LSU HEALTH SCIENCES CENTER DEPARTMENT OF GENETICS



Table of Contents

Mission	
Department of Genetics Mission Department of Genetics Graduate Program Mission	1 1
Faculty	
Full-Time	2
Conjoint	2-3
Graduate Faculty	3
Adjunct	4
Emeritus Faculty	4
Staff	5
Research Interests	6-8
Annual Report	
Year in Review	9
Faculty Appointments	9-10
Research	
Grants and Contracts	10
Publications and Presentations	10-11
Research Infrastructure	11
Education	
Teaching	11-12
Graduate Program	12-13
Seminar Series	13
Outreach	
Summer Internship Research Program	14
Middle and High School Workshops	14-15
LSUHSC Genetic Educational Videos	15-16
Other Departmental Activities	
State of the Department Presentation	16
Annual Team Building Event	16
Plans for the Coming Year	16-17

APPENDIX:

Teaching Activities	19
Seminar Schedule	20-21
Mentoring	22-24
Presentations Invited Presentations	25-27 28-32
Consulting	33
Grants (Active and Submitted During FY2010)	34-42
Other Academic Activities and Achievements	43-47
Professional Affiliations	48-49
Publications	50-55

Department of Genetics Mission

The mission of the Department of Genetics at LSUHSC is to provide state of the art education, research, and community outreach, in the area of genetics. To this end the Department has outstanding faculty, researchers, and community educators that can cut across disciplines to fulfill this mission.

Department of Genetics Graduate Program Mission

The Graduate Program in Genetics provides students with a working knowledge of human functional and molecular genetics, genomics, and animal model systems. Students are mentored by exceptional faculty who guide them through their training and enable them to become active members of the scientific community. The departmental curriculum is designed to form the foundation for their future career development through a combination of coursework, seminars, proposal writing, and laboratory-based research. The Department of Genetics provides students with all the skills they need to become successful, independent academic investigators.

Faculty

Full-time:

Jay K. Kolls, M.D.

Professor and Chair

Judy Crabtree, Ph.D.

Assistant Professor

Xiaogeng Feng, M.A.

Instructor

Edward Grabczyk, Ph.D.

Associate Professor

Paula Gregory, Ph.D.

Associate Professor

Andrew Hollenbach, Ph. D.

Associate Professor

Tomoo Iwakuma, Ph.D.

Assistant Professor

Wanguo Liu, Ph.D.

Associate Professor

Conjoint:

Yan Cui, Ph.D.

Associate Professor, Gene Therapy Program

Michael Lan, Ph.D.

Professor, Pediatrics

Donald Mercante, Ph.D.

Professor, Biometry

Donna Neumann, PhD.

Assistant Professor – Research

Diptasri Mandal, Ph.D.

Associate Professor and Graduate Program Director

Doan Nguyen, Ph.D.

Instructor

Udai Pandey, Ph.D.

Assistant Professor

Derek Pociask, Ph.D.

Assistant Professor - Research

Fern Tsien, Ph.D.

Instructor

Lisa Moreno-Walton, Ph.D.

Assistant Professor - Research

Mingquan Zheng, Ph.D.

Associate Professor - Research

Alistair Ramsay, PhD.

Professor and Director, Gene Therapy

Program

W. Douglas Scheer, Ph.D.

Professor, Pathology

Guoshun Wang, D.V.M., Ph.D.

Associate Professor, Gene Therapy

Program

Oliver Wessely, PhD.

Associate Professor, Anatomy

Augusto Ochoa, M.D.

Professor and Director, Stanley S. Scott Cancer Center

Genetics Graduate Faculty:

(Eligible Mentors)

Jay K. Kolls, MD

Professor and Chair, Genetics

Michael S. Lan, PhD

Professor, Pediatrics

Donald Mercante, PhD

Professor, Biometry

Alistair J. Ramsay, PhD

Professor, Gene Therapy Program

Krzysztof Reiss, PhD

Professor

W. Douglas Scheer, PhD

Professor, Pathology

Judd E. Shellito, PhD

Professor and Section Chief, Pulmonary Medicine

Yan Cui, PhD

Associate Professor, Gene Therapy Program

Ed Grabczyk, PhD

Associate Professor, Genetics

Paula Gregory, PhD

Associate Professor, Genetics

Andrew Hollenbach, PhD

Associate Professor, Genetics

Wanguo Liu, PhD

Associate Professor, Genetics

Diptasri Mandal, PhD

Associate Professor, Genetics

Luis Del Valle, MD

Associate Professor

Guoshun Wang, D.V.M, PhD

Associate Professor, Gene Therapy

Program

Judy Crabtree, PhD

Assistant Professor, Genetics

Tomoo Iwakuma, MD, PhD

Assistant Professor, Genetics

Shahriar Koochekpour, MD, PhD

Assistant Professor

Udai Pandey, PhD

Assistant Professor, Genetics

Oliver Wessely, PhD

Associate Professor, Anatomy

Mingquan Zheng, MD

Associate Professor of Research,

Genetics

Adjunct:

Prescott Deininger, Ph.D.

Professor (Tulane)

John Doucet, Ph.D.

Associate Professor (Nichols State Univ)

Shulin Li, Ph.D.

Professor (LSU-BR)

Tarun Mandel, Ph.D.

Professor (Xavier)

Emeritus Faculty:

Bronya J.B. Keats, PhD

Professor

Mary Z. Pelias, PhD, JD

Professor

Barbara Kurth, Ph.D.

Assistant Professor (Tulane)

William Richardson, Ph.D

Assistant Professor (Ochsner)

Karen Weissbecker, Ph.D.

Assistant Professor (Tulane)

Staff

Administrative:

Stephanie Laurent Business Manager

Karen Cappiello Assistant Business Manager Heather Shields Department Coordinator

Research:

Amit Adhikari, Ph.D. Postdoctoral Fellow Neeraj Agarwal, Ph.D. Postdoctoral Fellow Jasminkumar Bavarva, Ph.D. Postdoctoral Fellow Sue Brand, Ph.D. Postdoctoral Fellow Kong Chen, Ph.D. Postdoctoral Researcher Meng-Hsuan Ho, Ph.D. Postdoctoral Fellow Jeremy McAleer, Ph.D. Postdoctoral Fellow Srirangan Sampath, Ph.D. Postdoctoral Fellow Yuki Tochigi, Ph.D. Postdoctoral Fellow Zemin Wang, Ph.D. Postdoctoral Fellow

Angelle Bencaz Research Associate Angela Flynn Research Associate Pete Finelli Research Associate Peter Hickman Research Associate Jill Hutchinson Clinical Associate Nicholas Lanson, Jr. Research Associate Astha Maltare Research Associate Patrick Miller Research Associate Candice Fisher Research Associate Alana Whitehead Research Associate

Graduate Students:

Ayan Banerjee (PhD)

Sun Mi Choi (MD/PhD)

Scott Ditch (PhD)

Elisa Ledet (PhD)

Heena Mehta (PhD)

Nikki Nguyen (MS)

Ryan Bonvillain (PhD)

Kevin Dietz (PhD)

Alain D'Souza (PhD)

Swathi Iyer (PhD)

Sammeta Raju (PhD)

David Ricks (PhD)

Research Interests

Jay Kolls M.D., Chair

- Investigate mechanisms of the lung host defenses in normal and immunocompromised hosts.
- Investigate how IL-23 and IL-17 regulate neutrophil recruitment in response to infectious stimuli in the lung.
- Study cellular sources of IL-17A, IL-17F, and IL-22 in lung as well as their signaling in response to pulmonary infection.
- Long-standing interest in determining if Th 17 cells and their cytokine products contribute to airway destruction in cystic fibrosis.
- Long-standing interest in understanding cytokine biology in the lung through overexpression or dominant negative inhibitor strategies using somatic gene transfer.
- Identified that sub-populations of CD8+ T-cells polarized in vivo via cytokine gene transfer have effector activity against P. carinii.
- Gene Expression profiling and proteomics to define this effector activity.
- Program developing CD4-independent vaccination against AIDS-related opportunistic infections.

Judy Crabtree, Ph.D., Assistant Professor

- Understanding biological processes & epigenetics of endocrine tumor disorders.
- Candidate gene transcriptional regulation via methylation in tumors from human and the Eker rat, and the functional consequences of this epigenetic regulation in uterine fibroid pathogenesis.
- Role of microRNAs in uterine fibroid etiology.
- The role of estrogen, progesterone and other hormones in the epigenetic regulation of menin expression and function in Multiple Endocrine Neoplasia Type1 (MEN1).

Xiaogeng Feng, M.A., Instructor

- High-throughput data computation
- Gene regulation analysis
- Protein-protein interaction prediction
- Protein structure prediction
- Analysis of multiple sequence alignment
- Algorithm development for motif search and biologic data analysis
- Bioimage process

Edward Grabczyk, Ph.D., Associate Professor

- Genetic disorders caused by unstable repetitive DNA ("dynamic mutations")
- Interactions between DNA structure, transcription, and replication that elicit repeat expansion diseases such as Friedreich ataxia

Paula Gregory, Ph.D., Associate Professor

- Research in genetics education for teachers, students, the public, and health care professionals
- Psychological barriers to understanding genetics information and the impact of predictive genetic testing on family dynamics

Andrew Hollenbach, Ph.D., Associate Professor

- The regulation of transcription factors through phosphorylation
- Biochemical mechanisms of chromosomal translocation gene products in cancer formation

Tomoo Iwakuma, M.D., Ph.D., Assistant Professor

- Protein function on the p53 pathway
- Analyses of mouse models of cancer
- Dissection of the mechanism underlying osteosarcoma metastasis

Wanguo Liu, Ph.D., Associate Professor

- Genetics and biological roles of Wnt signaling in GI tumor development
- Genetics and functional analysis of DNA damage-response defects in prostate cancer susceptibility

Diptasri Mandal, Ph.D., Associate Professor

- Genetic linkage and segregation analysis of complex disorders, in particular humans cancers
- Investigation of properties of statistical genetic analysis methods through computer simulation

Doan Nguyen, Ph.D., Instructor

- Secretory lacrimal gland of the ocular surface and the contribution of the neural pathways on lacrimal gland function
- Interested in developing a web application, Gene2function, a SQL database application to consolidate high-throughput data such as microarrays relating to the lacrimal gland and dry eye syndrome. This easy to use application will allow investigators to develop their own genomics database

Udai Pandey, Ph.D., Assistant Professor

- Modeling human neurodegenerative disease such as amyotrophic lateral sclerosis and spinobulbar muscular atrophy in Drosophila
- Investigating the role of protein degradation pathways in neurodegeneration Unbiased genetic screening to identify novel modifiers of neurodegeneration

Derek Pociask, Ph.D., Assistant Professor of Research

- The role of gamma delta T cells in pulmonary injury, repair and fibrosis, as well as the genes important in their signaling and amplification.
- How extracellular peptides such as lipocalin 2 (an extracellular siderophore) helps protect the lung in the initial stages of epithelial injury.
- The long term impact of influenza injury in the lung and its role in promoting fibrosis through inducing epithelial to mesenchymal transitions.

Fern Tsien, Ph.D., Instructor

- Chromosome instability in cancer and stem cells
- Epigenetics and chromatin modifications
- Genetics education, especially in the fields of Cytogenetics and Epigenetics
- Correlation between DNA methylation with constitutive heterochromatin and gene silencing
- Genetics of the Acadian population

Lisa Moreno-Walton, M.D., Assistant Professor of Research

- The impact of alcohol and substance abuse on outcomes from trauma (especially mortality, homeostatic maintenance, and the development of sepsis)
- Issues implicit in consenting trauma patients for participation in research
- Intergenerational learning and teaching

Mingquan Zheng, M.D., Associate Professor of Research

- Investigating mechanisms of lung host defenses in normal and immunocompromised hosts.
- Developing CD4-independent vaccination against AIDS-related opportunistic infections and influenza.
- Investigating how IL-23 and IL-17 regulate neutrophil recruitment in response to infectious stimuli in the lung.
- Role of IL-17 signaling in COPD

Department of Genetics Annual Report Fiscal Year 2010

Year in Review

In fiscal year 2010, the U.S. and State economies were faced with financial challenges. These challenges ultimately presented themselves to our department. However, in light of the financial climate, the Department of Genetics remained strong and productive and experienced an increase in grant funding, addition of new faculty and research equipment, and an expansion of our education and outreach programs including our Graduate Program, High School Workshops and Summer Student Program.

Faculty

Fiscal year 2010 also marked the one year anniversary of Dr. Jay K. Kolls' tenure as Chair of the Department of Genetics. He arrived in January 2009 and immediately increased the critical mass of faculty by recruiting two Assistant Professors of Research, Drs. Mingquan Zheng and Derek Pociask.

Recruitment continued into fiscal year 2010 with the addition of four new faculty members. Dr. Kolls recruited two tenure-track Assistant Professors: Dr. Udai Pandey from St. Jude Children's Research Hospital and Dr. Judy Crabtree from Wyeth Research. Dr. Pandey's lab is studying molecular pathogenesis of the motor neuron diseases, specifically amyotrophic lateral sclerosis (ALS) and spinobulbar muscular atrophy (SBMA). Dr. Crabtree's research investigates the role of epigenetics in uterine fibroids and the molecular mechanisms of multiple endocrine neoplasia, type 1 (MEN1). Dr. Lisa Moreno-Walton, a physician in the Department of Medicine, Section of Emergency Medicine at LSUHSC, accepted an offer to join the Department of Genetics as an Assistant Professor of Research after successfully competing for a NIH Diversity Supplement to train in the laboratory of Dr. Jay Kolls. Through a joint recruitment effort with the Gene Therapy Program, Xiaogeng Feng, MS, joined the department as an Instructor of Research to perform bioinformatic analysis of high throughput sequence data. Finally, Donna Neumann, PhD with the Department of Ophthalmology was nominated and approved as a joint appointee in the Department of Genetics. Dr. Neumann's research is on Epigenetic Modifications Regulating Ocular HSV-1 Latency and Reactivation.

The Department of Genetics congratulates Drs. Andrew Hollenbach and Mingquan Zheng for successful advancements in the FY2010 promotion and tenure application process. Dr. Andrew Hollenbach was approved for promotion from Assistant Professor on the tenure-track to Associate Professor with tenure. Dr. Hollenbach joined the Department of Genetics in 2003 where he was recruited from St. Jude Children's Research Hospital. Dr. Mingquan Zheng was promoted from Assistant Professor of Research to Associate Professor of Research. Dr. Zheng joined LSUHSC in January 2009 and was previously an Assistant Professor with the University

of Pittsburgh. Both advancements become effective July 1, 2010.

Two of our faculty members have also been recognized by Dr. Steve Nelson, Dean of the School of Medicine, to provide services on behalf of his Office of Faculty and Institutional Affairs with Dr. Janis Letourneau, Associate Dean. Dr. Paula Gregory has been appointed as Director of the Office of Faculty Development which is charged with supporting the professional development of School of Medicine faculty at every level. Their goal is to assist the faculty in achieving success and satisfaction at every stage in their careers in academic medicine. Dr. Andrew Hollenbach was named as Chair of the School of Medicine Communications Committee. The Communications Committee was established as a result of the Dean's Strategic Initiative to improve communications within the School of Medicine (SoM). One of the first actions of the Communications Committee was the creation of a SoM newsletter where Dr. Hollenbach serves as head editor. They both epitomize faculty service and are truly outstanding representatives of the Department of Genetics.

Research

Grants and Contracts

In fiscal year 2010, the Department of Genetics faculty members were awarded 11 grants totaling \$6,191,788 including 5 NIH awards/contracts, 4 Private Foundation awards and 3 awards from state agencies. We currently have 32 <u>active</u> grants and contracts totaling \$13,926,071.

Notably, Dr. Derek Pociask was the recipient of a Louisiana Board of Regents Research Competitiveness Subprogram (RCS) award. Dr. Pociask's proposal entitled, "Gamma Delta T Cells are Integral Mediators of Interstitial Pulmonary Fibrosis" was ranked #15 of 154 submissions and Dr. Pociask was the only investigator at LSUHSC to receive this award in the FY2010 funding period. Congratulations to Dr. Pociask for this outstanding accomplishment.

An award to Dr. Fern Tsien from the Patrick F. Taylor Foundation provided the ability to expand our high school workshops to New Orleans Recovery District and charter schools and it offered the opportunity for additional Louisiana educated undergraduates and medical students to enter our Summer Research Internship Program. Additionally, funding through the Patrick F. Taylor Foundation award provided funds for the creation of genetics educational videos. These videos will be used as part of our high school workshop program, but can also be used as an educational tool for teachers in classrooms. More information about the high school workshop and summer internship programs can be found under the section on Outreach Activities.

A listing of all active grants in the department can be found in the appendix, together with a list of all grants submitted during fiscal year 2010.

Publications and Presentations

Department faculty and staff continued their productivity by contributing a total of 47 published papers, 40 invited presentations and 63 platform and poster presentations at local, national and international meetings in fiscal year 2010.

Please refer to the appendix for a detailed list of all publications and presentations.

Research Infrastructure

The Department of Genetics also added to its research infrastructure with the acquisition of two major items of equipment and the construction of a fly kitchen. The first major equipment acquisition was a robotic liquid handling platform. The Agilent liquid handling platform is a fully automated robotic device housed in a BSL fume hood allowing for high throughput liquid handling and precision cell culture set up all within a sterile environment.

The second piece of major equipment is a Roche 454 sequencer that was purchased by the Department of Genetics. The Roche 454 sequencer is a next generation DNA sequencing instrument used to analyze the DNA of virtually any species of plant or animal at more than one million reads per run. The power of this device, coupled with its computing software, allows for sequencing of entire genomes. It is currently being used to sequence human lung samples for investigation of potential genetic markers for various types of lung disease.

The construction of a fly kitchen was completed in fiscal year 2010. The fly kitchen is located in room 914A of the Lion's Building and will be utilized by fly researchers in the Departments of Genetics, Neuroscience, Biochemistry and Pharmacology. Dr. Udai Pandey in the Department of Genetics performs research on neurodegenerative diseases using Drosophila as a model system. His research is focused on studying molecular mechanism of the motor neuron diseases, specifically amyotrophic lateral sclerosis (ALS) and spinobulbar muscular atrophy (SBMA). At LSUHSC, Pandey lab succeeded in developing a Drosophila model of ALS that recapitulates FUS/TLS mutation-dependent degeneration in vivo. His lab is currently doing an unbiased genetic screen to identify novel modifiers of FUS/TLS related neurodegeneration.

Lastly, development of a mouse core was completed in fiscal year 2010. The laboratory of Dr. Jay K. Kolls has produced 10 strains of mice through funding awarded to him by the NIH. Through the creation of this core, other investigators will have access to these mice that are not commercially available. This allows for active collaborations between Dr. Kolls and other investigators around the country.

Education

<u>Teaching</u>

In fiscal year 2010, our faculty taught in 16 courses within the Schools of Medicine, Graduate Studies, Nursing and Public Health. Please see appendix for a detailed list of courses directed by Genetics Faculty and course lectures given by Genetics Faculty.

In the past, Genetics has been a section of the Human Prenatal Development (HPD) course for the first year medical students. This was a historic placement that was related to genetics being associated with pediatrics and newborn screening. HPD is taught in the first semester and placement of genetics in this course is no longer appropriate. The medical school curriculum committee agreed to move genetics into the Medical Biochemistry course in the spring. We have

worked to coordinate the content of the two courses and beginning in the spring semester of 2011, genetics will be a section of biochemistry.

Even with an expanded course content, genetics does not constitute sufficient hours to be a stand alone course (>30 hours). However, we are striving to integrate genetics into other courses, in particular Pathology and Pharmacology, which are taught the second year. We have also started a genetics review for the L2s prior to the USMLE Step 1 exam, in an effort to also increase our scores on the genetics questions on the exam. As genetics becomes increasingly important to nearly every clinical field, we will continue to increase our presence in the medical school curriculum.

Graduate Program

During fiscal year 2010, the Department of Genetics accepted four new students into its graduate program beginning the Summer 2010 semester. Jyothi Vijayaraghavan, was accepted directly into the Genetics program. Two of the five School of Graduate Studies Interdisciplinary Program (IDP) students, Jacob Loupe and Waleed Elsegeiny, also joined the Genetics program this past year demonstrating the high rate of interest the IDP students have in our Department and program. Finally, an M.D./Ph.D. student, Sun Mi Choi, joined the department to undertake the Ph.D. portion of her degree. Sun Mi and Waleed are performing their dissertation work in the laboratory of Dr. Jay Kolls and Jacob Loupe joined the laboratory of Dr. Andrew Hollenbach.

In total, the Department of Genetics had 12 graduate students, of whom 5 have graduated (Kevin Dietz, Heena Mehta, Scott Ditch, Ryan Bonvillain, and Ayan Banerjee). At present they are post-doctoral fellows in Harvard Medical School and Mass General, Tulane University Health Sciences Center, Emory School of Medicine and University of Texas-Austin.

The Graduate School Program in the Department of Genetics has performed a number of student recruitment activities in fiscal year 2010. We hosted two departmental tours to introduce the new Interdisciplinary graduate students and MD/PhD students to research activities ongoing within the Department. In addition, we presented departmental information on research activities and curriculum to the prospective MD/PhD students for the year 2010. These presentations provide a foundation for recruitment into our graduate program and provide a platform for faculty to discuss their research interests with prospective students.

To re-evaluate the curriculum requirements for the graduate and MD/PhD students, the first departmental Curriculum Committee was established, members include Drs. Mandal, Hollenbach, Iwakuma and Wessely. The Committee met to discuss the current coursework and possible revisions or additions to the Departmental curriculum. Stemming from the decision made by the Curriculum Committee, the Department held the first curriculum retreat on December 18, 2009. The Committee presented the results of the curriculum retreat to the graduate faculty members in the department, suggesting revisions and changes in the content and sequence of the current curriculum. Changes and additions of new courses that were recommended by the Committee were subsequently approved by all faculty members who were present. Based on the new revised curriculum, our graduate students are required to take 61

credit hours, including the dissertation research and coursework for the PhD degree. A direct result of the retreat was the development of a new elective course on animal models, developed and co-directed by Drs. Crabtree, Iwakuma, and Pandey, which will be available for all graduate students at LSUHSC. Additionally, a new Journal Club course was developed by Drs. Iwakuma, Liu, and Tsien and this course is mandatory for all graduate students. Both courses will be offered in the 2010-2011 academic year. Coursework for the MD/PhD students was revisited and recommended changes were approved by the faculty members.

Another newly established committee in the Departmental Graduate School Program is the Graduate Student Oversight Committee. The responsibilities of this Committee entail the annual evaluation and monitoring of the progress of Departmental graduate students. The Committee held meetings and contacted students and their respective mentors to remind them of their timeline in taking the qualifying examinations and prospectus. The members of this Committee include Drs. Mandal, Hollenbach, Iwakuma and Wessely.

Finally, the Department designated three new Department of Genetics training faculty members. These include Shahriar Koochekpour, M.D., Ph.D., of the Department of Microbiology, Immunology and Parasitology; Krysztof Reiss, Ph.D., Professor of Medicine; and Luis Del Valle, M.D., Associate Professor of Pathology and Medicine.

Seminar Series

The Department of Genetics conducts an annual seminar series, directed by Drs. Fern Tsien and Andrew Hollenbach. The series is offered as an opportunity for graduate students, postdoctoral fellows and faculty to broaden their knowledge beyond their specific area of research and/or studies. The department's aim is to offer a dynamic, interactive seminar series that encourages an exchange of ideas among researchers and students. The Seminar Series Committee works to provide a full agenda of speakers who are known globally and represent academia, industry and government. The intention is to balance the topics across all areas of the Department while also integrating a few speakers who traverse the traditional Genetics boundary into new and exciting areas. In fiscal year 2010, seminars were presented by each of the graduate students, in addition to local and national researchers. Invited outside speakers included:

- Wolfgang Sadee, Dr. rer.nat., Chair of Pharmacology, Ohio State University Medical Center
 - Seminar: "Expression Genetics: Search for the Missing Heritability of Complex Diseases and Therapies"
- Guo-Min Li, Ph.D., Professor of Molecular & Cellular Biochemistry, University of Kentucky
 - Seminar: "Molecular mechanism of DNA mismatch repair"
- Gary J. Bassell, Ph.D., Professor of Biology & Neurology, Emory University School of Medicine
 - Seminar: "RNA traffic, local translation and fragile x syndrome"

A full copy of the 2009-2010 seminar series schedule can be found in the Appendix.

Outreach Activities

Summer Internship Research Program

The summer research program, directed by Drs. Paula Gregory and Fern Tsien, accepted 70 students (10 high school, 26 undergrad, and 34 medical students). The program is designed to, expose students to cutting edge research and provide an introduction to medical and graduate school as a means of preparing students for careers in basic and translational research. Students learn about the scientific method, how to design experiments, and how analyze and interpret data. Furthermore, they gain valuable hands-on laboratory experience during their summer months. This program is funded by the Louisiana Gene Therapy Consortium, the Louisiana Vaccine Center, the Louisiana Cancer Research Consortium, the LSU School of Medicine, Tulane School of Medicine, the National Institutes of Health through the NIH ARRA stimulus supplements, and the Patrick F. Taylor Foundation.

The summer program is modeled after the NIH Summer Internship Program and has three main components. Students work directly with faculty and graduate students on a research project of their liking at LSUHSC, Tulane School of Medicine, Pennington Biomedical Research Center, or Children's Hospital. Many of the faculty of the Genetics Department successfully mentored these students. The second component of the program encompasses didactic learning through seminars, journal clubs, and lab meetings. The program hosts a seminar series that covers a variety of topics related to basic laboratory techniques and careers in the biomedical fields, including responsible conduct of research and presentation skills. The third component of the program focuses on communication and presentation skills. Students are taught how to put a poster together and how to effectively present their data.

At the end of the summer, the interns presented their results at one of two scientific meetings attended by students, mentors, lab members, and the scientific community. Medical students were encouraged to give an oral presentation of their results at the Medical Student Research Symposium on July 26th, 2010 at the CSRB on the LSUHSC campus. High school, undergraduate, and medical students who did not compete in the Symposium presented their summer projects at the Summer Internship Poster Session held in the Lions Building at LSUHSC on July 29th, 2010. Awards were given out to top posters and oral presentations in each academic category (High School, Undergraduate, and Medical students).

Middle and High School Workshops

Dr. Paula Gregory and Dr. Fern Tsien have directed various education outreach programs throughout the state.

GENA Partnership - Dr. Gregory partnered with Ms. Kathleen Litchfield from Haynes Academy to participate in the NSF-funded Geneticist-Educator Network of Alliances (GENA). Together they designed and implemented a teaching plan related to state science education standards and misconceptions in genetics. Their activity focused on the use of DNA for identification of Katrina victims, something that is relevant to nearly all students in the greater New Orleans area. High School PCR Activity - Dr. Gregory conducted hands-on classroom activities with students at Mt. Carmel H.S., West Jefferson H.S., Higgins H.S., St. Mary's Dominican H.S., Ben Franklin H.S. and Mandeville H.S. The students performed PCR analysis of their own DNA, amplifying

the D1S80 Alu repeat locus. The students also discussed some of the ethical issues that arise with genetic testing.

Summer DNA Technology Camp - Based on their long-standing partnership, Dr. Gregory and Ms. Laura Decker (Mandeville H.S. A.P. Biology teacher) organized the first DNA Technology Camp held for a week in June at the high school. A variety of faculty and graduate students worked with the 15 students to cover all aspects of DNA technology such as chromosome analysis, gel electrophoresis and PCR. Based on the reviews, the camp was a success and we will continue to offer it each summer.

High school field trips-Through her Patrick F. Taylor Foundation award, Dr. Fern Tsien has hosted high school biology class field trips at LSUHSC with the goal of encouraging students to become interested in biomedical sciences. During the morning-long or day-long field trips at LSUHSC, students learn about careers in the medical sciences, including research, forensics science, and clinical medicine. Genetic Department graduate students and LSU medical students assist hands-on experiments, which include: swabbing DNA from items found in a "crime scene", and comparing extracted DNA with suspect DNA via PCR and gel electrophoresis, and chromosome preparation and analysis from cancer, Down syndrome, and normal individuals. Students are also given lab tours, including a highly interactive visit of the Human Simulation Lab, and are given presentations on careers in the forensic sciences, genetic research, genetic counseling, and clinical medicine. Participating schools included: Patrick F. Taylor Science and Technology Academy, Donaldsonville High School (Donaldson, LA), East Ascension High School (Gonzalez, LA), Destrehan High School (Destrehan, LA), St. Martin's Episcopal School (Metairie, LA) and South Lafourche High School (Galliano, LA).

Elementary, Middle, and High school hands-on workshops- Dr. Tsien directed various genetics workshops at schools in the New Orleans area. Dr. Tsien, along with Department of Genetics graduate and LSU medical students, perform hands-on experiments that are developed in close coordination with the teacher to supplement the existing classroom curriculum. Middle school topics include taste testing with PTC paper to learn about heredity and traits, learning about microorganisms and blood cell types, DNA isolation from bananas and strawberries, and comparing cancer versus normal cells under the microscope. High school students learn about forensics, PCR, and chromosome instability. Participating schools included: 7th Ward Elementary School (Abbeville, LA), Holy Name of Jesus Middle School, the Recovery District Greater Gentilly High School, and Lusher Charter School.

Medical students and genetics department graduate students: Victoria Givens, Kevin Dietz, Ryan Bonvillain, Elisa Ledet, Sammeta Vamsee Raju, and Alain D'Souza assisted with Dr. Tsien's field trips and workshops.

LSUHSC Genetics Educational Videos

Through funding by the Patrick Taylor Foundation, three short, educational videos were generated by Lakefront Films and produced by Dr. Tsien. The videos can be accessed by schools and individuals through the Department of Genetics website and YouTube. The goal of the videos is to enhance current school curricula and to emphasize the topics discussed during the

LSUHSC field trips and school workshops. The video topics are: "Forensics", aimed at the high school level, in which a crime scene is recreated and the process used by geneticists to find the culprit of a crime is described; "Down syndrome", also aimed at the high school level, in which an actual teen with Down syndrome and his mother are interviewed, followed by an explanation of the genetic changes which cause Down syndrome; and "The Cell", aimed at the middle school level, which depicts the components inside the human cell, focusing on the nucleus. Additional videos and an educational website are planned for the near future.

Genetics graduate students Elisa Ledet, Sammeta Vamsee Raju, and Ryan Bonvillain made cameo appearances.

Other Departmental Activities

State of the Department Address

In fiscal year 2009, Dr. Kolls issued his first annual report and gave the first annual state of the department address to review the year and define the goals and objectives for fiscal year 2010. Dr. Kolls felt it imperative for the Genetics Department to practice transparency; therefore, the state of the department and annual report were open to all interested parties. The state of the department address given by Dr. Kolls was well attended by the entire department including full-time and joint faculty, staff, researchers and students. This transparency allows the department to work as a unified front towards achieving our goals.

Annual Team Building Event

The Department of Genetics believes in fostering team spirit and understands that as a department we must all work together to achieve goals and objectives. To this end, the Department of Genetics hosted its second annual team building event and crawfish boil on April 29, 2010. Members of the department participated in team activities such as football, horseshoes and washers. By participating in the games, individual team members with very different roles in the department worked together to achieve a common goal, which highlighted the value of each person's skill set and how well these skill sets can complement one another when applied as a unified effort. The fun, relaxed afternoon got the department out of their "normal" roles and routines, and encouraged everyone to get to know one another in a different environment. This team building activity improved morale and cohesiveness that translated back to a better, more productive work environment within the department.

Plans for the Coming Year

The focus of fiscal year 2011 will be the expansion of our research resources including faculty, equipment and core facilities. Recruitment continues to be a top priority. The Department of Genetics has partnered with the School of Medicine Dean's office, Department of Microbiology, Immunology and Parasitology and the Section of Pulmonary Medicine in the Department of Medicine to recruit an additional FTE in bioinformatics. The individual will perform high throughput sequencing for each program and assist with the scientific information technology needs of the School of Medicine.

Further equipment acquisitions are planned for fiscal year 2011. Dr. Jay K. Kolls was awarded an equipment grant from the Louisiana Board of Regents for the purchase of shRNA libraries. It will be used to conduct most of the liquid handling and cell culture necessary for lentiviral shRNA screens. This technology employs the use of lentiviral constructs designed to target known transcripts of RNA effectively rendering them inactive for translation, or "knockdown" of protein expression in a cell line. These in vitro experiments will be conducted for investigation of the roles played by various proteins in an RNAi core setting for the university.

At the close of fiscal year 2010, meetings were held regarding re-establishing a transgenic facility for LSUHSC researchers. A transgenic facility at Pennington Biomedical Research Center has since been identified and has additional capacity for our needs. Plans are underway to execute a cooperative endeavor agreement with Pennington in fiscal year 2011 for the use of their transgenic facility.

Lastly, the Department of Genetics will offer two new graduate courses in fiscal year 2011, Animal Models in Research and Journal Club. A new elective course on animal models, developed and co-directed by Drs. Crabtree, Iwakuma, and Pandey, which will be available for all graduate students at LSUHSC. Additionally, a new Journal Club course, developed by Drs. Iwakuma, Liu, and Tsien will be offered. This course will be mandatory for all genetics graduate students.

Appendix

Teaching Activities

Courses Directed by Genetics Faculty

Course	School	Director	Genetics Lecturer(s)	Semester
Introduction to Research	Graduate	Dr. Gregory	Dr. Gregory	Summer 2009
and Resources	Studies			
(INTER 101)				
Human Prenatal	Medicine	Dr. Gregory	Dr. Gregory	Fall 2009
Development				
(ANAT 101)				
Molecular Genetic	Graduate	Dr. Hollenbach	Drs. Tsien, Grabczyk,	Fall 2009
Mechanisms	Studies		Iwakuma	
(INTER 122)				
Cell Biology and	Medicine	Dr. Gregory	Dr. Gregory	Fall 2009
Microanatomy				
(ANAT 192)				
Cancer Molecular	Graduate	Drs. Hollenbach and	Drs. Tsien, Mandal, Liu,	Fall 2009
Genetics	Studies	Iwakuma	Nguyen	
(GENET 245)				
Epigenetics	Graduate	Dr. Tsien	Dr. Tsien	Fall 2009
(GENET 234)	Studies			
Human Molecular	Graduate	Dr. Gregory	Drs. Gregory, Tsien	Fall 2009
Genetics	Studies			
(GENET 231)				
Control of Gene	Graduate	Dr. Hollenbach	Drs. Tsien, Grabczyk,	Spring 2010
Expression C	Studies		Iwakuma, Crabtree, Mandal	
(INTER 123)				
Responsible Conduct of	Graduate	Dr. Gregory	Dr. Gregory	Spring 2010
Research	Studies			
(INTER 260)				
Proposal Writing	Graduate	Dr. Gregory	Dr. Gregory	Spring 2010
(GENET 247)	Studies			
Human Cytogenetics	Graduate	Dr. Tsien	Dr. Tsien	Spring 2010
(GENET 292)	Studies			

Course Lectures Given by Genetics Faculty

Course	School	Lecturer	Semester
Cell Biology	Graduate Studies	Dr. Crabtree	Fall 2009
(INTER 121)			
Genetic Health Across the Life Span	Nursing	Dr. Gregory	Spring 2010
(NURS 3451)			
Cell Signaling and Cell Cycle Control	Graduate Studies	Dr. Iwakuma	Spring 2010
(INTER 124)			
Biological Systems	Graduate Studies	Dr. Gregory	Spring 2010
(INTER 132)			
Cancer Epidemiology	Public Health	Dr. Mandal	Spring 2010
(EPID 6222)			

Department of Genetics Fall 2009/Spring 2010 Seminar Series Schedule

September 4, 2009 Shahriar Koochekpour, M.D., Ph.D.

Assistant Professor

Microbiology, Immunology & Parasitology

LSUHSC- New Orleans New Orleans, LA

October 16, 2009 J. Michael Mathis, Ph.D.

Professor and Director

Gene & Cell Therapy Program LSU Health Sciences Center

Shreveport, LA

October 28, 2009 Graduate Student Dissertation Defense: Scott Ditch

October 30, 2009 Graduate Student Dissertation Defense-Ayan Banerjee

November 13, 2009 Jeffrey Gimble, M.D., Ph.D.

Professor, Stem Cell Biology

Pennington Biomedical Research Center

Baton Rouge, LA

November 30, 2009 Graduate Student Dissertation Defense-Heena Mehta

December 11, 2009 Wolfgang Sadee, Dr. rer.nat.

Felts Mercer Professor of Medicine & Pharmacology

Chair, Pharmacology

Professor, Pharmacy, Psychiatry & Medical Genetics Director, OSU Program in Pharmacogenomics

Ohio State University Medical Center

Columbus, OH

December 18, 2009 Graduate student seminar – Ryan Bonvillain

February 26, 2010 Graduate Student Seminar: Alain D'Souza

March 12, 2010 Guo-Min Li, Ph.D.

Professor

Department of Molecular & Cellular Biochemistry

University of Kentucky

Lexington, KY

March 22, 2010 Graduate Student Dissertation Defense: Kevin Dietz

March 26, 2010 Graduate student seminar: Elisa Ledet

March 30, 2010 Graduate Student Dissertation Defense:: Ryan Bonvillain

April 16, 2010 Graduate student seminar – David Ricks

April 26, 2010 Hamid Boulares, Ph.D.

Associate Professor, Pharmacology

LSU Health Sciences Center

New Orleans, LA

May 14, 2010 Gary J. Bassell, Ph.D.

Professor

Department of Biology & Neurology Emory University School of Medicine

Atlanta, GA

May 28, 2010 Graduate student seminar – Vamsee Sammeta

Mentoring

Dr. Kolls:

Dissertation Advisor S. Mi Choi, D. Ricks

Thesis Advisor N. Nguyen

Y. Cai, W. Wlsegeiny **Rotation Advisor** Postdoctoral Advisor K. Chen, J. McAleer,

T. Johnson

Dissertation Committee Member S. Raju

Dr. Crabtree:

Summer Research Mentor J. DePaolo

Dr. Grabczyk:

Dissertation Advisor A. Banerjee, S. Ditch Postdoctoral Advisor M. Sammarco, S. Brand

Summer Research Mentor J. Wang

R. Gravolet Summer 2009 Undergraduate Research Advisor C. Carpenter

Masters student, Cell and Molecular Biology, Tulane University

Dr. Gregory:

Dissertation Committee Member H. Meta, R. Bonvillain,

S. Ditch, A. Banerjee,

R. Rudraraju Post doctoral grant application (K25) S. Brand Postdoctoral Committee Member M. Sammarco

Clinical Research Scholar Committee Member E. Richter, R. Lin,

L. Moreno-Walton

Grant Writing D. McDermott, C. Villavosa Research Guidance B. Baggert, M. Edwards,

J. Wey

Dr. Hollenbach:

Dissertation Advisor K. Dietz, A. Iyengar,

J. Loupe Co-Dissertation Advisor M. Abdraboh

Dissertation Committee Member M. Abdraboh, R. Bonvillain,

> P. Sarvaiya, S. Aras, R. Buckley, D. Edwards, S. Raju, N.Nguyen

K. Johanson (Xavier Junior Faculty Mentor

University), G. Thomas (Xavier University)

Dr. Iwakuma:

Dissertation Advisor S. Iyer

Postdoctoral Advisor A. Adhikari, N. Agarwal

Dissertation Committee Member K. Dietz

Summer Research Mentor C. Chen, M. Abughazleh

Dr. Liu:

Dissertation Committee Member Z. Wang, J. Burke,

E. Ledet

Summer Research Mentor J. Wu, T. Wang

R. Rebowe, W. Richardson

Mentor to Jr. Faculty from Tulane COBRE

N. Makridakis

IDP Rotation Mentor J. Park

Postdoctoral Advisor J. Guo, Z. Wang, J. Bavarva, M. Ho

Dr. Mandal:

Dissertation Advisor E. Ledet

Dissertation Committee Member R. Bonvillain; S. Raju

Dr. Nguyen:

LVC SLIDR Mentor M. Darbar, C. Winters, X. Xao

Summer Research Mentor A. Das, T. Nguyen

Dr. Pandey:

IDP Rotation Mentor W. Elsegeiny,

K. Sherman, J. Park
Summer Research Mentor
H. King, T. Nichols
Dissertation Committee Member
A. Augustus-Wallace

Dr. Pociask:

Summer Research Mentor J. Winfield

Dr. Tsien:

Dissertation Committee Member R.Bonvillain

Summer Research Mentor D. Guo, B. Bateman,

M. Abughazleh,

J. James

High School Mentor C. Duvall

Dr. Moreno-Walton:

Resident Mentor

Medical Student Mentor G. Alexander,

D. Lewis, A. Fuller, M. Dietz, S. Stafford, P. Hurd, S. Kaiser,

C. McClain M. Harper, K.

Washington, C.

D'Antonio, L.Peeples, A. Lyon, D. Beren, L. Mutter, M. Rice, S. D'Andrea, L. Mutter, T. Oden,

G. Buller

Junior Faculty Mentoring F. Azuibiuke, V.

Piazza, E. Halton, C. Butts, J. Avegno

Dr. Zheng:

Thesis Co-Advisor N. Nguyen

Research Mentor K. Chen, D. Ricks,

W. Elsegeiny, M. Ripple

Invited Presentations (seminars, mini-courses, etc.)

Dr. Kolls:

- "How Th17 Cytokines regulate Mucosal Immunity" Cold Spring Harbor, November 2009
- "IL-22 and Sepsis" TSIS 2010 Munich, Germany
- "Overview of Th17 Cytokines and Lung Disease" American Thoracic Society Meeting, New Orleans, LA. May 2010
- "Th17 Cytokines and Mucosal Immunity". AAAAI Meeting, New Orleans, LA
- "Th17 Cytokines and Mucosal Immunity". FASEB Summer conference. Carefree, AZ June 2010

Dr. Crabtree:

- "Endocrine tumor biology: Multiple Endocrine Neoplasia, type 1 and Uterine Fibroids" LSUHSC Physiology Department, New Orleans, LA (9/10/09)
- "Endocrine tumor biology: Multiple Endocrine Neoplasia, type 1 and Uterine Fibroids" Pennington Biomedical Research Center, Baton Rouge, LA (9/14/09)
- "Endocrine tumor biology: Multiple Endocrine Neoplasia, type 1 and Uterine Fibroids" LSUHSC Biochemistry and Molecular Biology Department, New Orleans, LA (12/4/09)
- "Endocrine tumor biology: Multiple Endocrine Neoplasia, type 1 and Uterine Fibroids" Tulane Pharmacology Department, New Orleans, LA (4/23/10)
- "Of mice and MEN1: Multiple Endocrine Neoplasia, type 1"Ochsner Endocrinology Department, New Orleans, LA (4/27/10)

Dr. Gregory:

- "Pharmacogenomics" Tulane Medical School, Dept of Pharmacology
- DNA-based identification St. Mary's Dominican High School
- DNA-based identification Mandeville High School
- DNA-based identification West Jefferson High School
- DNA-based identification Ben Franklin High School
- DNA-based identification Higgins High School
- Post Katrina DNA-based identification Haynes Academy High School
- DNA-based identification Mt Carmel High School
- "Grant Writing" Clinical Translational Research Center Faculty Development Training
- Week long DNA Camp for high school students

Dr. Hollenbach:

- Summer Seminar Series, Louisiana Cancer Research Consortium NCI Research Internship, New Orleans, LA, July 2009, "The regulation of Pax3 and Pax3-FOXO1 by phosphorylation."
- Louisiana State University Health Sciences Center, Department of Biochemistry and Molecular Biology, New Orleans, LA, November 2009, "The regulation of Pax3 and Pax3-FOXO1 by phosphorylation."

Dr. Iwakuma:

• 2009, October 14: University of Alabama, Department of Pathology Seminar Series. Metastasis suppression by MTBP.

Dr. Liu:

- "Contribution of DNA Damage-Signaling Defects to Prostate Cancer Risk" in the Department of Structural and Cellular Biology, Tulane University. September, 2009.
- "Axin2-deficient Mouse and Colorectal Cancer Tumorigenesis" in the Department of Gene Therapy, LSUHSC. January, 2010.

Dr. Mandal:

- Susceptibility Genes in Prostate Cancer: Family Studies. Tulane Hayward Genetics Center Seminar Series. December 4, 2009.
- Identification of Susceptibility Genes in Hereditary Cancer Families. Department of Physiology Seminar Series. LSUHSC. January 28, 2010.
- Genetic Epidemiology and Public Health, Department of Genetics, Tulane University, April 14, 2010.
- Genetic Studies on Familial Prostate Cancer. Department of Cell Biology, Tulane Medical School. April 28, 2010.

Dr. Pandey

 Title: "HDAC6 at the intersection of autophagy and UPS" Department of Physiology, LSUHSC

Dr. Tsien:

- LVC/LCRC/LGTC Summer Internship Program, "Chromosomes and epigenetics", 2009, LSUHSC, New Orleans, LA
- LVC/LCRC/LGTC Summer Internship Program, "How to present a poster at a scientific meeting", 2009, LSUHSC, New Orleans, LA
- Hayward Genetics Center, Tulane School of Medicine, "22q11.2 spectrum disorders", 2009, Tulane University School of Medicine, New Orleans, LA
- Patrick F. Taylor Science and Technology Academy, 2009, "Genetics Workshop at LSUHSC"
- Destrehan High School "Forensics", 2009, LSUHSC-New Orleans
- Ascension Parish Gifted and Talented Program, "Genetics", 2009, LSUHSC-New Orleans
- Patrick F. Taylor Science and Technology Academy, 2009, "Hands-on Medical and research career opportunities Workshop at LSUHSC", LSUHSC-New Orleans, 2010
- St. Martin's Episcopal School, "Hands-on Medical and research career opportunities Workshop at LSUHSC", LSUHSC-New Orleans, 2010.
- Greater Gentilly High School, "Forensics" and "Chromosomes in cancer" at GGHS, 2010.
- Seventh Ward Elementary School, Abbeville, LA, "Genetics and heredity", at 7th Ward, 2010.
- Holy Name of Jesus School, "Cells", at HNJ, 2010.

- South Lafourche High School, "Hands-on Medical and research workshop at LSUHSC", at LSUHSC-NO, 2010.
- Science Partnership Field Day for New Orleans Public school 4th graders, "DNA isolation from strawberries", at LSUHSC-NO, 2010.
- LVC/LCRC/LGTC Summer Internship Program, "Working in a lab-what you need to know", 2010, LSUHSC, New Orleans, LA, 2010
- LVC/LCRC/LGTC Summer Internship Program, "Lab notebook organization and record keeping", 2010, Research Institute for Children, Children's Hospital of New Orleans, LA, 2010
- LVC/LCRC/LGTC Summer Internship Program, "How to give a poster and oral presentation at a scientific meeting", 2010, Research Institute for Children, Children's Hospital of New Orleans, LA, 2010
- Holy Name of Jesus School, "Cells", at HNJ, September 2010.

Dr. Moreno-Walton:

- "I'm Suicidal...and Can I Have a Sandwich?: Assessment of Suicide Risk in the Emergency Department", American Academy of Emergency Medicine Scientific Assembly, Las Vegas, February 2010.
- "Are Backboards Really Useful?", American Academy of Emergency Medicine Scientific Assembly, Las Vegas, February 2010.
- "Generation X,Y,Z: Teaching in the Era of Alphabet Soup", Council of Residency Directors in Emergency Medicine Academic Assembly, Orlando FL, March 2010.
- "Precarious Foreign Bodies", 2010 Critical Concepts in Emergency Medicine conference, New Orleans, April 2010.
- "Inter-generational Teaching: Techniques for Optimal Learning", Society for Academic Emergency Medicine Annual Scientific Assembly, Phoenix AZ, June 2010.
- "Mentorship in Action: Benefits and Techniques", Society for Academic Emergency Medicine Annual Scientific Assembly, Phoenix AZ, June 2010.

Dr. Zheng:

• The role of IL-17+ cell migration to bone marrow for granulopoiesis during lung infection. Oral presented at the 2010 American Thoracic Society International Conference, New Orleans, LA.

Platform and Poster Presentations at Scientific Meetings

Dr. Kolls:

- "How Th17 Cytokines regulate Mucosal Immunity" Cold Spring Harbor, November 2009
- "IL-22 and Sepsis" TSIS 2010 Munich, Germany
- "Overview of Th17 Cytokines and Lung Disease" American Thoracic Society Meeting, New Orleans, LA. May 2010
- "Th17 Cytokines and Mucosal Immunity". AAAAI Meeting, New Orleans, LA
- "Th17 Cytokines and Mucosal Immunity". FASEB Summer conference. Carefree, AZ June 2010

Dr. Crabtree:

• Jack DePaolo, Judy Crabtree. "miRNA regulation of the mTOR signaling pathway in uterine fibroids." LSUHSC Summer Research Internship, August 2009

Dr. Grabczyk:

• Ryan Gravolet, Mimi C. Sammarco, Ayan Banerjee, Scott Ditch, and Ed Grabczyk "Optimizing Green Fluorescent Protein Fusion." LSU Health Sciences Center, Tulane Health Sciences Center Joint Summer Intern Research Program Poster Session.

Dr. Hollenbach:

- Dietz, K. N., Miller, P. J., and Hollenbach, A. D., "Phosphorylation at Ser205 by protein kinase CK2 persists on Pax3-FOXO1, but not Pax3 during early myogenic differentiation." European Molecular Biological Organization (EMBO) Annual Meeting, Amsterdam, The Netherlands, September 2009.
- Dietz, K. N., Miller, P. J., and Hollenbach, A. D., "Pax3-FOXO1a, but not Pax3, is phosphorylated throughout myogenic differentiation", American Association of Cancer Research, Frontiers in Basic Cancer Research Symposium, Boston, MA, October 2009.

Dr. Iwakuma:

- 2009, August 14: LCRC Friday encounter series. A novel mitotic checkpoint protein.
- 2010, January 11: Grant proposal committee meeting: Targeting gain-of-function mutant p53 in osteosarcoma stem cells
- 2010, April 16: Annual NIH P20 COBRE Grant Advisory Board Meeting. Dissecting Roles of MTBP in Osteosarcoma Metastasis.
- Yuki Tochigi, Neeraj Agarwal, Shuo Cui, Yan Cui, and Tomoo Iwakuma, Fifth International Mdm2 Workshop, August 25, 2009: MTBP is a novel regulator of the mitotic spindle assembly checkpoint.
- Amit S. Adhikari, Neeraj Agarwal, Byron M. Wood, Constance Porretta, Bernardo Ruiz, Radhika R. Pochampally, and Tomoo Iwakuma, AACR special conference: Frontiers in Basic Cancer Research, October 8-11, 2009: CD117 and Stro-1 identify osteosarcoma stem cells associated with metastasis and chemotherapy-drug resistance.

- Neeraj Agarwal, Yuki Tochigi, Shuo Cui, Amit S. Adhikari, Yan Cui, and Tomoo Iwakuma, LSUHSC Research Day, November 6, 2009: MTBP is a novel regulator of the mitotic spindle assembly checkpoint.
- Amit S. Adhikari, Neeraj Agarwal, Byron M. Wood, Constance Porretta, Bernardo Ruiz, Radhika R. Pochampally, and Tomoo Iwakuma, LSUHSC Research Day, November 6, 2009: CD117 and Stro-1 identify osteosarcoma stem cells associated with metastasis and chemotherapy-drug resistance.

Dr. Liu:

- Invited platform speaker at 5th Annual Academic Surgical Congress Title: "Axin2Mutations in Sporadic Ampullary Carcinoma Correlate with Young Age Onset and Aggressive Phenotype." San Antonio Texas, February 3-5, 2010.
- Poster presentation titled "HEF1, a Novel Target of Wnt Signaling, Promotes Colonic Cell Migration and Cancer Progression" at 2010 Louisiana Cancer Research Consortium Retreat.

Dr. Mandal:

- E. M. Ledet, X. Hu, M. Li, D. M. Mandal. Identification of Copy Number Variation in high-risk African-American men with prostate cancer. American Society of Human Genetics Annual Meeting. Hawaii. October 20-24, 2009.
- E. M. Ledet, X. Hu, M. Li, D. M. Mandal. Identification of Copy Number Variation in high-risk African-American men with prostate cancer. International Genetic Epidemiology Society Annual Meeting. Hawaii. October 17-20, 2009.

Dr. Nguyen:

- Das A, Nguyen DH. Gene expression profiling of the lacrimal gland in an experimental model. LSUHSC Summer Research Internship, August 2009.
- Nguyen T, Nguyen DH. Proteomic analysis of the rabbit lacrimal gland in an experimental dry eye model. LSUHSC Summer Research Internship, August 2009. Placed third in competition.
- Byrne P, Nguyen DH, Fang Z, Das A. Cross-species hybridization: profiling of the rabbit lacrimal gland using rat exon Genechip. Gene Therapy Research Symposium, Oct 14, 2009, New Orleans, LA.

Dr. Pandev:

- Pandey, Udai, Jaffer, Zahara M, Chen, Ruihong, Taylor, J. Paul, Winssinger, Nicolas, and Rubenstein, Allan. Proof-of-Concept for a Novel Small Molecule Hsp90 Inhibitor for age related neurodegeneration. American Academy of Neurology (AAN) Toronto, Canada April 10th-14th 2010
- Pandey, Udai, Jaffer, Zahara M, Chen, Ruihong, Taylor, J. Paul, Winssinger, Nicolas, and Rubenstein, Allan. Proof-of-concept for a novel small molecule Hsp90 inhibitor for SBMA. 20th International Symposium on ALS/MND Berlin, Germany December 18th 21st 2009

Dr. Pociask:

• Influenza A Potentiates the Pulmonary Fibrotic Response through Epigenetic Regulation of Epithelial to Mesenchymal Transition. Platform presentation- American Thoracic Society in New Orleans, May 2010.

Dr. Tsien:

- Abughazhelh M, Bateman B, Liu W, Tsien F, AXIN2 Gene Expression in Colon Cancer, LVC/LCRC/LGTC Summer Internship Poster session, 2009.
- Babu S, Flaat M, Tsien F, Bunnell B, Comparison Between High, Medium, and Low Passage Neural Adult Rhesus Stem Cell Karyotypes, Summer Research Internship Poster session, 2009.
- Bateman B, Kibe R, Cui Y, Tsien F, Chromosome Instability in Mouse Cell Lines and Primary Cells, Summer Research Internship Poster session, 2009.
- Kibe R, Zhang S, Marrero L, Tsien F, Zieske A, Huang J, Durum S, Iwakuma T, Cui Y, Cross-talk between IL-7R signaling and the p53 pathway in maintaining genomic stability during T cell development, Louisiana Cancer Research Consortium, New Orleans, 2009.
- Guo D, Tsien F, Cui Y, Iwakuma T, Potential molecular mechanism of IL-7 signaling in maintaining genomic stability, Summer Research Internship Poster session, 2010
- James J, Tsien F, Chromosome instability in a chronic myelogenous leukemia cell line, Summer Research Internship Poster session, 2010
- Bateman B, Tsien F, Marble M, Newbron screening: Advances and controversies, Summer Research Internship Poster session, 2010

Dr. Moreno-Walton:

- Azuibuike F, Moreno-Walton L, Radeos MS, Baquero A, Ryan MT. "A
- Randomized Controlled Clinical Trial of 1000 cc vs. 500 cc Oral Contrast in Adults
- Undergoing Abdominal CT Scans", Mediterranean Emergency Medicine Conference Valencia, Spain, September 2009.
- Moreno-Walton L, Katz V, Shah A, Lieb J. "Social Factors Which Predict Penetrating Trauma: Has Anything Changed in the Past Twenty Years?", Mediterranean Emergency Medicine Conference, Valencia, Spain, September 2009.
- Moreno-Walton L, Ryan MT, Harper M, Haydel M, "Examining the Impact of a Sexual Assault Response Team on Delivery of Healthcare to Survivors of Sexual Assault", Mediterranean Emergency Medicine Conference, Valencia, Spain, September 2009.
- Moreno-Walton L, Brunett P, Akhtar S, DeBlieux PM. "Teaching Across the Generation Gap: An Advance Report of the Article in <u>Academic Emergency Medicine</u>", Beth Israel Medical Center Research Day, New York City, November 11, 2009.
- Moreno-Walton L, Haughey-Barrios M, Hagan J, Alexander G, Katz E. "Influenza Vaccine Health Literacy and Attitudes Survey", Medicine Research Day, Louisiana State University Health Sciences Center- New Orleans, January 2010. (Won First Prize Clinical Research)
- Moreno-Walton L, Haughey-Barrios M, Hagan J, Alexander G, Katz E. "Influenza Vaccine Health Literacy and Attitudes Survey", SAEM Western Regional Research Forum, Sonoma CA, March 2010.

- Moreno-Walton L, Haughey-Barrios M, Hagan J, Alexander G, Katz E. "Influenza Vaccine Health Literacy and Attitudes Survey", SAEM Southeastern Regional Research Meeting, Birmingham AL, April 2010.
- Beran David I, Ramirez Juan D, Moreno-Walton L. "How We Have Coped: Dealing with Overcrowding in a Post-Katrina New Orleans", American College of Emergency Medicine Annual Scientific Assembly, Boston, MA, October 2009.
- Avegno J, Murphy-Lavoie H, Moreno-Walton L. "Medical Students' Perceptions of an Emergency Medicine Clerkship: An Analysis of Self Assessment Surveys", Council of Residency Directors in Emergency Medicine Academic Assembly, Orlando, FL, March 2010.
- Moreno-Walton L, Haydel M. "Galeazzi's Fracture Secondary to a Fall on an Outstretched Arm", Mediterranean Emergency Medicine Conference, Valencia, Spain, September 2009.
- Moreno-Walton L, Haydel M. "Anterior Talar Dislocation with Displaced Fibula Fracture", Mediterranean Emergency Medicine Conference, Valencia, Spain, September 2009.
- Lyon A, Moreno-Walton L. "Traumatic Unstable C-spine Injury", Mediterranean Emergency Medicine Conference, Valencia, Spain, September 2009.
- Moreno-Walton L, Ryan MT "Pulmonary Emboli Causing Chest Pain", Mediterranean Emergency Medicine Conference, Valencia, Spain, September 2009.
- Moreno-Walton L, Haydel M. "Angel's Wings: A Case of Pulmonary Edema", Mediterranean Emergency Medicine Conference, Valencia, Spain, September 2009.
- Washington K, Moreno-Walton L. "Atypical Presentation of Pulmonary Embolus in a Patient With No Risk Factors", Mediterranean Emergency Medicine Conference, Valencia, Spain, September 2009.
- D'Antonio C, Moreno-Walton L. "A Case of Gram Negative Sepsis and Myositis Resulting from Pelvic Metastasis of Rectal Carcinoma", Mediterranean Emergency Medicine Conference, Valencia, Spain, September 2009.
- Peeples L, Moreno-Walton L, Mills LM. "Traumatic Retinal Detachment Diagnosed with Ultrasound", Mediterranean Emergency Medicine Conference, Valencia, Spain, September 2009.
- Prasankumar R, Moreno-Walton L, Lugo B, Waseem M. "Are Children Less Likely Than Adults to Receive Analgesia When Being Ruled out for Appendicitis?" Mediterranean Emergency Medicine Conference, Valencia, Spain, September 2009.
- Moreno-Walton L, Ryan M. "The Case of a Pelvic Kidney", Mediterranean Emergency Medicine Conference, Valencia, Spain, September 2009.
- Moreno-Walton L, Ryan M. "A Pediatric Cause of Abdominal Pain in an Adult", Mediterranean Emergency Medicine Conference, Valencia, Spain, September 2009.
- Moreno-Walton L, Brunett P, Akhtar S, DeBlieux PM. "Teaching Across the Generation Gap: A Report of the Article in <u>Academic Emergency Medicine</u>", Medicine Research Day, Louisiana State University Health Sciences Center- New Orleans, January 2010.
- Lyon A, Moreno-Walton L. "Traumatic Unstable C-spine Injury", Medicine Research Day, Louisiana State University Health Sciences Center- New Orleans, January 2010.

- Peeples L, Moreno-Walton L, Mills LM. "Traumatic Retinal Detachment Diagnosed with Ultrasound", Medicine Research Day, Louisiana State University Health Sciences Center- New Orleans, January 2010.
- Rice M, Moreno-Walton L. "A Case of Synovial Chondromatosis", Medicine Research Day, Louisiana State University Health Sciences Center- New Orleans, January 2010.
- Halton E, Moreno-Walton L, Butts C, Piazza VM. "Abdominal Aortic Aneurysm Presenting as Constipation in an Elderly Man", Medicine Research Day, Louisiana State University Health Sciences Center- New Orleans, January 2010.
- Lewis D, Moreno-Walton L, Butts C. "The Use of Bedside Ultrasound to Distinguish Between Cellulitis and Cutaneous Abscess", Medicine Research Day, Louisiana State University Health Sciences Center- New Orleans, January 2010.
- Mutter L, Piazza VM, Butts C, Moreno-Walton L. "The Use of Bedside Ultrasound Guided Pericardiocentesis as a Life Saving Intervention in the Emergency Department", Medicine Research Day, Louisiana State University Health Sciences Center- New Orleans, January 2010.
- Peeples L, Moreno-Walton L, Mills LM. "Traumatic Retinal Detachment", Las Vegas, February 2010.
- Moreno-Walton L, Haydel M. "A Case of Anterior Talar Dislocation", Las Vegas, February 2010.
- Lyon A, Moreno-Walton L. "Traumatic Unstable C-spine Injury", Las Vegas, February 2010.

Dr. Zheng:

- IL-17+ cell and granulopoiesis during lung infection. Presented at the 2010 Gordon Research Conferences-Biology Of Acute Respiratory Infection, Ventura, CA
- The role of IL-17+ cell migration to bone marrow for granulopoiesis during lung infection. Presented at the 2010 The Second International Conference on Lung Innate Immunity and Pulmonology. New Orleans, LA.

Consulting

Dr. Gregory:

- NHGRI Grant Writing Course taught grant writing skills to post doctoral fellows at the NIH
- Genetics for Kids reviewed curriculum units for middle school students
- Louisiana Gene Therapy Research Consortium Vice President for Educational Outreach

Dr. Hollenbach:

• Madwha Raj, Ph.D., Department of Obstetrics and Gynecology, "Analysis of the CD44-dependent expression of the anti-apoptotic protein survivin."

Dr. Liu:

• Served as a adjunct professor (role as a voluntary consultant) in College of Life Science in Yunnan University, Kunming, China

Dr. Nguyen:

- Madhwa Raj, Ob-Gyn, Biochemistry and Molecular Biology, Epigenetic mechanisms of dietary phytochemical action in ovarian cancer.
- Nicolas Bazan, Neuroscience, RPE messengers, transcription and photoreceptor renewal.
- Stephanie Cormier, Pharmacology, Ultrafine Pollutant Exposure Alters Pulmonary Immunologic Homeostasis
- Gus Kousoulas, LSU School of Veterinary Medicine, Angiogenesis, glycoprotein B and keratin 8
- Suresh Alihari, Biochemistry, NISHrna and Epithelial to Mesenchymal Transition

Dr. Tsien:

- Bruce Bunnell, PhD, Tulane Regional Primate Center, "Characterization of multipotent stem cells of Rhesus Macaque"
- Yan Cui, PhD and Tomoo Iwakuma, MD, PhD, LSUHSC, "Cross-talk between IL-7Rα signaling and p53 pathway in maintaining chromosomal stability during thymopoiesis and preventing lymphomagenesis"
- Michael Marble, MD, Children's Hospital, "Molecular Cytogenetic Studies of Patients with Genetic Diseases"
- Jeff Gimble, Pennington Biomedical Research Center, "Characterization of rat adiposederived cells"
- Prescott Deininger and Roy Weiner, Tulane Medical School, "LCRC Summer Internship Program"

Dr. Moreno-Walton:

 Ellen Slaven, MD; Emergency Medicine: Assessing Knowledge and Current Practices of Incision and Drainage Procedures for Peri-rectal Abscess; Assessing Efficacy of Various Methods of Incision and Drainage Procedure for Peri-rectal Abscess

Grants

Dr. Kolls:

A. Funded

R01-HL061271, Kolls (PI) 06/01/09-04/30/2014 1.44 calendar NIH/NHLBI \$250,000 (current annual direct cost budget)

"Non-CD4 host Defense against P. carinii Pneumonia"

R01-HL062052, Kolls (PI) 2/10/2004-5/31/2015 1.92 calendar NIH/NHLBI \$247,500 (current annual direct cost budget)

"T-Cells and P. carinii Pneumonia"

R01-HL079142, Kolls (PI) 12/13/2004 – 12/31/2014 1.44 calendar NIH/NHLBI \$293,319 (current annual direct cost budget)

"Th17 Cytokines and Lung Immunity"

"Host Defense against HIV-related pulmonary infections"

R01-AA016688, Kolls (PI) 9/30/2006-8/31/2011 1.44 calendar NIH/NIAAA \$210,000 (current annual direct cost budget)

"Alcohol, ROS, and Macrophage Epigenetics"

R01-AI070672, Peebles (PI), Kolls (consultant) 8/1/2007-7/31/2012

NIH/NIAID \$29,364 (current annual direct cost budget)

"The Role of IL-17 in RSV-induced Mucus and Airway Responsiveness"

R01-HL062052 (ARRA Student Supplement) 6/1/2009-8/31/2010

NIH/NHLBI \$6,850 (current direct cost budget)

"CD8 T-CELLS AND Host Defense against P. carinii Pneumonia"

R01-HL079142 (ARRA Student Supplement) 7/1/2009 – 11/30/2010

NIH/NHLBI \$6,850 (current direct cost budget)

"IL-23/IL-17 and Lung Host Defense"

R01-AA016688 (ARRA Student Supplement) 7/1/2009 - 8/31/2011

NIH/NIAAA \$6,850 (current direct cost budget)

"Alcohol, ROS, and Macrophage Epigenetics"

2P60AA009803-17, Nelson (PI) 12/1/2009-11/30/2014 1.2 calendar NIH/NIAAA \$98,657 (current annual direct cost budget)

"Alcohol, HIV Infection and Host Defense"

"The W.M. Keck Center for lung Mucosal Immunology"

LEQSF(2010-11)-ENH-TR-14 06/1/2010-06/30/2011

BoR \$170,000 (direct cost budget)

"The Southeast Louisiana shRNA Screening Facility"

B. Submitted

NHLBI – R01 "T-cells and P carinii Pneumonia (renewal)"

12/1/2010-11/30/2015 \$2,073,217

NIH (Tulane) – R01 Supplement "Nlrp3 inflammasome suppression by cigarette smoke"

6/1/2010-5/31/2012 \$127,800

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NIH – RC4 "Respiratory Microbiota and Mucosal Immunity"

9/30/2010-9/29/2013 \$5,256,604

NIH – R21 "Novel Macrolide Th17 Inhibitors"

7/1/2010-6/30/2012 \$394,733

The W.M. Keck Center for Lung

Mucosal Immunology

7/1/2010-6/30/2013 \$995,486

Bill and Melinda Gates Foundation "Create new ways to induce and measure mucosal

Immunity"

4/1/2010-3/31/2011 \$100,000

American Asthma Foundation "Th17 cytokines and steroid resistant asthma"

7/1/2010-6/30/2013 \$750,000

NIH (Vanderbilt) – R21 "The role of IL-13 in regulating TH17 cytokine

production"

12/1/2010-11/30/2012 \$37,716

NIH – R01 "Th17 Cells, COPD, and Ocogenesis in the Lung"

4/1/2011-3/31/2015 \$2,840,200

Board of Regents "The Southeast Louisiana shRNA Screening Facility"

06/01/10-06/30/11 \$170,000

Dr. Crabtree:

A. Submitted

NIH-R21 "DES-Responsive Epigenetic alterations in uterine

Leiomyoma"

\$275,000 total direct costs 7/1/10-6/30/12

BoR-RCS "Epigenetic alterations in uterine leiomyoma"

\$160,681 total direct costs 6/1/10-6/30/13

"Epigenetic alterations in uterine leiomyoma" NIH-R21

7/1/10-6/30/12 \$275,000 total direct costs

Dr. Grabczyk:

A. Funded

R01-R01NS046567, Grabczyk (PI) 9/1/2005-7/31/2010 6 calendar NIH/NINDS \$153,487 (current annual direct cost budget)

"Mechanisms contributing to frataxin deficiency"

R01-R01NS046567 (Supplement), Grabczyk (PI) 8/1/2008-7/31/2010

NIH/NINDS \$7,042 (direct cost budget)

"Mechanisms contributing to frataxin deficiency"

R01-R01NS046567 (ARRA Student Supplement) 7/21/2009-7/31/2010

NIH/NINDS \$6,850 (direct cost budget)

"Mechanisms contributing to frataxin deficiency"

Freidreich's Ataxia Research Alliance 2 4 calendar 11/1/2009-10/30/2010

"Transcription-coupled GAA-TTC expansion

in human cells" \$102,416 (direct cost budget)

B. Submitted

"Mechanisms contributing to frataxin defeciencey" NIH – ARRA Supplement

04/01/2010 - 03/31/2015\$76,743

"The Role of Antisense Transcripts in Autosomal Department of Defense

Dominant Polycystic Kidney Disease"

\$106,500 9/30/2010-9/29/2011

Pennington Biomedical Research Ctr

"Frataxin expression and adipocyte function"

07/01/2010-06/30/2011 \$35,000 Freidreich's Ataxia Research Alliance

11/1/2009-10/30/2010

"Transcription-coupled GAA-TTC expansion

in human cells" \$102,416

Dr. Gregory:

A. Funded

LESQF(2007-12)-ENH-PKSFI-PRS, Ramsay (Co-I) 07/01

07/01/2007-06/30/2012

1.2 calendar

BOR \$5,500,000 (total direct costs)

"Center of Excellence for Vaccine Development"

RC/EEP-06(2007-10), Nelson (Co-I)

09/01/2007-07/31/2010

3.6 calendar

BOR

\$5,900,000 (total direct costs)

5.6 Calendar

"Clinical and Translational Research Education"

B. Submitted

NIH (Pennington) 7/1/2010-6/30/2015

"Genetic Obesity Testing Intervention Trial"

\$137,999

NIH – T35

"LSUHSC Summer Internship Program"

12/1/10-11/30/15 \$107,150

Dr. Hollenbach:

A. Funded:

1 R01 CA138656, Hollenbach (PI)

06/01/2009 - 03/31/2014

6 calendar

NIH/NCI

\$1,037,500 (current direct cost budget)

"Mechanism of regulation for the oncogenic Pax3-FOXO1 in Alveolar Rhabdomyosarcoma"

B. Submitted

NIH – R21

"Apoptosis vs. survival: FOX01-dependent gene

expression in hepatic cell fate"

4/1/11-3/31/13

\$390,500

Dr. Iwakuma:

A. Funded

1 R01 CA132603-01 (Morris, Shan, Sullivan) (Co-investigator)

05/01/2008 - 4/30/2013

0.6 calendar

NIH/NCI

\$ 22,535 (current direct cost budget)

"Mechanisms of Lung Carcinogenesis Induced by Asbestos and Cigarette Smoke"

ACS RSG-09-169-01-CSM (Iwakuma) 06/01/2009 - 05/31/2013 4.8 calendar American Cancer Society \$720,000 (current direct cost budget)

"Uncovering the mechanisms of osteosarcoma metastasis suppression by MTBP"

P20 RR020152-02 (Deininger) (Project PI) 07/01/2009 – 6/30/2012 1.2 calendar NIH/GM \$100,000 (current direct cost budget)

"Regulation of the mitotic checkpoint by MTBP"

B. Submitted

NIH – R21 "Targeting gain-of-function mutant p53 in 12/1/10 – 11/30/12 osteosarcoma using siRNA nano-particles"

\$408,135

Dr. Liu:

A. Funded (Awarded to Stanley S. Scott Cancer Center, LSUHSC)

R01 CA115555-1, Liu 09/29/2007 – 08/28/2011 2.4 calendar

NIH/NCI \$227,662 annual direct costs

"DNA Damage-Response Defects in Prostate Cancer Risk"

CA11555-02S1(ARRA Student Supplement) 06/01/2009 – 09/30/2010

NIH/NCI \$9,352 total direct costs

"DNA Damage-Response Defects in Prostate Cancer Risk"

CA11555-03S1(ARRA Postdoc Supplement) 11/30/2009-09/29/2011

NIH/NCI \$74,033 total direct costs

"DNA Damage-Response Defects in Prostate Cancer Risk"

5P20RR020152, Deininger (Co-I) 08/01/09 – 07/31/2014 1.2 calendar

NIH/GM \$18,216 annual direct costs

"Mentoring a Cancer Genetics Program in Louisiana"

ACS RSG-09-169-01-CSM (Iwakuma) 06/01/2009 – 05/31/2013 0.36 calendar

American Cancer Society \$150,000 annual direct cost

"Uncovering the mechanisms of osteosarcoma metastasis suppression by MTBP"

Dr. Mandal:

A. Funded

N01-HG-65404, Mandal (PI) 10/13/97-09/30/11 3.6 calendar NIH \$666,605 (current direct cost budget)

"Determination of Genetic Susceptibility to Lung Cancer in Families from Southern Louisiana"

R01-HD050559, Mandal (PI) 04/01/06-03/31/11 1.2 calendar

NIH \$55,189 (current direct cost budget)

"SNP analysis of Endometriosis Candidate Genes"

U01-CA076293, Anderson (PI) 09/01/06-08/31/10 .36 calendar

NIH \$25,321 (current direct cost budget)

"Genetic Epidemiology of Lung Cancer"

Louisiana Cancer Research Consortium, Mandal (PI) 09/29/08-08/30/10

LCRC \$40,000 (current direct cost budget)

"Copy number variation in high-risk African-American men with prostate cancer"

U01-CA076293, Anderson (PI) 9/30/09-9/29/11

NIH (Cincinnati) – ARR Admin Supplement \$117,351 (direct cost budget)

"Genetic Epidemiology of Lung Cancer"

B. Submitted

BoR "Graduate Training in Molecular Biology, Genetic Control

of Inflammation and Cancer"

06/01/2011 - 05/31/2015 \$200,000 total direct costs

Dr. Moreno-Walton:

A. Funded

R01-AA016688-05S1, Kolls (PI) 9/30/2006-8/31/2011 9 calendar NIH/NIAAA (Diversity Supplement) \$87,917 (current annual direct cost budget)

"Alcohol, ROS, and Macrophage Epigenetics"

Dr. Nguyen:

A. Funded (Awarded to Gene Therapy Program, LSUHSC)

2P20RR016456 SUB1433 (Project Leader) 05/01/2006 – 04/30/2010 6 calendar

NIH \$259,934 direct costs

"Lacrimal gland bioinformatics: a neural connection of dry eye and aging"

DOD - W81XWH-08-1-0676, Martin (Co-I) 09/02/2008 - 10/01/2011 1.8 calendar

DoD \$19,261 annual direct costs

"Bioinformatics and Biotechnology Research Initiatives"

B. Submitted

DoD (Ochsner) "Experimental strategies to promote nerve

regeneration after chronic injuries: Roles of cytokines, growth factors and the effects of

electrical stimulation"

7/1/10 - 6/30/13 \$115,969 total direct costs

NIH/NINDS (Ochsner) "Mechanisms and experimental treatments of

chronic nerve injuries"

4/1/11 - 3/31/15 \$292,646 total direct costs

NIH-R21 "Genomics of newly-formed accessory lacrimal

glands"

4/1/11 - 3/31/13 \$275,000 total direct costs

Dr. Pandey:

A. Funded

07/01/10 - 6/30/12 3 calendar

Robert Packard Center for ALS Research at Johns Hopkins "A drosophila model to investigate the role of FUS in ALS"

07/01/09 - 12/31/09

1.8 calendar

Muscular Dystrophy Association (MDA)

\$20,455 annual direct costs

"The role of histone deacetylase 6 in spinal and bulbar muscular dystrophy (SBMA)"

B. Submitted

NIH-R21 "An in vivo screen for drugs that protect agains

neurodegeneration"

4/1/10 - 3/31/11 \$275,000 total direct costs

MDA "The role of HSP90 disruption in a drosophila

model of SBMA"

1/1/10-12/31/13 \$272,727 total direct costs

NIH-R01 "Understanding the role of HDCA6 in

neurodegenerative diseases"

4/1/10 - 3/31/15 \$1,250,000 total direct costs

Kennedy's Disease Association "An in vivo drug screen for compounds that protect

against spinal and bulbar muscular atrophy

(SBMA)"

12/10/09-12/09/10 \$23,809

BoR – Pfund "Evaluating the role of HDAC6 in

neurodegeneration"

1/1/10 - 9/30/10 \$10,000 total direct costs

NIH-DP2 "Novel approaches for developing therapeutics

interventions for neurodegeneration"

9/30/10 - 7/31/15 \$1,500,000 total direct costs

BoR-RCS "The role of HDAC6 in age related

neurodegeneration"

6/1/10 - 6/30/13 \$275,000 total direct costs

NIH-R01 Resubmission "Understanding the role of HDCA6 in

neurodegenerative diseases"

7/1/10 - 6/30/15 \$1,250,000 total direct costs

Robert Packard Center for ALS Research at Johns Hopkins

"A drosophila model to investigate the role of FUS

in ALS"

07/01/10 - 6/30/12 \$170,000 total direct costs

NIH-R21 (resubmission) "An in vivo screen for drugs that protect agains

neurodegeneration"

7/1/10 - 6/30/12 \$275,000 total direct costs

Dr. Pociask

A. Funded

LEQSF(2010-13)-RD-A-07 06/01/10 - 06/30/13 3 calendar

BoR – RCS \$29,452 annual direct costs "Gamma delta T cells are integrl mediators of interstitial pulmonary fibrosis"

B. Submitted

NIH-R21 (Pittsburgh) "Influenza A Potentiates the Pulmonary Fibrotic

Response"

7/1/10 - 6/30/12 \$137,500 total direct costs

American Lung Association "Gamma delta T cell promote pulmonar epithelial

wound healing through IL-17 and IL-22 induction

of Lipocalin-2"

7/1/10 - 6/30/12 \$80,000 total direct costs

BoR-RCS "Gamma delta T cells are integrl mediators of

interstitial pulmonary fibrosis"

06/01/10 - 06/30/13 \$88.356 total direct costs

Dr. Tsien:

A. Funded

Patrick F. Taylor Fdtn 08/01/2007 – 07/31/2009 3.6 calendar \$328,704 (current direct cost budget)

"Medical research opportunities for the Patrick F. Taylor Science and Technology Academy and Taylor Opportunity Program for Students (TOPS)"

B. Submitted

Patrick F. Taylor Foundation "Louisiana Genetics Education center interactive

website for high school students and teachers"

8/1/10-7/31/12 \$60,000 total direct costs

Reily Foundation "Louisiana Genetics Education center interactive

website for high school students and teachers"

8/1/10-7/31/12 \$60,000 total direct costs

Dr. Zheng:

A. Funded

Pennington Biomedical Research Ctr 07/01/2009 – 06/30/2010

"CD4-Independent DNA Vaccinations Against Influenza" \$30,000 (direct costs budget)

Other Academic Activities and Achievements

Dr. Kolls:

- Section Editor, Journal of Immunology
- Consulting Editor, Journal of Clinical Investigation

Dr. Crabtree

- Committee on Women's Affairs
- Judge for LSUHSC Graduate Research Day
- Treasurer for South Louisiana AWIS Chapter
- Ad Hoc reviewer FEBS Letters
- Reviewer and grader for PhD student qualify exam in our department in 2010
- Member, Louisiana Cancer Research Consortium
- Member, Stanley S. Scott Cancer Center

Dr. Gregory:

- Coordinated summer research internships for med students, undergrads and high school students
- Coordinated LSU medical student (5 students) participation in National Student Research Forum competition
- Participated in AAMC Faculty Forward workshop with other faculty development professionals
- Analyzed and summarized Faculty Forward survey data; presented data to five SoM departments
- Started New Faculty Receptions (fall and spring) and online orientation
- Revised the Tulane (CTRECP) MS in Clinical Research curriculum, creating three new courses
- Mentored 3 junior faculty MSCR scholars; 2 have been promoted, 1 has submitted a K23
- Revised Genetics Curriculum which has been moved into Medical Biochemistry
- Conducted hands on DNA experiments with 7 high schools (4 new schools)
- Created and field-tested new DNA activity supported by NSF-funded GENA program with Haynes Academy
- Submitted Education Component of CTSA grant application
- Worked with the SoM Women's Affairs Committee to coordinate a variety of activities for women faculty, including: "Moms in Science", Translational Research Mixer
- Started LSU AWIS chapter
- Organized a variety of faculty development programs via the First Tuesday sessions
- Created Master of Science in Pathology Translational Track will be the Director of this program
- Created first week-long "DNA Camp" for high school students on the northshore (MHS)
- Organized a Post Doctoral Fellows group for career development and mentoring

Dr. Hollenbach:

- Co-organizer of the Department of Genetics seminar series
- Director The Department of Genetics Second Year Qualifying Exam
- Member The Department of Genetics Curriculum Committee
- Member The Department of Genetics Graduate Student Oversight Committee
- Member and Chair School of Medicine Committee for Improving Communications
- Head editor Newly formed School of Medicine Newsletter
- Member The Graduate Faculty of the LSUHSC School of Graduate Studies
- Member The Interdisciplinary Program Graduate School Curriculum Committee
- Member The Graduate School Recruitment Committee
- Ad hoc Reviewer Nucleic Acids Research
- Ad hoc Reviewer International Journal of Biochemistry and Cell Biology
- Ad hoc Reviewer Journal of Molecular Biology
- Grant Reviewer James and Esther King Biomedical Research Program
- Grant Reviewer Bankhead-Coley Florida Cancer Research Program
- Mentor St. Martin's Episcopal School Professional Shadow Day (Bruce Bonner and Paul Alvendia)

Dr. Iwakuma:

- 2009: Serve as a Genetic Curriculum Committee
- 2009: Serve as a Student Progress Oversight Committee
- January 18, 2010, The Graduate Research Day/Chancellor's Award.
- March 27, 2010; Research achievement award, LCRC Retreat.
- Serve as a judge for the LSUHSC Medical Student Summer Research Symposium on July 31, 2009.
- Serve as a Judge for LSUHSC Research Day, November 6, 2009.
- Invited Dr. Terry Van Dyke for the LCRC invited speaker series on January 21, 2010.
- Served on committees for the Ph.D. defense of Kevin Dietz in the Department of Genetics (March 2010).
- Served on committees for the Ph.D. qualifying examination of Aditi S Iyengar in the Department of Genetics (2010).
- Graduate faculty associate membership
- Committee for International Travel
- The Graduate Research Day/Chancellor's Award.
- Research achievement award, LCRC Retreat.
- Judge for the LSUHSC Medical Student Summer Research Symposium on July 31, 2009.
- Judge for LSUHSC Research Day, November 6, 2009.
- Interviewed by Kyushu University School of Medicine at the section of introduction of researchers studying abroad.
- Journal review for BMC Medical Genetics, Cell Cycle, Clinical & Experimental Metastasis (3 manuscripts), Molecular Cancer (2 manuscripts), Frontiers in Bioscience, Histochemistry and Cell Biology, BMC Cancer.
- Grant review for DOD Breast Cancer Training Grant and Idea Grant.

Dr. Liu:

- LCRC Tissue Utilization Review Committee (TURC).
- Junior faculty mentoring committee in LSU Cancer Center
- Faculty search committee in Department of Genetics
- LSU faculty development and evaluation committee
- LCRC Seed Fund Review Committee
- Tulane COBRE mentoring committee
- Served as a judge for the 2009 research day in LSUHSC
- Reviewer and grader for PhD student qualify exam in our department in 2010

Dr. Mandal:

- Graduate Student Coordinator, Department of Genetics, LSUHSC
- Chair, Graduate Admission Committee, Department of Genetics
- Member, Emergency Policy Guide Committee
- Chair, Promotion & Tenure Committee, Department of Genetics
- Chair, Graduate Student Oversight Committee, Department of Genetics
- Chair, Curriculum Committee, Department of Genetics
- Member, Graduate Advisory Council, LSUHSC
- Member, Council on Professional Conduct, LSUHSC
- Chair, Curriculum Committee, Graduate School, LSUHSC
- Member, Ethical, Legal and Social Issues (ELSI) Committee, International Genetic Epidemiology Society
- Summer Mentor, Summer Cancer Research Internship Program, Louisiana Cancer Research Consortium of New Orleans
- IDP and MD/PhD Tour Coordinator, Department of Genetics
- Judge, LSUHSC graduate School Research Day
- Judge, DNA day essay contest by American Society of Human Genetics
- Grant Reviewer, ARRA Research and Research Infrastructure, NCI (2009)
- Grant Reviewer, SPORE, NCI (2010)

Dr. Pandey

- Appointed as an editorial board member of "Journal of Biotech Research"
- Nominated as a member of "Council on Professional Conduct committee" at LSUHSC
- Served as a Judge for the Graduate Research Day held at Dental School, LSUHSC Nov 2009
- Served as a reviewer for the Department of Genetics Graduate student's qualifying exams
- Served as a volunteer for organizing a scientific demo for the 4th graders from Banneker Elementary School

Dr. Tsien:

- Co-director, Department of Genetics Seminar Series
- Co-director, LVC/LCRC/LGTC/ Taylor Summer Internship Program
- Education facilitator, Louisiana Vaccine Center

- Editor, Center for Acadiana Genetics and Hereditary Health Care
- Judge, Greater New Orleans Science and Engineering Fair
- Executive producer, LSUHSC/Taylor Foundation educational video, "The Cell", 2010
- Executive producer, LSUHSC/Taylor Foundation educational video, "Down syndrome", 2010
- Executive producer, LSUHSC/Taylor Foundation educational video, "Forensics", 2010

Dr. Moreno-Walton:

- Promoted to the rank of Associate Professor in Emergency, May 2010
- Academic Life in Emergency Medicine", a blogspot on the Clerkship Directors in Emergency Medicine's website, posted an interview with Dr. Moreno on October 12, 2009.
- Served as Expert Abstract Reviewer, Society for Academic Emergency Medicine Scientific Assembly, December 2009.
- First Prize Clinical Research- Medicine Research Day, Louisiana State University Health Sciences
- Center- New Orleans, January 2010
- Served as Abstract Reviewer, LSU School of Medicine Department of Medicine Research Day, December 2009.
- Invited to join the editorial board of Manuscript Reviewer, Western Journal of Emergency Medicine as Trauma Reviewer, May 2010.
- Member, Council of Residency Directors in Emergency Medicine Academic Assembly Planning Committee, November 2007- present.
- Chairman, Research Grants Committee, Council of Residency Directors in Emergency, August 2008 to present.
- Member, Efficacy in Training Committee, Council of Residency Directors in Emergency Medicine, October 2008-present.
- Member, CORD Academy for Scholarship in Education Research Committee, November 2008- present.
 - Member, Trauma Committee, Medical Center of Louisiana, New Orleans, February 2009-present.
- Member, Academic Affairs Committee, American Academy of Emergency Medicine, April 2009-present.
- Member, American Board of Emergency Medicine Certification White Paper Task Force, American Academy of Emergency Medicine, April 2009-present.
- Chair, Diversity Interest Group of Society for Academic Emergency Medicine, May 2009 to present.
- Member, Task Force on Aging and Generational Issues in Academic Emergency Medicine, Society for Academic Emergency Medicine, May 2009-present.
- Developed an Educational Research Grant Application and a Grant Application Scoring Tool for the Council of Residency Directors in Emergency Medicine, October 2009.
- Judge, Medicine Research Day, Louisiana State University Health Sciences Center, January 2010.
- Facilitator, Round Table Discussion: "Are You a Mentor or a Mentee?" CORD Academic Assembly, Orlando FL, March 2010.

- Faculty participant: "Speed 'Dating' with the Residency Directors", a program for students to learn more about EM residency programs through brief interviews with program directors; SAEM Western Regional Research Forum, Sonoma CA, March 2010.
- Facilitator, Round Table Discussion: "How to Get Into an EM Residency Program: Lunch with the Program Directors", SAEM Southeastern Regional Research Meeting, Birmingham AL, April 2010.
- Faculty Discussant: "A Guide to EM Fellowships" Panel Discussion at SAEM Southeastern Regional Research Meeting, Birmingham AL, April 2010.
- Judge, Clinical Pathological Correlation Competition of the Council of Residency Directors in Emergency Medicine, Phoenix AZ, June 2010.
- Member, Education Committee, American Association of Emergency Medicine, May 2010-present. School of Medicine: Weekly Didactic Conference for Emergency Medicine Residents Developed a conference curriculum based on topic modules in accordance with percent emphasis on the Board exam and meeting all learning requirements of the ACGME. Emphasis is on interactive learning, with ultrasound and simulation workshops, procedure labs, clinical guidelines, administrative issues, and research seminars that are related to the topic module being presented each month. Residents take an active role in presenting interactive learning modules. (July 2009)
- School of Medicine: Weekly Didactic Conference for Emergency Medicine Residents Design, implement and supervise the Weekly Didactic Conference for Residents in Emergency Medicine, which includes didactic/ power point lectures, Oral Board labs, simulation labs, cadaver labs and ultrasound workshops.
- School of Medicine: Asynchronous Learning Modules for Emergency Medicine
 Residents in accordance with ACGME requirements, design fifty two hours a year of
 asynchronous on-line and individual tutorial learning activities for emergency medicine
 residents, evaluate the learning efficacy of the exercises and grade the residents'
 performance
- Tutorials in Scholarly Project: Individual consultation with each of 47 EM and EM/IM
 residents on the design and completion of their ACGME required scholarly project. This
 includes instruction on how to do a literature search, study design, protocol writing, data
 analysis, and understanding the limitations of studies and implications for future
 investigation.
- Journal Club: Evaluation of articles for monthly journal club and instruction on how to interpret and evaluate a scientific article

Dr. Zheng:

- Associate Faculty Member, School of Graduate Studies, LSU Health Sciences Center-NO
- Faculty Member, Stanley S. Scott Cancer Center, LSU Health Sciences Center-NO

Professional Affiliations

Jay K. Kolls, M.D.

- Southern Medical Association
- American Thoracic Society
- American Society of Microbiology
- American Society of Gene Therapy
- American Society of Clinical Investigation
- American Association of Physicians

Judy Crabtree, Ph.D.

- The Endocrine Society
- American Society of Human Genetics

Edward Grabczyk, Ph.D.

- American Association for the Advancement of Science
- American Society for Biochemistry & Molecular Biology

Paula Gregory, Ph.D.

- American Society for Human Genetics
- Information & Education Committee
- American Society for Gene Therapy
- American Association for Cancer Education

Andrew Hollenbach, Ph.D.

• The American Society for Biochemistry and Molecular Biology

Tomoo Iwakuma, Ph.D.

- Japanese Orthopedics Society
- American Association for Cancer Research (member number 88899)
- Metastasis Research Society

Wanguo Liu, Ph.D.

- American Society of Human Genetics
- American Association of Cancer Research

Diptasri Mandal, Ph.D.

- The American Society of Human Genetics
- The International Genetic Epidemiology Society

Lisa Moreno-Walton, M.D.

- Society of Academic Emergency Medicine
- American College of Emergency Physicians
- American Academy of Emergency Medicine

- National Hispanic Medical Association
- Conference of Residency Directors in Emergency Medicine
- Louisiana Chapter, American Academy of Emergency Medicine

Doan Nguyen, Ph.D.

- Association for Research in Vision and Ophthalmology
- Tear Film and Ocular Surface
- International Society for Computational Biology

Derek Pociask, Ph.D.

• American Thoracic Society

Fern Tsien, Ph.D.

- DNA Methylation Society
- LSUHSC Stanley S. Scott Cancer Center
- American Society of Human Genetics
- Center for Acadiana Genetics and Hereditary Health Care
- Greater New Orleans Science and Engineering
- Louisiana Vaccine Center

Mingquan Zheng, Ph.D.

- American Thoracic Society
- American Society of Gene Therapy

Publications

Dr. Kolls:

- 1. Gomez M, Raju SV, Viswanathan A, Painter RG, Bonvillain R, Byrne P, Nguyen DH, Bagby GJ, **Kolls JK**, Nelson S, Wang G. Ethanol upregulates glucocorticoid-induced leucine zipper expression and modulates cellular inflammatory responses in lung epithelial cells. J Immunol. 2010 May 15;184(10):5715-22. Epub 2010 Apr 9.
- 2. Smith E, Prasad KM, Butcher M, Dobrian A, <u>Kolls JK</u>, Ley K, Galkina E. Blockade of interleukin-17A results in reduced atherosclerosis in apolipoprotein E-deficient mice. Circulation. 2010 Apr 20;121(15):1746-55. Epub 2010 Apr 5.
- 3. IL-17 is essential for host defense against cutaneous Staphylococcus aureus infection in mice. Cho JS, Pietras EM, Garcia NC, Ramos RI, Farzam DM, Monroe HR, Magorien JE, Blauvelt A, **Kolls JK**, Cheung AL, Cheng G, Modlin RL, Miller LS. J Clin Invest. 2010 May 3;120(5):1762-73. doi: 10.1172/JCI40891. Epub 2010 Apr 1.
- 4. Empey KM, Peebles RS Jr, <u>Kolls JK</u>. Pharmacologic advances in the treatment and prevention of respiratory syncytial virus. Clin Infect Dis. 2010 May 1;50(9):1258-67. Review.
- 5. Shahrara S, Pickens SR, Mandelin AM 2nd, Karpus WJ, Huang Q, **Kolls JK**, Pope RM. IL-17-mediated monocyte migration occurs partially through CC chemokine ligand 2/monocyte chemoattractant protein-1 induction. J Immunol. 2010 Apr 15;184(8):4479-87. Epub 2010 Mar 12.
- 6. **Kolls JK.** Th17 cells in mucosal immunity and tissue inflammation. Semin Immunopathol. 2010 Mar;32(1):1-2. Epub 2010 Feb 25.
- 7. Pickens SR, Volin MV, Mandelin AM 2nd, <u>Kolls JK</u>, Pope RM, Shahrara S. IL-17 contributes to angiogenesis in rheumatoid arthritis. J Immunol. 2010 Mar 15;184(6):3233-41. Epub 2010 Feb 19.
- 8. Alcorn JF, Crowe CR, **Kolls JK**. TH17 cells in asthma and COPD. Annu Rev Physiol. 2010 Mar 17;72:495-516.
- 9. Stark JM, Barmada MM, Winterberg AV, Majumber N, Gibbons WJ Jr, Stark MA, Sartor MA, Medvedovic M, <u>Kolls J</u>, Bein K, Mailaparambil B, Krueger M, Heinzmann A, Leikauf GD, Prows DR. Genomewide association analysis of respiratory syncytial virus infection in mice. J Virol. 2010 Mar;84(5):2257-69. Epub 2009 Dec 16.
- 10. Meeks KD, Sieve AN, **Kolls JK**, Ghilardi N, Berg RE.IL-23 is required for protection against systemic infection with Listeria monocytogenes. J Immunol. 2009 Dec 15;183(12):8026-34. Epub.

- 11. Alcorn JF, Ckless K, Brown AL, Guala AS, **Kolls JK**, Poynter ME, Irvin CG, van der Vliet A, Janssen-Heininger YM.Strain-dependent activation of NF-kappaB in the airway epithelium and its role in allergic airway inflammation. Am J Physiol Lung Cell Mol Physiol. 2010 Jan;298(1):L57-66. Epub 2009 Nov 6.
- 12. Lin Y, Ritchea S, Logar A, Slight S, Messmer M, Rangel-Moreno J, Guglani L, Alcorn JF, Strawbridge H, Park SM, Onishi R, Nyugen N, Walter MJ, Pociask D, Randall TD, Gaffen SL, Iwakura Y, **Kolls JK**, Khader SA. Interleukin-17 is required for T helper 1 cell immunity and host resistance to the intracellular pathogen Francisella tularensis. Immunity. 2009 Nov 20;31(5):799-810. Epub 2009 Oct 22.
- 13. Crowe CR, Chen K, Pociask DA, Alcorn JF, Krivich C, Enelow RI, Ross TM, Witztum JL, **Kolls JK**. Critical role of IL-17RA in immunopathology of influenza infection. J Immunol. 2009 Oct 15;183(8):5301-10. Epub 2009 Sep 25.
- 14. Morris A, Alexander T, Radhi S, Lucht L, Sciurba FC, **Kolls JK**, Srivastava R, Steele C, Norris KA. Airway obstruction is increased in pneumocystis-colonized human immunodeficiency virus-infected outpatients. J Clin Microbiol. 2009 Nov;47(11):3773-6. Epub 2009 Sep 16.
- 15. Zhou X, Chen Q, Moore J, **Kolls JK**, Halperin S, Wang J. Critical role of the interleukin-17/interleukin-17 receptor axis in regulating host susceptibility to respiratory infection with Chlamydia species. Infect Immun. 2009 Nov;77(11):5059-70. Epub 2009 Sep 8.
- 16. Wilson RH, Whitehead GS, Nakano H, Free ME, **Kolls JK**, Cook DN. Allergic sensitization through the airway primes Th17-dependent neutrophilia and airway hyperresponsiveness. Am J Respir Crit Care Med. 2009 Oct 15;180(8):720-30. Epub 2009 Aug 6.

Dr. Crabtree:

- 1. A.S. McCampbell, H.A. Harris, <u>J.S. Crabtree</u>, R.C. Winneker, C.L. Walker and R.R. Broaddus. Loss of inhibitory IRS-1 phosphorylation is an early event in mTOR-dependent growth of endometrial hyperplasia. Cancer Prevention Research 3(3): 290-300 (2010).
- 2. <u>J.S. Crabtree</u>*, Edward J. Kilbourne*, Bryan J. Peano, Sue Chippari, Thomas Kenney, Christopher McNalley, Wei Wang, Heather A. Harris, Richard C. Winneker, Sunil Nagpal and Catherine C. Thompson. A mouse model of androgenetic alopecia. Endocrinology 151: 2373-2380 (2010).

Dr. Grabczyk:

1. Banerjee, A., Sammarco, M. C., Ditch, S., and <u>Grabczyk, E</u>. (2009) A dual reporter approach to quantify defects in mRNA processing. Analytical Biochemistry, 395, 237-243.

- 2. Ditch, S., Sammarco, M. C., Banerjee, A. and <u>Grabczyk, E.</u> (2009) Progressive GAA•TTC repeat expansion in human cell lines. PLoS Genet 5, e1000704.
- 3. Mancuso, M., Sammarco, M.C., and <u>Grabczyk, E.</u> (2010). Transposon Tn7 Preferentially Inserts into GAA•TTC Triplet Repeats under Conditions Conducive to Y•R•Y Triplex Formation. PLoS One 5, e11121.

Dr. Hollenbach:

- 1. Dietz, K. N., Miller P. J., and <u>Hollenbach, A</u>. D., "Phosphorylation of Serine 205 by the protein kinase CK2 persists on Pax3-FOXO1, but not Pax3, throughout early myogenic differentiation." (2009) *Biochemistry* 48:11786-11795.
- 2. Sidhu, A., Miller, P. J., and <u>Hollenbach, A</u>. D., "Isolation of putative FOXO1 genomic elements using an improved in vitro technique to isolate genomic regulatory sequences." (2010) *Gene* 458 (1-2): 45-53.
- 3. Sidhu, A., Miller, P. J., and <u>Hollenbach, A.</u> D., "The *in vitro* PORE: An Improved Technique to Pull Out Regulatory Elements." (2010) *eLucidations* (in press). (NOTE: This publication is the Lucigen, Corp. newsletter that is mailed to customers and distributed at scientific meetings and trade shows.)

Dr. Iwakuma:

- 1. Odvody J, Vincent T, Arrate MP, Grieb B, Wang S, Garriga J, Lozano G, <u>Iwakuma T</u>, Haines DS, Eischen CM. A deficiency in Mdm2 binding protein inhibits Myc-induced B-cell proliferation and lymphomagenesis. Oncogene 2010 Mar 22. PMID: 20305689
- 2. Adhikari A, Agarwal N, Wood BM, Pochampally RR, Constance P, and <u>Iwakuma T*.</u> CD117 and Stro-1 identify osteosarcoma tumor-initiating cells associated with metastasis and drug resistance. **Cancer Research 2010**, 70(11): 4602-4612. PMID: 20460510. **Corresponding author.
- 3. Adhikari AS, Agarwal N, and <u>Iwakuma T</u>*. Metastatic potential of Tumor-Initiating Cells in Solid Tumors. **Frontiers in Bioscience**. Invited review. Under revision. *Corresponding author.

Dr. Liu:

- 1. Guo J, Cagatay T, Zhou G, Chan CC, Blythe S, Suyama K, Zheng L, Pan KF, Qian C, Hamelin R, Thibodeau SN, Klein P, Wharton K, and <u>Liu W</u>. Mutations in the human naked cuticle homolog NKD1 found in colorectal cancer alter Wnt/Dvl/b-catenin signaling. *PLoS ONE* 2009, 4(11):e7982.
- Zhang J, Zhao D, Park HP, Wang H, Wang L, Dyer RB, <u>Liu W</u>, Klee GG, Thibodeau SN, McNiven MA, Tindall DJ, Molina JR, and Fei P. FAVL Elevation Disrupts Fanconi Anemia Pathway Signaling and Promotes Genomic Instability and Tumor Growth. <u>J Clin Invest</u> 2010, 120(5):1524-34.

Dr. Mandal:

- Y. Liu, P. Liu, W. Wen, M. A. James, Y. Wang, J. E. Bailey-Wilson, C. I. Amos, S. M. Pinney, P. Yang, M. de Andrade, G. M. Petersen, J. S. Wiest, P. R. Fain, A. G. Schwartz, A. Gazdar, C. Gaba, H. Rothschild, <u>D. M. Mandal</u>, E. Kupert, J. Lee, D. Seminara, J. Minna, M. W. Anderson, and M. You. Haplotype and Cell Proliferation Analyses of Candidate Lung Cancer Susceptibility Genes on Chromosome 15q24-25.1. Cancer Research. 2009. 69:7844-50.
- 2. P. Liu, H.G. Vikis, D. Wang, Y. Lu, A.G. Schwartz, S.M. Pinney, P. Yang, M. de Andrade, A. Gazdar, C. Gaba, **D.M. Mandal**, J. Lee, E. Kupert, D. Seminara, J. Minna, J.E. Bailey-Wilson, C.I. Amos, M.W. Anderson, M. You. Cumulative Effect of Multiple Loci on Genetic Susceptibility to Familial Lung Cancer. Cancer Epidemiology, Biomarkers, & Prevention. 2010. 19:517-24.
- 3. P. Liu, P. Yang, X. Wu, H. G. Vikis, Y. Lu, Y. Wang, A. G. Schwartz, S. M. Pinney, M. de Andrade, A. Gazdar, C.Gaba, **D. M. Mandal**, J. Lee, E. Kupert, D. Seminara, J. Minna, J. E. Bailey-Wilson, M. Spitz, C. I. Amos, M. W. Anderson, and M. You. **A** Second Genetic Variant on Chromosome 15q24-25.1 Associates with Lung Cancer. Cancer Research. 2010. 70:3128-35.
- C.I. Amos, S.M. Pinney, Y. Li, E. Kupert, J. Lee, M.A. de Andrade, P. Yang, A.G. Schwartz, P.R. Fain, A. Gazdar, J. Minna, J.S. Wiest, D. Zeng, H. Rothschild, <u>D. M. Mandal</u>, M. You, T. Coons, C. Gaba, J.E. Bailey-Wilson, M.W. Anderson. A susceptibility locus on chromosome 6q greatly increases lung cancer risk among light and never smokers. Cancer Research. 2010. 70:2359-67.

Dr. Pandey:

- Lee JY, Koga H, Kawaguchi Y, Tang W, Wong E, Gao YS, <u>Pandey UB</u>, Kaushik S, Tresse E, Lu J, Taylor JP, Cuervo AM and Yao TP. HDAC6 controls autophagosomelysosome fusion in basal homeostatic autophagy critical for protein aggregate clearance and neurodegeneration, EMBO J Jan 2010 "This paper was selected for the "Editor's Choice" in Science Feb 5th, 2010 issue"
- **2.** Batlevi Y, Simon C, <u>Pandey UB</u>, Powers C, Taylor JP, and Baehrecke EH. Dynein light chain 1 is required for autophagy, protein clearance and cell death in *Drosophila*, PNAS, 2010 107, 2

Dr. Pociask:

- 1. Crowe CR, Chen K, <u>Pociask DA</u>, Alcorn JF, Krivich C, Enelow RI, Ross TM, Witztum JL, Kolls JK. Critical role of IL-17RA in immunopathology of influenza infection. J Immunol. 2009 Oct 15;183(8):5301-10.
- 2. Lin Y, Ritchea S, Logar A, Slight S, Messmer M, Rangel-Moreno J, Guglani L, Alcorn JF, Strawbridge H, Park SM, Onishi R, Nyugen N, Walters M, **Pociask D**, Randall TD, Gaffen SL, Iwakura Y, Kolls J, and SA Khader. IL-17 is required for Th1 immunity and host resistance to the intracellular pathogen Francisella tularensis LVS. *Immunity* Nov 20;31(5):799-810., 2009.

Dr. Nguyen:

1. Wang G, Gomez M, Raju SV, Viswanathan A, Painter RG, Byrne P, Nguyen DH, Babgy GJ, Nelson S, Kolls J. Ethanol upregulates glucocorticoid-induced leucine zipper expression and modulates cellular inflammatory responses in lung epithelial cells. JI, in press.

Dr. Tsien:

- 1. <u>Tsien F, "Cytogenetic education for patients and their families"</u>, Center for Acadiana Genetics and Hereditary Health Care, Doucet J and Tsien F, Ed. (in press)
- 2. Tennberg J, Robert B, Yu G, Yu X, Detrick M, Kloster C, McLaughlin L, <u>Tsien F</u>, Rood J, Gimble J, "Delivery of Adipose-derived Cells Fails to Improve Recovery in a Rat Acute Renal Ischemia Model", Journal of Tissue Engineering and Regenerative Medicine (in press).

Dr. Moreno-Walton:

- 1. Azuibiuke F, <u>Moreno-Walton L</u>, Radeos MS, Baquero A, Ryan MT. "A Randomized Controlled Clinical Trial of 1000 cc v 500 cc Oral Contrast in Adults Undergoing Abdominal CT Scans"; The Journal of Emergency Medicine, vol. 37, no. 2, p. 234, August 2009.
- 2. Azuibiuke F, Moreno-Walton L, Radeos MS, Baquero A, Ryan MT. "A Randomized Controlled Clinical Trial of 1000 cc v 500 cc Oral Contrast in Adults Undergoing Abdominal CT Scans"; European Journal of Emergency Medicine, vol.16, no. 5, p. 292, October 2009.
- 3. Moreno-Walton L, Brunett P, Akhtar S, DeBlieux PM. "Teaching Across the Generation Gap: A Consensus Statement from the Council of Residency Directors in Emergency Medicine 2009 Academic Assembly", Academic Emergency Medicine, vol. 16, no. 777, p.19-24, December 2009.
- 4. **Moreno-Walton L,** Haughey-Barrios M, Hagan J, Alexander G, Katz E. "Influenza Vaccine Health Literacy and Attitudes Survey", Academic Emergency Medicine, vol. 17, no. 5, p.S89-90, May 2010.
- 5. Mohr N, <u>Moreno-Walton L</u>, Mills A, Brunett P, Promes S. "Teaching and Learning, Mentoring and Technology (Part 1)", Academic Emergency Medicine, accepted for publication.

Dr. Zheng:

1. Rapaka RR, Alcorn JF, Khader SA, **Zheng M**, Plevy S, Bengten E, and Kolls JK. Conserved natural IgM antibodies mediate innate and adaptive immune responses and host defense against opportunistic fungi. Accepted for publish at Journal of Experimental Medicine

2. Sung Hwan Ki, Oygi Park, <u>Mingquan Zheng</u>, Oriol Morales Ibañez, Jay K. Kolls, Ramon Bataller, and Bin Gao. Interleukin-22 treatment ameliorates alcoholic liver injury in a murine model of chronic plus binge ethanol feeding: role of STAT3. Hepatology. 2010 Oct;52(4):1291-300.