning research efforts in the lab, Andrew and his





Current members of the lab:
Andrew "Andillo" Kowalczyk
Susan "The Dean Maker" Smith
(Previous trainees: Tom Lawley and William Murdy)
Jean Marie "Weena" Jennings
Catharine "Catenin" Calkins
Kanyan "Double Happiness" Xiao
Emma "Ed" Delva (BCDB)
Christine "Kwan" Chiasson (BCDB)
Rebecca "Rho" Oas (GMB)
Rebekah "Rac" Kushner (BCDB Rotation Student)
Nikhil "Nicki" Urs (Georgia Tech Biology)



BASSELL LAB JOINS CELL BIOLOGY



Gary Bassell joined our faculty in July 2005 after being on the faculty at Albert Einstein College for ten years. Gary received a PhD degree in Cell Biology from the University of Massachusetts Medical School and did postdoctoral research at the Center for Neurological Diseases at Harvard Medical School. Gary's laboratory has been studying mechanisms and functions of mRNA traffic and local protein synthesis in neurons, and dysfunction in two inherited neurological diseases: Fragile X Syndrome and Spinal Muscular Atrophy.

Gary is so pleased to have been able to recruit six members of his lab from Einstein to Emory! Dr. Yukio Sasaki, Instructor, is an expert in neuronal signaling and axon guidance, and is now working on how guidance molecules regulate local protein synthesis in growth cones. Yukio obtained a Ph.D. degree from Kobe University and has also been an Instructor at Yokohama City University prior to joining Gary's lab at AECOM. Dr.

Chanxia Li, a postdoctoral fellow, received a MD in Shanghai and a PhD from Yokohama City University in Japan. Chanxia is studying how the Fragile X Mental Retardation protein FMRP may regulate local mRNA translation in growth cones. Dr. Ravi Muddashetty, a postdoctoral fellow, received his PhD degree from the University of Muenster where he worked on noncoding RNAs and is now studying how FMRP regulates mRNA translation at synapses. Dr. Viji Valavadi, a postdoctoral fellow, received her PhD in Bangalore, India and then did postdoctoral work in Germany on myosin at the University of Muenster. Viji is studying the role of myosins in mRNA transport. Two of Gary's graduate students, Lei Xing and Xiaodi Yao, have transferred into the BCDB program. Lei received his BS degree at Nankai University and was enrolled in a PhD program at the Chinese Academy of Science before moving to AECOM. Lei's thesis research is on the Survival of Motor Neuron protein (SMN) and Spinal Muscular Atrophy (SMA). Xiaodi's thesis research is on synapse assembly and glutamate receptor cycling. Xiaodi received her BS degree from Nankai University, a MS degree from Fudan University and a MS degree from Albert Einstein College of Medicine.

The above "New Yorkers" are pleased to be joined by six new lab members at Emory. The first to join us was Tiesha Murray as our lead research specialist/lab manager who received her BS degree at William Paterson University in New Jersey and has previously worked as a research specialist at Emory for five years. We thank Tiesha for helping to set-up our new lab! Congratulations to Tiesha and her husband on the birth of their son, Caleb on March 16th. Holding the fort now, as a research specialist, is Jason Chen, a recent graduate of Emory who is from Vancouver. Dr. Wilfried Rossoll joins us as an Instructor who had received his PhD from the University of Vienna, Austria and conducted postdoctoral studies at the Institute of Clinical Neurobiology in Wuerzburg, Germany. Congratulations to Wilfried on his new grant from FSMA Foundation for studies on the Survival of Motor Neuron protein and Spinal Muscular Atrophy. To oversee our live cell microscopy and viral transduction efforts, we were fortunate to entice Wulin Teo to leave the Mayo Clinic for some warmer weather! Wulin received his BS degree in Biotechnology from St. Cloud State University in Minnesota. Dr. Mei Xu, a postdoctoral fellow, has recently joined the lab to conduct research on a role for local protein synthesis in nerve regeneration, which is a collaboration with Dr. Arthur English' laboratory. Mei received a PhD degree from the National University of Singapore and an MD degree from Beijing Medical University. Last but not least, Dr. Christina Gross, a postdoctoral fellow, has just joined the lab after receiving a PhD degree from the University of Berlin. Christina will work on mechanisms of synaptic mRNA translation during long-term plasticity, underlying learning and memory.

We are also so pleased to have some very talented Emory undergraduates: Laura Griffin, Kinsley Beale and Michelle Kline to assist us. These young budding scientists are so critical to our research effort and we thank them for their contributions!

The Bassell lab is currently funded by RO1 grants from NINDS and NICHD, and private foundations grants from the Muscular Dystrophy Association, Families of Spinal Muscular Atrophy Foundation, Ritter Foundation and the Dana Foundation.

Bassell lab trivia:

- 1) can you guess which four lab members are married to each other?
- 2) can you guess which two people speak what three languages?
- 3) can you guess who is the lab adventurer, often seen skateboarding across campus (no, it's definitely not Gary who is often seen with a rolling briefcase!)

Some recent presentations include:

- -In April 2006, Gay spoke at the Banbury CSHL conference on Fragile X Syndrome
- -In April 2006, Gary have a keynote lecture on Fragile X Syndrome at the 8th international neuroscience winter conference in Solden, Austria (great skiing!).
- -In March 2006, Gary was the keynote speaker at an Atlanta MDA chapter fundraiser for SMA research.
- -In November 2005, Gary co-chaired and spoke at a satellite symposium on Spinal Muscular Atrophy at the Society for Neuroscience annual meeting.
- -In November 2005, Gary presented the lab's research on FXS at a symposium on Dendritic Protein Synthesis at the Society for Neuroscience annual meeting.



In closing, the Bassell lab thanks Dr. Barry Shur and the department for their warm and enthusiastic welcome. We also thank Linda Jordon and departmental administration staff for the countless crises which were amicably addressed and eventually resolved to enable transition of the lab to Emory (how friendly you all are, but then again we only have the Bronx to compare you to)! We are so very much looking forward to future years ahead as we develop new relationships and collaborations.

DAVID DUNLAP

David Dunlap was born in Austin, Texas but at age three moved with his family to the "Land of Enchantment", New Mexico. He spent entire summers on horseback in Corrales, a farming community on the outskirts of Albuquerque. After twenty years, he received his Bachelor's Degree in BioMedical Engineering from the University of New Mexico. Then David joined the Chemistry Department where he studied polarized light scattering with Professor Fritz Allen with whom David also rebuilt a 1960 Chevy El Camino (sweeping fender fins and an engine compartment that you can sit inside while working on the big block V8). David's life changed dramatically. A lovely Italian girl, Laura Finzi, had joined the lab next door in 1985 and after just one ski trip David and Laura fell for each other. David received a Master's Degree in 1986.



Throughout these years David volunteered at the nearby Sandia Peak ski slopes as a ski patroller. Perhaps this experience led him toward medical research, and he enrolled in the graduate research program at the University of New Mexico Medical School. David joined Carlos Bustamante's lab in 1987, and began to image DNA with the scanning tunneling microscope. Laura and David moved to the University of Oregon, where David finished his doctoral work in the Bustamante lab. Using a custom-built microscope (many hours in the student machine shop), he showed that DNA is not conductive enough to routinely image with a tunneling current. Instead the scanning force microscope is better suited to image biological specimens and David succeeded in imaging entire chromosomes before leaving Carlos' lab for Italy.

The Biology Department at the University of Milan had offered a tenure-track position to Laura. There David joined Flavia Valtorta's neurobiology laboratory at the San Raffaele Scientific Institute and led efforts to quantitatively use microscopy to assess modifications and interactions of pre-synaptic proteins. Work on the phosphorylation of synapsins was in collaboration with Paul Greengard at Rockefeller. Next, David developed the San Raffaele imaging facility that opened in 2001. When he was not evaluating new technology, training users, or fashioning new hardware and software, David collaborated with Laura on single molecule experimentation. However, in just 4 years the imaging facility grew to include 9 optical workstations and 2 electron microscopes, including a spinning disk confocal, a point scanning, spectroscopic confocal, automated wide-field fluorescence microscopes, an image deconvolution workstation, and a spectroscopy equipped TEM. That left little time for research and when Laura had the chance to join the Physics Department at Emory, David seized the opportunity to join the Department of Cell Biology.

David and Laura have two children who were born in Italy. Jessica is completing fifth grade at Fernbank Elementary, and, with trepidation on the part of her parents, should move to Shamrock Middle School next year. Instead Henry has two more years at Fernbank. You may see the whole family along the sidewalks near Emory from time to time, since they live within walking

SUBHABRATA SANYAL

Subhabrata Sanyal (Sanyal) grew up in New Delhi, India and did his undergraduate in Zoology at the University of Delhi. He then moved to the Tata Institute of Fundamental Research (TIFR) in Bombay, to pursue graduate research in synaptic transmission using fruit flies. It was here that he also met his future wife, Sujata, who was doing a summer project in an adjoining fly laboratory (and no, theirs isn't an arranged marriage!). While Sanyal was completing his degree, Sujata joined the graduate program at CalTech where she has since earned her degree working on the development of the vertebrate olfactory system. Thereafter, Sanyal moved to the University of Arizona, Tucson to initiate his post-doctoral work studying mechanisms of synaptic plasticity. He joined Emory in January of 2006 and his lab. is located on the 4th floor in Whitehead.





Both Sanyal and Sujata are fond of traveling and reading widely. While Sujata is accomplished in Indian Classical Dance forms, Sanyal's hobbies primarily include photography and painting (oil on canvas). They are both very passionate about nature and hope to be actively involved once Sujata identifies her scientific career in Atlanta.

FAREWELL TO LUZENE

As many of you know, Luzene Hill worked in various capacities in our administrative office for almost 12 years, most recently as event planner extraordinaire. Unfortunately for us (but happily for her), she left to pursue other goals which include moving to North Carolina and working on artistic projects in the vicinity of Cherokee.





CELL BIOLOGY STUDENTS WIN AWARDS FOR RESEARCH PRESENTATIONS.



At the fall Graduate Student Research Symposium put on by the Division of Biological and Biomedical Studies, Cell Biology students Karen Newell (left) and Marie Cross (right) were recognized for their excellent research presentations. Karen Newell from the Faundez lab received the second place award for her talk "Evidence for an AP-3-derived Synaptic Vesicle-Lysosomal Hybrid Organelle". Marie Cross from the Powers lab was awarded third place among posters for her presentation "Investigation of a Novel Role for Nup98 During Mitosis". Each student received a cash award which was then supplemented by the Biochemistry, Cell and Developmental Biology Program as part of the Alec Hodel Memorial Research Award.

CELL BIOLOGY STUDENTS SHARE OUTSTANDING TEACHING ASSISTANT AWARD FOR 2004-2005.

Each year the Graduate Division for Biological and Biomedical Studies presents an award to the outstanding teaching assistant of the previous academic year. The top graduate TA is chosen from those nominated by course directors for their exemplary performance. This year the award was shared by Branch Craig (Faundez lab) and Marie Cross (Powers lab) for their excellent work in IBS556 Priciples of Basic Biological and Biomedical Science, directed by Dr. Rick Kahn. Branch and Marie were TAs for the spring semester of the inaugural year of this course and went above and beyond normal duties in helping to make the course run smoothly. The awards were presented at the Spring GDBBS Mixer. Branch and Marie each received a certificate and a \$250 award.



GRADUATE DEFENSES

Our warm congratulations to the following students who successfully defended their dissertations during the past year: Diana Caracino (Saxe Lab), July, 2005, "The Regulation of *Dictyostelium* Scar by N-terminal Sequences; Alysia Vrailas (Moses Lab), August, 2005, "Pathway Integration in the Developing *Drosophila* Eye"; Edward Rogers (Moses Lab), August, 2005, "The Role of Slingshot and the Regulation of *Hedgehog* in *Drosophila* eye development"; Aloma Rodrigues (Moses Lab), August 2005, "Characterization of a Temperature Sensitive Allele of the Epidermal Growth Factor Receptor (Egfr^{tsla}) and Its Role in Early *Drosophila* Eye Development"; and Quentin Machingo (Shur Lab), September, 2005, "Identification and Characterization of Glycosyltransferases during Early Zebrafish Embryogenesis."

HONORS AND AWARDS

Robert DeHaan, Professor Emeritus of Cell Biology and Senior Science Advisor, Division of Educational Studies, will receive the Emory Distinguished Emeritus Award which Dr. Shur will present to him. Dr. DeHaan will also receive the Viktor Hamburger Outstanding Educator Prize form the Society for Developmental Biology on June 17th in Ann Arbor, Michigan.

CHANGES

New Staff: Jason Chen, Research Specialist (Bassell Lab); Brendan Hilbert, Research Specialist (Powers Lab); Jean Marie Jennings, Lead Research Specialist (Kowalczyk Lab); Tiesha Murray, Lead Research Specialist (Bassell Lab); Murat Senyuz, Research Specialist (Finch Lab); Susan Summers Smith, Sr. Research Specialist (Kowalczyk Lab); Wulin Teo, Imaging Analysis Specialist (Bassell Lab); Binfei Zhou, Research Specialist (Joshi Lab).

New Postdocs: Melissa Gilbert (Moberg Lab); Chonnettia Jones (Chen Lab); Chanxia Li (Bassell Lab); Ravi Muddashetty (Bassell Lab); Viji Nalavadi (Bassell Lab); Manning Sabatier (English Lab); Anandita Seth (Shur Lab); Alysia Vrailas (Sanyal Lab); Mei Xu (Bassell Lab); X

New Graduate Students: Christine Chiasson (Kowalczyk Lab); Li-ting Chien (Hartzell Lab); Emma Delva (Kowalczyk Lab); Carolyn Krisel (Moberg Lab); Karen Newell (Faundez Lab); Rebecca Oas (Kowalczyk Lab); Nikhl Urs (Kowalczyk Lab); Lei Xing (Bassell Lab); Xiaodi Yao (Bassell Lab).

New Research Track Faculty: Catharine Calkins, Instructor (Kowalczyk Lab); Wilfried Rossoll, Instructor (Bassell Lab); Yukio Sasaki, Instructor (Bassell Lab); Edward Smith, Assistant Professor (Luccesi Lab, Biology); Kanyan Xiao, Instructor (Kowalczyk Lab)

CONGRATULATIONS!

Faculty Promotions: Michael Ensslin, Sean (Zhiqiang) Qu, and Erica Werner were promoted to Assistant Professors,

Research Track.

Staff promotions: Jennifer Cash was promoted to Administrative Assistant.

GRANTS AND CONTRACTS

NEW AWARDS (2005 and 2006)

Gary Bassell "Imaging Dendritic MRNA Transport and Translation" Charles A. Dana Foundation

Total Costs Transferred to Cell Biology: \$170,247 (2 years)

Gary Bassell "Beta-Acting MRNA Localization in Neurons" NIH

Total Costs Transferred to Cell Biology: \$961,184 (3 years)

"Role of Survival of Motor Neuron Protein (SMN) in Asembly of Localized mRNPs" Subcontract from Gary Bassell

Baylor University

Total Costs: \$387,500 (2 years)

"Cancer and polyamine-mediated chromatin maintenance", URC **David Dunlap**

\$30,000 (1 year)

Victor Faundez "Cellular Mechanisms of Neuronal Metal Transport & Toxicity," NIH

Total Costs: \$1,148,572 (4 years)

Criss Hartzell "Regulation of Calcium-Activated Chloride Channels" NIH

Total Costs: \$1,285,200 (4 years)

Criss Hartzell "RPE Cell Volume Regulation by Bestrophins" American Health Assistance Foundation

Total Costs: \$100,000 (2 years)

"Novel Anti-Melanoma Agents and Their Mechanism of Acton" NIH Harish Joshi

Total Costs: \$1,359,790 (5 years)

"Cadherin Regulation in Dermal Endothelial Cells" NIH Andrew Kowalczyk

Total Costs: \$1,113,840 (4 years in Cell Biology)

"Role of P0071 in Cutaneous Intercellular Junctions" NIH Andrew Kowalczyk

> Total Costs: \$544,160 (2 years in Cell Biology) "Minority Predoctoral Fellowship Program" NIH

Andrew Kowalczyk

E. Delva

Total Costs: \$170,420 (4 years in Cell Biology)

Kenneth Moberg "Drosophila Tsg101:Coordination of Growth Control and Epithelial M. Gilbert NRSA

Polarity" NIH Estimated Total Costs: \$142,200 (3 years)

Wilfried Rossoll "The Role of SMN in the Axonal Compartment of Motor Neurons"

Families of SMA

Total Costs: \$108,000 (2 years)

Winfield Sale "Targeting and Regulation of Flagellar Dynein" NIH

M. Wirschell NRSA Total Costs; \$92,272 (2 years)

"Cell Substrate Interaction in Craniofacial Morphogenesis", NIH **Barry Shur**

Total Costs: \$1,816,875 (5 years)

"Anthrax Receptor/Tumor Endothelium Marker 8 Mediated Adhesion" Erica Werner

> American Heart Association - SRC Total Costs: \$110,000 (2 years)

"Role of P120-Catenin in Angiogenesis and Vascular Development" Kanyan Xiao

Dermatology Foundation Career Development Award

Total Costs: \$165,000 (3 Years)

Dermatology Foundation Research Award

Total Costs: \$20,000 (1 year)

REGULATORY AND POLICY CHANGES/APPLICATION INFORMATION

(from OSP and NIH web pages, university and other sources)

The NIH recently announced the Pathway to Independence Award program, which is directed at promising postdoctoral scientists so they can receive both mentored and independent research support from the same award. NIH expects to issue from 150-200 awards beginning fall, 2006. To learn more about the program go to http://grants.nih.gov/grants/oer.htm and www.nih.gov/news/pr/jan2006/od-27.htm.

In 2005, NIH began to phase in electronic submission of grant applications. Emory will provide training to PI's and research administrators on using local and NIH systems to submit grants as they come online. Please note that the new federal submission system is very different than other electronic submission systems and no PI can afford to dismiss the difficulty of the transition for everyone involved. So stay tuned for more information in the coming months.

This is the current schedule which delineates when each grant type will be required to be submitted using the electronic system.

Grant Type Effective Date for Electronic Submission

 R03, R21/R33, R34
 June 1, 2006

 R18/U18,R25,C06/UC6
 October 1, 2006

 R01
 February 1, 2007

 K-series
 June 1, 2007

 F-Series (Fellowships)
 August 5, 2007

 T-series (Training)
 September 10, 2007

 P-series (Project/Center)
 October 1, 2007

Reminder. Just –In-Time materials requested by NIH may now be submitted through their electronic portal, known as the eRA Commons. To utilize this option, investigators must provide Other Support documentation for all Key Personnel in an electronic file (preferably MS Word format), and send a copy of relevant IRB/IACUC approval letters and human subjects education certificates to Linda Jordan who will review and forward to OSP. OSP will review and upload the necessary information to the eRA Commons system.

WEB SITES OF NOTE

Information about Cottrell postdoctoral fellowships which are administered through Emory's Office of Postdoctoral Education is available at: http://www.emory.edu/WHSC/MED/POSTDOC/cottrell_program_application.html.

Find sources of internal and external funding on the OSP website at: http://www.osp.emory.edu/funding.cfm. The OSP web site also provides Proposal Writing Tips at http://www.osp.emory.edu/proposals/propprep.html

Emory faculty profiles can be viewed via the departmental web site or directly at: http://www.medadm.emory.edu/faculty.

Up-to-date information about visas can be accessed on the web site for Emory's International Student and Scholar Programs: http://www.emory.edu/ISSP.

Postdoctoral positions can be announced or searched utilizing Academic Careers Online at www.AcademicCareers.com. Applicants use all of their services without being charged and employers can post a job listing for up to three full months for \$175.

PUBLICATIONS

- Antar LN, Li C, Zhang H, Carroll RC, Bassell GJ Local functions for FMRP in axon growth cone motility and activity-dependent regulation of filopodia and spine synapses. Mol Cell Neurosci. 2006 Apr 20; [Epub ahead of print] PMID: 16631377.
- Bassell GJ, Twiss JL. RNA exodus to Israel: RNA controlling function in the far reaches of the neuron. Workshop on RNA control on neuronal function. EMBO Rep. 2006 Jan;7(1):31-5. No abstract available. PMID: 16391534.
- Huttelmaier S, Zenklusen D, Lederer M, Dictenberg J, Lorenz M, Meng X, Bassell GJ, Condeelis J, Singer RH. Spatial regulation of beta-actin translation by Src-dependent phosphorylation of ZBP1. Nature. 2005 Nov 24;438(7067):512-5. PMID: 16306994.
- Le TT, Pham LT, Butchbach ME, Zhang HL, Monani UR, Coovert DD, Gavrilina TO, Xing L, Bassell GJ, Burghes AH. SMNDelta7, the major product of the centromeric survival motor neuron (SMN2) gene, extends survival in mice with spinal muscular atrophy and associates with full-length SMN. Hum Mol Genet. 2005 Mar 15:14(6):845-57. Epub 2005 Feb 9.
- Bhat KM. Slit-roundabout signaling neutralizes Netrin-Frazzled-mediated attractant cue to specify the lateral positioning of longitudinal axon pathways. Genetics. 2005 May;170(1):149-59. Epub 2005 Feb 16.
- Qian D, Radde-Gallwitz K, Kelly M, Tyrberg B, Kim J, Gao WQ, Chen P. Basic helix-loop-helix gene Hes6 delineates the sensory hair cell

- lineage in the inner ear. Dev Dyn. 2006 Mar 13;235(6):1689-1700 [Epub ahead of print]
- Tang W, Zhang Y, Chang Q, Ahmad S, Dahlke I, Yi H, Chen P, Paul DL, Lin X. Connexin29 is highly expressed in cochlear Schwann cells, and it is required for the normal development and function of the auditory nerve of mice. J Neurosci. 2006 Feb 15;26(7):1991-9.
- Zhang Y, Tang W, Ahmad S, Sipp JA, Chen P, Lin X. Gap junction-mediated intercellular biochemical coupling in cochlear supporting cells is required for normal cochlear functions. Proc Natl Acad Sci U S A. 2005 Oct 18;102(42):15201-6. Epub 2005 Oct 10.
- Berger AC, Vanderford TH, Gernert KM, Nichols JW, Faundez V, Corbett AH. Saccharomyces cerevisiae Npc2p is a functionally conserved homologue of the human Niemann-Pick disease type C 2 protein, hNPC2. Eukaryot Cell. 2005 Nov;4(11):1851-62.
- Love R, Salazar G, Faundez V. Neuronal zinc stores are modulated by non-steroidal anti-inflammatory drugs: an optical analysis in cultured hippocampal neurons. Brain Res. 2005 Nov 2;1061(1):1-12. Epub 2005 Oct 20.
- Xiao K, Garner J, Buckley KM, Vincent PA, Chiasson CM, Dejana E, Faundez V, Kowalczyk AP. p120-Catenin regulates clathrin-dependent endocytosis of VE-cadherin. Mol Biol Cell. 2005 Nov;16(11):5141-51. Epub 2005 Aug 24.
- Salazar G, Craige B, Wainer BH, Guo J, De Camilli P, Faundez V. Phosphatidylinositol-4-kinase type II alpha is a component of adaptor protein-3-derived vesicles. Mol Biol Cell. 2005 Aug;16(8):3692-704. Epub 2005 Jun 8.
- Salazar G, Craige B, Love R, Kalman D, Faundez V. Vglut1 and ZnT3 co-targeting mechanisms regulate vesicular zinc stores in PC12 cells. J Cell Sci. 2005 May 1;118(Pt 9):1911-21.
- Styers ML, Kowalczyk AP, Faundez V. Intermediate filaments and vesicular membrane traffic: the odd couple's first dance? Traffic. 2005 May;6(5):359-65. Review.
- Seong E, Wainer BH, Hughes ED, Saunders TL, Burmeister M, Faundez V. Genetic analysis of the neuronal and ubiquitous AP-3 adaptor complexes reveals divergent functions in brain. Mol Biol Cell. 2005 Jan;16(1):128-40. Epub 2004 Nov 10.
- English AW. Enhancing axon regeneration in peripheral nerves also increases functionally inappropriate reinnervation of targets. J Comp Neurol. 2005 Oct 3;490(4):427-41.
- Groves ML, McKeon R, Werner E, Nagarsheth M, Meador W, English AW. Axon regeneration in peripheral nerves is enhanced by proteoglycan degradation. Exp Neurol. 2005 Oct;195(2):278-92.
- English AW, Meador W, Carrasco DI. Neurotrophin-4/5 is required for the early growth of regenerating axons in peripheral nerves. Eur J Neurosci. 2005 May;21(10):2624-34.
- Fischmeister R, Hartzell HC. Volume sensitivity of the bestrophin family of chloride channels. J Physiol. 2005 Jan 15;562(Pt 2):477-91. Epub 2004 Nov 25.
- Aneja R, Lopus M, Zhou J, Vangapandu SN, Ghaleb A, Yao J, Nettles JH, Zhou B, Gupta M, Panda D, Chandra R, Joshi HC. Rational design of the microtubule-targeting anti-breast cancer drug EM015. Cancer Res. 2006 Apr 1;66(7):3782-91.
- Aneja R, Vangapandu SN, Lopus M, Chandra R, Panda D, Joshi HC. Development of a novel nitro-derivative of noscapine for the potential treatment of drug-resistant ovarian cancer and T-cell lymphoma. Mol Pharmacol. 2006 Mar 3; [Epub ahead of print]
- Aneja R, Zhou J, Vangapandu SN, Zhou B, Chandra R, Joshi HC. Drug-resistant T-lymphoid tumors undergo apoptosis selectively in response to an antimicrotubule agent, EM011. Blood. 2006 Mar 15;107(6):2486-92. Epub 2005 Nov 10.
- Zhou J, Liu M, Luthra R, Jones J, Aneja R, Chandra R, Tekmal RR, Joshi HC. EM012, a microtubule-interfering agent, inhibits the progression of multidrug-resistant human ovarian cancer both in cultured cells and in athymic nude mice. Cancer Chemother Pharmacol. 2005 May;55(5):461-5. Epub 2005 Feb 3.
- Kottke MD, Delva E, Kowalczyk AP. The desmosome: cell science lessons from human diseases. J Cell Sci. 2006 Mar 1;119(Pt 5):797-806.
- Calkins CC, Setzer SV, Jennings JM, Summers S, Tsunoda K, Amagai M, Kowalczyk AP. Desmoglein endocytosis and desmosome disassembly are coordinated responses to pemphigus autoantibodies. J Biol Chem. 2006 Mar 17;281(11):7623-34. Epub 2005 Dec 23.
- Xiao K, Garner J, Buckley KM, Vincent PA, Chiasson CM, Dejana E, Faundez V, Kowalczyk AP. p120-Catenin regulates clathrin-dependent endocytosis of VE-cadherin. Mol Biol Cell. 2005 Nov;16(11):5141-51. Epub 2005 Aug 24.
- Styers ML, Kowalczyk AP, Faundez V. Intermediate filaments and vesicular membrane traffic: the odd couple's first dance? Traffic. 2005 May:6(5):359-65. Review.
- Hamill CE, Goldshmidt A, Nicole O, McKeon RJ, Brat DJ, Traynelis SF. Special lecture: glial reactivity after damage: implications for scar formation and neuronal recovery. Clin Neurosurg. 2005;52:29-44. No abstract available.
- Jain A, Kim YT, McKeon RJ, Bellamkonda RV. In situ gelling hydrogels for conformal repair of spinal cord defects, and local delivery of BDNF after spinal cord injury. Biomaterials. 2006 Jan;27(3):497-504. Epub 2005 Aug 15.
- Gilbert RJ, McKeon RJ, Darr A, Calabro A, Hascall VC, Bellamkonda RV. CS-4,6 is differentially upregulated in glial scar and is a potent inhibitor of neurite extension. Mol Cell Neurosci. 2005 Aug;29(4):545-58.
- Nicole O, Goldshmidt A, Hamill CE, Sorensen SD, Sastre A, Lyuboslavsky P, Hepler JR, McKeon RJ, Traynelis SF. Activation of protease-activated receptor-1 triggers astrogliosis after brain injury. J Neurosci. 2005 Apr 27;25(17):4319-29.
- Gilbert MM, Moberg KH. ESCRTing cell proliferation off the beaten path: lessons from the drosophila eye.Cell Cycle. 2006 Feb;5(3):283-7. Epub 2006 Feb 1.
- Moberg KH, Schelble S, Burdick SK, Hariharan IK. Mutations in erupted, the Drosophila ortholog of mammalian tumor susceptibility gene 101, elicit non-cell-autonomous overgrowth. Dev Cell. 2005 Nov;9(5):699-710.
- Vrailas AD, Marenda DR, Cook SE, Powers MA, Lorenzen JA, Perkins LA, Moses K. smoothened and thickveins regulate Moleskin/Importin 7-mediated MAP kinase signaling in the developing Drosophila eye. Development. 2006 Apr;133(8):1485-94. Epub 2006 Mar 15.
- Marenda DR, Vrailas AD, Rodrigues AB, Cook S, Powers MA, Lorenzen JA, Perkins LA, Moses K. MAP kinase subcellular localization controls both pattern and proliferation in the developing Drosophila wing. Development. 2006 Jan;133(1):43-51. Epub 2005 Nov 24.
- Gaillard AR, Fox LA, Rhea JM, Craige B, Sale WS. Disruption of the A-Kinase-anchoring Domain in Flagellar Radial Spoke Protein 3 Results in Unregulated Axonemal PKA Activity and Abnormal Flagellar Motility. Mol Biol Cell. 2006 Mar 29; [Epub ahead of print]
- Scott JW. Sniffing and spatiotemporal coding in olfaction. Chem Senses. 2006 Feb;31(2):119-30. Epub 2005 Dec 14. Review.
- Machingo QJ, Fritz A, Shur BD. A {beta}1,4-galactosyltransferase is required for Bmp2-dependent patterning of the dorsoventral axis during zebrafish embryogenesis. Development. 2006 May 3; [Epub ahead of print
- Shur BD, Rodeheffer C, Ensslin MA, Lyng R, Raymond A. Identification of novel gamete receptors that mediate sperm adhesion to the egg coat. Mol Cell Endocrinol. 2006 May 16;250(1-2):137-48. Epub 2006 Jan 18.
- Fuchs S, Frenzel K, Hubert C, Lyng R, Muller L, Michaud A, Xiao HD, Adams JW, Capecchi MR, Corvol P, Shur BD, Bernstein KE. Male fertility

is dependent on dipeptidase activity of testis ACE.Nat Med. 2005 Nov;11(11):1140-2; author reply 1142-3. No abstract available	



2ND ANNUAL CELL BIOLOGY BOWLING EVENT







IMPORTANT COMPUTER INFO (PC USERS ONLY)

A recent version of Symantec Antivirus has been compromised. The automatic updates uploaded a patch that actually opened a hole rather than closed one. Unfortunately a new update won't fix the problem. Instead a complete reinstall of the antivirus program is necessary with the latest version. If you already have this version (10.1.0.401 or later) you are not at risk.

If you feel comfortable doing this yourself, simply go to the Add/Remove Program control panel and remove the Symantec Antivirus and any other Symantec programs associated with it (LiveReg and LiveUpdate). After rebooting your computer (important step!) you can then go to the software distribution website and download the most recent copy that doesn't have this security hole.

The website is located at: http://software.service.emory.edu. Then click on the Software Express link. You will be asked for a username and login, so you need to use your Emory id and password to get to the next page.

Scroll down till you see the **Symantec AntiVirus 10.1.0.401** item and click the download link. You can choose to run it directly or save it somewhere and then run the file later. Follow the setup instructions and it should install without a problem.

For those who aren't comfortable or have time to do this, I will be making rounds during the next week to correct the issue on any



NEW ARRIVALS



Keelin Irene Craige - Born 02/02/06



Nicholas James Copeland Born 02/22/06



Sarah (2 yrs) and Will (9 months) Elder

UPCOMING EVENTS

(Spring/Summer 2006)

June 1 NIH Deadline (New proposals)

July 1 NIH Deadline (Resubmissions and Renewals)

July 4 Fourth of July Holiday
August 5 NRSA Deadline
September 4 Labor Day Holiday

October 1 NIH Deadline (New proposals)

November 1 NIH Deadline (Resubmissions and Renewals)

November 23, 24 Thanksgiving Holidays December 25, 26 Christmas Holidays

BEG SCHEDULE

June 26, 2006 Saxe no B&G July no B&G August Sept 11, 2006 Scott Oct 9, 2006 Shur November 13, 2006 Wolf Wood December 11, 2006 January 8, 2007 Bassell February 12, 2007 Benian

FEEDBACK REQUESTED

This is your newsletter and your involvement is crucial to its success. Please send comments, suggestions, or ideas for articles or columns to Linda Jordan by departmental mail, telephone at 727-3748 or e-mail to linda@cellbio.emory.edu.

SEMINAR SCHEDULE

The fall seminar schedule is still being formulated. Currently there are no scheduled Department seminars for the summer months.