



CURRICULUM VITAE

Judy S. Crabtree, Ph.D., SMB(ASCP)^{CM}

Current Title: Professor - Research
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Education:

Undergraduate

1987 – 1992 Bachelor of Science in Chemistry (Honors), The University of Oklahoma, Norman, OK

Graduate

1992 – 1994 Master of Science in Biochemistry, The University of Oklahoma, Norman, OK

1994 – 1997 Ph.D. in Biochemistry and Genetics, The University of Oklahoma, Norman, OK (Advisor: Bruce A. Roe, Ph.D.)

Post-Doctoral Fellowship

1997 – 2001 National Human Genome Research Institute, National Institutes of Health (Advisor: Francis S. Collins, M.D., Ph.D.)

Certification:

2022 **Specialist in Molecular Biology (SMB)** certification #23, American Society for Clinical Pathology, effective 5/1/2022- 4/31/2025.

Licensure:

2022 **CSL-Specialist** license #332460, Louisiana State Board of Medical Examiners, effective 7/1/2022 – 12/31/2023.

Career Development:

2005 – 2006 **Wyeth Women as Leaders in Discovery.** This was a two-year leadership training program emphasizing leadership skills for careers in upper management. This training included topics such as ethics, managing difficult people, conflict resolution, learning style identification, time management, efficient meeting management, negotiation skills, and effective communication strategies.

2006	Wyeth Drug Development Training. An intensive three-day training for senior R&D project Team Leaders. This training included topics relevant to drug development including high throughput screening, lead optimization, preclinical testing strategies, commercial development, marketing, positioning strategy, labeling, clinical trial design, and intellectual property protection.
2011	American Association of Medical Colleges Early Career Women Faculty Professional Development Program, Washington, DC. A one-week program of professional development for early stage female faculty in medical colleges. Attendees were selected through a competitive application process.
2017	Mentor Training Participant in the National Science Foundation Research Mentor Training Program. This was a training session for faculty and other mentors to improve and refine mentoring skills, specifically for mentors involved in the Research Experiences for Underrepresented Minority Undergraduates Program (REU) at NSF. The mentoring training program was conducted in 4 online sessions of 2 hours each and covered skills such as how to improve mentees' research productivity, how to reduce frustration in mentoring and how to increase/incorporate culturally sensitive mentoring practices.
2019	Participant, Groundwater forum on systemic racism
2020	Race around the Table forum participant, Department of Genetics
Academic, Professional, and Research Appointments:	
2001-2003	Research Fellow, National Human Genome Research Institute, National Institutes of Health, Bethesda, MD
2003-2006	Senior Research Scientist II, Women's Health and Musculoskeletal Biology, Wyeth Research, Collegeville, PA
2007-2008	Principal Research Scientist I, Women's Health and Musculoskeletal Biology, Wyeth Research, Collegeville, PA
2009-2013	Assistant Professor (tenure track), Louisiana State University Health Sciences Center School of Medicine, Department of Genetics, New Orleans, LA
2009-present	Member, Graduate Faculty, Louisiana State University Health Science Center, New Orleans, LA
2009-2022	Member, Stanley S. Scott Cancer Center and Louisiana Cancer Research Consortium, Louisiana State University Health Sciences, New Orleans, LA
2009-present	Member, Louisiana Clinical and Translational Science Center (LACaTS), New Orleans, LA

2012-2022	Adjunct Assistant Professor , Pennington Biomedical Research Center, Baton Rouge, LA
2013-present	Director , Genomics Core, School of Medicine, New Orleans, LA
2013-2018	Assistant Professor – Research , Louisiana State University Health Sciences Center, New Orleans, LA
2014-2018	Adjunct Faculty , Tulane University Diabetes Research Program, Tulane University School of Medicine, New Orleans, LA
2017-present	Scientific and Education Director , LSUHSC Precision Medicine Program, New Orleans, LA
2018-2023	Associate Professor – Research , Louisiana State University Health Sciences Center, New Orleans, LA
2020-2022	Technical Consultant , LSUHSC Precision Medicine/COVID Testing Laboratory, New Orleans, LA
2022-present	Technical Supervisor , LSUHSC Precision Medicine Laboratory, New Orleans, LA
2023-present	Professor – Research , Louisiana State University Health Sciences Center, New Orleans, LA

Membership in Professional Organizations:

1992-1997	Member, Phi Lambda Upsilon, Alpha Omega Chapter, National Chemistry Honor Society
1998-2005	Member, American Association for the Advancement of Science
1999-2009	Member, American Society for Human Genetics
2004-present	Member, The Endocrine Society
2004-2005	Contributing Faculty Member, Faculty of 1000 in Medicine (Endocrinology Section)
2009-present	Founding Member, Association of Women in Science (AWIS), South Louisiana Chapter
2009-2010	Treasurer, Association of Women in Science, South Louisiana Chapter
2011-2012	Member, Society for the Study of Reproduction
2011-present	Member, American Association for Cancer Research (AACR)
2011-present	Member, AACR Women in Cancer Research

2014-2016	Treasurer, Association of Women in Science, South Louisiana Chapter
2021-present	Member, American Society for Clinical Pathology (ASCP)

Awards and Honors:

1991	Phi Lambda Upsilon, National Chemistry Honor Society, Outstanding Undergraduate Research Student, The University of Oklahoma, Norman, OK
1992-1997	Department of Energy Graduate Research Fellowship Recipient
1999	Pioneering Women in Oklahoma exhibit (in conjunction with International Women in Science Day), Pioneer Woman Statue and Museum, Ponca City, OK. My work with the Human Genome Project was featured in an exhibit highlighting exceptional women from the State of Oklahoma.
2000	Abstract selected for late breaking oral plenary session , American Society of Human Genetics annual meeting, Philadelphia, PA. I was selected to give an oral presentation in the late-breaking science plenary session. This session is for cutting edge science and was scheduled unopposed during this time slot. It was estimated that more than 5,000 people attended this session.
2001	John Haddad Young Investigator Award , Advances In Mineral Metabolism - American Society of Bone and Mineral Research (AIMM-ASBMR) Annual Meeting, Keystone, CO
2002	Outstanding Merit Award , National Human Genome Research Institute, Scientific Retreat, Bethesda, MD
2002	Newkirk High School Hall of Fame Award, Newkirk, OK.
2003	Director's Distinguished Service Award , National Human Genome Research Institute, National Institutes of Health. Institute Director: Dr. Francis S. Collins
2004	Above and Beyond Award for exemplary service and research excellence, Wyeth Research, Collegeville, PA
2006 – 2007	Wyeth Scholars Program . I was selected through a competitive process to serve as a scientist teacher/mentor to Perkiomen High School science teachers in Collegeville, PA. This program was a two-year continuing education program for high school teachers that involved didactic classwork in mentoring, direct mentoring of teachers, and conducting science experiments with high school science students.

- 2012 **Travel award** (\$1500) to attend the “How to Secure Promotion and Tenure Workshop and Reception” at The Endocrine Society’s Annual Meeting, Houston, TX.
- 2012 Selected for Early Career Reviewer (ECR) program at the Center for Scientific Review (CSR), NIH, Bethesda, MD
- 2016 Selected to attend the Council on Undergraduate Research’s Research Experiences for Undergraduates National Symposium as mentor, Washington, D.C. Mentee: Denicka Wilson.

TEACHING EXPERIENCE AND RESPONSIBILITIES

My teaching responsibilities include lecturing graduate students in the School of Graduate Studies Interdisciplinary Program and the Department of Genetics, students in the Physician Assistant program in the School of Allied Health, medical students in the School of Medicine, and undergraduate and graduate students in the School of Nursing.

Within the Interdisciplinary Program (IDP), my teaching has increased over my time at LSUHSC from teaching one lecture in the introductory core course (INTER121), to now teaching 7-10 lectures in the overall first year IDP core curriculum. In addition, I served as co-course director for Introduction to Genetics (INTER141) for several years, also a required core course for all incoming graduate students. Within the Department of Genetics, I was co-course director for the Human Molecular Genetics course (GENET231 - the fundamental core genetics course for all Department of Genetics graduate students) for 7 years until it was replaced by Introduction to Genetics (INTER141) when the IDP curriculum was revised in 2016. I have developed an upper level graduate course in the School of Graduate Studies entitled Animal Models of Human Disease (GENET242), for which I am the course director. Additionally, I served as the course director for Seminars in Human Genetics (GENET299), a required seminar class for graduate students in the Department of Genetics, until Fall 2018. In 2017, I taught a Professionalism lecture to incoming graduate students as a part of the Graduate Student Orientation class, INTER101.

In 2015 my teaching responsibilities expanded to include lectures on Precision Medicine to students in the Physician’s Assistant (PA) program in the School of Allied Health (Clinical Genetics, PYAS6574). This topic has subsequently been integrated into the Fundamentals of Pharmacology course (PHARM207), which is taken by the PA students as well as the graduate students in the Department of Pharmacology. In March 2021, I became course director for the entire Clinical Genetics course (PYAS6574) for the PA program and implemented a new, more comprehensive curriculum in time for the course start in Summer 2021.

My teaching in the School of Medicine also began in 2015 when I taught two lectures in the Medical Biochemistry course to first year medical students on topics of Pharmacogenomics, Next Generation Sequencing and Precision Medicine. In 2016, my Medical School responsibilities changed with the curriculum renewal process and I taught second year medical students on similar topics in the new Foundations of Disease and Therapy course. With subsequent curriculum revisions in 2019-2020, the lecture on Precision Medicine and Pharmacogenomics was moved from Foundations of Disease and

Therapy and now is held in the Genetics block. I am a House Mentor for Decatur House wherein I facilitate group discussion for first- and second-year medical students - initially in Science and Practice of Medicine (SPM100/101 and 200/201) and now in the Clinical Skills Integration courses (CSI101/102 and 201/202). In Fall of 2018, I became the basic science House Leader for Decatur House and currently continue in this role.

I also teach in the School of Nursing. This began in 2020 as a lecturer in NURS3451, Nursing Genetics teaching Precision Medicine and Pharmacogenomics to 3rd year nursing students. My course responsibilities in this course now include lectures on Genetic Testing, and Gene Therapy. In 2021 I was approached by Dr. Gloria Giarratano to co-direct a new course NURS7056 in the new Doctorate of Nursing Science program. I helped plan and teach this new course to doctorate nursing students, including didactic lectures on Pharmacogenomics and team-based laboratory learning activities.

In addition to my formal didactic teaching responsibilities, I have trained three graduate students through my laboratory, two who received their Ph.D. degrees in 2015, and a third who graduated in 2021. Currently, I serve on two dissertation committees. I have trained eight rotating graduate students, four summer medical students, two undergraduate summer students (one student for three summers in a row), and two high school summer students in my years at LSUHSC.

Course Directorships:

- 2010 – present **Course Director, Animal Models of Human Disease (GENET242).** Graduate School Program in the Department of Genetics. Initially I developed this course in collaboration with Dr. Udai Pandey who left the institution in 2011. This course has been offered each spring but has suffered from low enrollment after the first iteration in 2010 and was not taught again until 2018. I was responsible for developing the course content, updating the material to include new technologies, evaluating the final project, preparing, and scoring the class exams, and scheduling additional faculty to assist with lectures. This course encompasses 11 lectures and two exams. Students were also required to prepare a final project, which involved generating a new, theoretical mouse model along with literature presentations on the topic. In 2018 the course was updated and revised to include new lectures on amphibians, zebrafish, porcine and zebra finch models of human disease as well as zoonotic concerns when working with animals. This course was taught to 3 students in 2018.
- 2011 – 2016 **Co-course Director, Human Molecular Genetics (GENET231).** Graduate School Program in the Department of Genetics. Along with Dr. Paula Gregory, I was responsible for the overall organization, content, and implementation of this fundamental course for Genetics graduate students. My contributions included setting the curriculum including my topic areas on the Human Genome Project, epigenetics, and Precision Medicine. My primary role was to independently develop and teach a content module on the Human Genome. This included determining the topics to be covered, teaching the first five lectures of the course, and developing, proctoring, and grading the first exam. This course was discontinued in 2016 with the curriculum restructuring and was replaced by INTER141 (see below).

- 2012 – 2018 **Course Director**, Seminars in Human Genetics (GENET299). Graduate School Program in the Department of Genetics. In this capacity, along with Dr. Andrew Hollenbach (2012-2014) and then independently (2015-2018), I was responsible for scheduling the Department of Genetics student seminars, setting the schedule, and evaluating the performance of student presentations.
- 2017 – 2023 **Co-course Director**, Introduction to Genetics (INTER141). Graduate School Interdisciplinary Program. This class replaced Human Molecular Genetics (GENET231) and was expanded from a Department of Genetics course to a required course for all incoming graduate students. This course includes ten didactic lecture sessions, two exams, and seven homework assignments covering the fundamentals of Human Genetics. Along with Dr. Fern Tsien, I was responsible for developing the curriculum for the course, selecting additional expert faculty to lecture within the course, organizing/grading the take-home problem sets, teaching four lectures, proctoring exams, calculating final grades, and implementing team-based learning modules for the study of genetics-based medical ethics. In 2021 I became the lead course director, with Dr. Tsien serving in an advisory capacity. This course has 12-15 students per year. In 2023, Dr. Fokhrul Hossain became co-course director with me, and he will take over this class beginning in Spring 2024.
- 2017 **Course Director**, Continuing Medical Education (CME) course on Genetics and Precision Medicine for physicians and other medical professionals (including physical therapy, occupational therapy, and nurse practitioners). I conceived, planned, and developed a 4.5-hour course which was held on April 7, 2017. This course included didactic instruction on the fundamental concepts of genetics, chromosome structure, molecular biology, and heredity, and then expanded these concepts into the genetics of disease and clinical decision-making.
- 2021 – present **Co-course Director**, Emerging Science: Omics in Nursing Research and Practice (NURS7056). I helped develop and teach in the new course for the Doctor of Nursing Science program in the SON. This included recruiting faculty for presentations on the microbiome (Welsh, Taylor), cancer genetics (Hollenbach), proteomics (J. Guidry), pharmacogenomics (Crabtree), and epigenomics (Tsien). This course was held for the first time in the Spring 2021 in collaboration with Dr. Gloria Giarratano and has 5-10 students/year.
- 2021 – present **Course Director**, Clinical Genetics (PYAS6574) in the School of Allied Health. I updated this curriculum to be more comprehensive and to mirror the content taught in the SOM and Department of Genetics graduate genetics courses. This course was conducted completely by zoom in 2021, with exams taken online using Moodle. This course has 35 students/year.

Curriculum Development/Implementation:

1. Soon after my arrival at LSUHSC in 2009, I developed and implemented a new upper-level graduate course Animal Models of Human Disease (GENET242) in collaboration with Dr. Udai Pandey. This course was designed to give a fundamental knowledge of animal models to upper-level graduate students. Topics included *Drosophila* models, transgenic mouse and rat model systems, rabbit models of virus reactivation, and non-human primate model systems. Students developed a final project wherein they describe the production and use of one of these model systems to answer a particular biological question. This final student project is presented to the other students in the class in seminar format. Students are graded on content and suitability of the model system to the hypothesis in question. In 2018 I revised the curriculum and updated it to capitalize on the wealth of animal models being used by LSUHSC researchers. The new curriculum includes additional lectures on amphibian, zebrafish, porcine and zebra finch models of human disease in addition to *drosophila*, mouse, rat, and nonhuman primate models. Further, discussions with our Animal Care veterinary staff led to inclusion of zoonotics and animal-borne diseases into the curriculum.
2. In collaboration with Dr. Fern Tsien, I developed and implemented a new core course for all incoming graduate students in the interdisciplinary program (INTER141). This course was modeled after GENET231 but included updated curriculum development and organization. Topics include chromosome structure and function, modes of inheritance (Mendelian and non-Mendelian), the human genome, genome editing, population genetics, biochemical genetics, epigenetics, and imprinting, immunogenetics, pharmacogenetics, genetic testing and genetic ethics.
3. In 2016 as an *ad hoc* member of the Interprofessional Education (IPE) Committee, I helped develop the IPE Day activity by providing information on the Genetic Nondiscrimination Act (GINA) component.
4. In 2017, as the Scientific and Education Director for the Precision Medicine Program within the Department of Genetics, I developed and implemented a Continuing Medical Education (CME) course for physicians and other medical professionals (including physical therapy, occupational therapy, and nurse practitioners) entitled "Precision Medicine: Integrating Genetics and Genomics into the Clinic." The session of this 4.5-hour course was held on April 7, 2017. Topics included didactic instruction on the fundamental concepts of genetics, chromosome structure, molecular biology, and heredity, and then correlated these concepts into the genetics of disease and the role of genetic variation in drug metabolism, genetic counseling, and clinical decision-making.
5. I served on the Ethics and Cultural Competency subcommittee for Clinical Skills Integration course for first- and second-year medical students in 2017. Chaired by Dr. Robin English and along with many other faculty, we were tasked with revising the case study scenarios to integrate cultural competency and ethics more effectively into the curriculum.
6. In collaboration with Dr. Gloria Giarratano in the SON, I helped develop the curriculum for a new course, N7056 Emergent Science: Omics in Nursing Research and Practice. This included recruiting faculty for presentations on the

microbiome, cancer genetics, proteomics, pharmacogenomics, and epigenetics. This course was first taught in Spring 2021.

7. I worked with Rachel Chappell, then-PA Program Director in the SAPH to revise and update the curriculum for PYAS6574, Clinical Genetics for the PA students. The new curriculum is a hybrid of medical genetics and graduate school introduction to genetics. This course was first taught in Summer 2021.

Formal Course Responsibilities:

School of Graduate Studies:

2009-2015	Lecturer , INTER121, <u>Cell Biology</u> . Lectured 3 hours per year on the topic of genome-wide technologies called –Omics. This topic was omitted when the curriculum was revised at the end of 2015. In 2014 and 2015, I also lectured an additional 3 hours on modes of genetic inheritance.
2009-present	Lecturer , INTER122, <u>Introduction to Molecular Biology</u> . I lecture between 10 and 12 hours per year on the topics of DNA replication, site specific recombination, homologous recombination, general transcription, and RNA splicing. In the fall of 2015, I taught three additional lectures (7.5 additional lecture hours) on general transcription, RNA processing and protein translation to cover for a colleague who needed to leave town unexpectedly to deal with family matters. This course usually has 10-15 students/year.
2009-2016	Lecturer (2009–2011), Co-Course Director (2011–2016) , GENET231, <u>Human Molecular Genetics</u> . In my capacity as lecturer and co-course director I lectured 12 hours per year on topics including organization of the human genome, cloning human genes, genomics technologies, epigenetics, imprinting and regulatory RNAs. In the later years (2013-2016) this course was organized into three topic blocks, and I was fully responsible for the first block on the Human Genome including all lectures, homework, and the block 1 exam.
2010-2016	Lecturer , INTER123, <u>Control of Gene Expression</u> . I lectured 3 hours on mouse model generation and their use in basic science research.
2010-present	Lecturer , GENET234, <u>Epigenetics</u> . I lecture 1.5 hours per year on Regulatory RNAs. This course has 3-6 students/year.
2010-present	Course Director , GENET 242, <u>Animal Models of Human Disease</u> . This course has been offered every spring but has had low enrollment resulting in this class not being taught except in 2010 and 2018. In 2010 and 2018, I served as course director and lectured 12 hours on basic rodent biology, mouse model production and use, practical application of mouse model strategies, and rat model systems.
2012-2018	Course Director , GENET299, <u>Department of Genetics Student Seminar Series</u> . I served as Co-director (with Dr. Hollenbach from 2012-2014) or as Director of the Departmental Student Seminar series since 2012. In this role, I was responsible for establishing the

schedule for the seminar series each year, assigning dates for each student seminar based on student seniority, resolving scheduling conflicts, and assessing student performance.

- 2015-present **Lecturer**, GENET245, Cancer Molecular Genetics and Applications. In 2015, lectured 3 hours on Precision Medicine in a one-on-one, independent study format to the one student who enrolled in this course and needed it for graduation. Other years I teach in person/zoom on Precision Medicine and Pharmacogenomics to 3-6 students.
- 2017-2023 **Co-course Director**, INTER141, Introduction to Genetics. This course replaced GENET231 upon restructuring of the Interdisciplinary Program curriculum in 2016. In addition to co-directing this course with Dr. Fern Tsien, I lecture 9 hours on topics that include the Human Genome, genome editing, mouse models, pharmacogenomics, precision medicine, genetic testing, genetic approaches to treating disease, clinical genetics, and ethics of genetic testing. In 2020, Dr. Tsien stepped back from course directing and served in an advisory capacity, allowing me to act as the “unofficial” solo Course Director. In Spring 2023, I co-directed this course with Dr. Fokhrul Hossain, who will serve as solo course director beginning in Spring 2024.
- 2017 **Lecturer**, INTER101, Graduate Student Orientation. I delivered a 1-hour lecture on Professionalism and behavioral expectations of LSUHSC graduate students.

School of Medicine

- 2012-2013, &
2015-present **Basic Science Facilitator and House Faculty Mentor**, MCLIN101/102, Science and the Practice of Medicine (Clinical Skills Integration as of 2015). Decatur House. In this capacity I lead group discussions on biomedical and clinical ethics for 10 hours per year to first year medical students. Discussion topics include history taking, professional relationships, confidentiality, duty to report, informed consent, disclosing errors, truth telling, research ethics, right to refuse treatment, duty to treat, professional responsibility in extreme conditions, lifesaving support and withdrawal of care, assisted suicide, access to care, medical interpreters, ethics of digital health information, and assessing decision-making capacity of patients. This class has 12-13 students/year.
- 2012-2013, &
2015-present **Basic Science Facilitator and House Faculty Mentor**, MCLIN201/202, Science and the Practice of Medicine (Clinical Skills Integration as of 2015). Decatur House. In this capacity I lead group discussions on how to critically read and evaluate medical literature. This involves 10 hours per year working with second year medical students. This class has 12-13 students/year.

- 2018-present **House Leader, Decatur House** My role has been ensuring faculty coverage of all sessions and adapting to zoom versus in-person learning during COVID.
- 2015 **Lecturer**, MED100, Medical Biochemistry, I lectured 2 hours per year on the topics of next generation sequencing and precision medicine to first year medical students.
- 2016-2020 **Lecturer**, MCLIN230, Foundations of Disease and Therapy. I lecture 1 hour per year on Pharmacogenomics to second year medical students.
- 2021-present **Lecturer**, GENET100, Medical Genetics. I collaborated with others in the Genetics Department on the reorganization of this course in Fall of 2020. I currently lecture one hour on pharmacogenomics and Precision Medicine to the 200 medical students.
Student feedback:
- *“Dr. Crabtree's lecture was truly SO interesting, I was previously unaware of pharmacogenetics and what it entailed.”*
 - *“Dr. Crabtree gave clear lectures that allowed me to walk away with a better grasp on the material.”*
 - *“Dr. Crabtree's thorough explanations to complex topics all helped me understand and learn the material in order to succeed in the class.”*
 - *“Dr. Crabtree is yet another kind and helpful, clear lecturer who did a great job of presenting her info in a concise and application-based manner. I loved that she highlighted tools that physicians will use in their practice.”*

School of Allied Health

- 2015 **Lecturer**, PYAS6574, Clinical Genetics. I lectured 2.5 hours on Precision Medicine and Genomics to 35 first year physician assistant students.
- 2017-present **Lecturer**, PHARM207, Medicinal Pharmacology. I lecture one hour on Precision Medicine to pharmacology graduate students and first year physician assistant students. This course has 40-45 students/year.
- 2021-present **Course Director and Lecturer**, PYAS6574, Clinical Genetics. I restructured this course to include updated, relevant topics that cover basic inheritance through genetic counseling and genetic testing. As a part of this course, I teach 6 hours of lecture on the topics of Pedigrees, Inheritance Patterns, Precision Medicine, and Pharmacogenomics. This course has 35 students/year.
Student feedback:
- *“I think that Dr. Crabtree was very engaging during her lectures and did a great job making these complex topics understandable.”*
 - *“I really appreciate how accessible via email Dr. Crabtree was.”*

- *“Dr. Crabtree is an excellent course director – she is kind, approachable and extremely knowledgeable and passionate about her field of study.”*
- *“Dr. Crabtree was amazing and so sweet! The test questions were always extremely fair in my opinion. She coordinated the course very well.”*

School of Nursing

- 2020-present **Lecturer**, NURS3451 Nursing Genetics. I lecture two hours on the topics of Precision Medicine, pharmacogenomics, and gene therapy to 3rd year nursing students (170 students in 2020, 93 students in 2021, 63 students in 2022).
- 2021-present **Lecturer**, NURS7056 Emergent Science: Omics Nursing Research and Practice. I facilitate one 3-hour class period on pharmacogenomics that includes 1.5hr of didactic lecture and 1.5hr of team-based laboratory learning (5 students in 2021, 10 students in 2022).
- 2021 – present **Co-course Director**, NURS7056 Emergent Science: Omics Nursing Research and Practice.
Student feedback:
- *“Dr. Crabtree is as knowledgeable as she is passionate about omics. She is an engaging and charismatic presenter/educator, and I really looked forward to each class. I especially enjoyed the “field trip” to the lab. Like most nurses, I’m a visual learner and learn well with the see one, do one, teach one framework. I benefited from applying what was taught in class in a lab experiment.”*
 - *“Dr. Crabtree is such an asset to this course. Her level of knowledge and enthusiasm on the topic are just fantastic. I thoroughly enjoyed learning from her this semester.”*
 - *“This course was excellent – Thank you Drs. G and Crabtree!”*
 - *“This was my favorite course so far! I love the ability to holistically research health promotion/conditions/illnesses as well as the concept of individuality. Both instructors were amazing.”*

Undergraduate, Medical, or Graduate Students Trained:

Dissertation Advisor:

- 2011-2015 Elaine C. Maggi, Ph.D. – Dissertation title “Role of Aberrant RBP2 Expression in Neuroendocrine Tumors.” LSUHSC Department of Genetics (Continued on to perform postdoctoral work with Steve Libutti, M.D. at Albert Einstein College of Medicine/Montefiore Hospital in Bronx, N.Y. Current role: Scientist, Next Generation Sequencing – Target Enrichment, Twist Biosciences)
- 2011-2015 Jyothi Vijayaraghavan, Ph.D. – Dissertation title “MicroRNA-mediated Regulation of Adaptive Beta Cell Mass Expansion.” LSUHSC Department of Genetics (Continued on to perform postdoctoral work

with Barbara Osborne, Ph.D. at University of Massachusetts, Amherst. Current role: Clinical Scientist, Viridian Therapeutics)

2015-2022 Ciera Singleton, Ph.D. – Dissertation title “The Transcriptional Role of Notch-4 in ER+ Breast Cancer”, LSUHSC Department of Genetics. (Current role: Medical Science Liaison for Agendia)

Thesis and Dissertation Committees:

2010-2012	Nikki Nguyen, Ph.D., Department of Genetics (PI: Jay Kolls), “Vitamin D Regulation of Immune Responses to <i>Aspergillus fumigatus</i> ,” awarded December 2012.
2012-2014	Jacob Loupe, Ph.D., Department of Genetics (PI: Andrew Hollenbach), “The contribution of PAX3-FOXO1 to the Progression of Alveolar Rhabdomyosarcoma,” awarded May 2014.
2012-2014	Michael Ripple, Ph.D., Department of Genetics (PI: Luis Del Valle), “Modulation of Wnt Pathway Target Gene Expression by JC Virus T-Antigen in Colon Cancer,” awarded August 2014.
2014-2017	Kayla Fuselier, Ph.D., Department of Genetics (PI: Ed Grabczyk), “MLH3 Isoforms: The Difference 72 Nucleotides Makes in GAA*TTT Repeat Expansion,” awarded December 2017.
2017-2018	Bryant Autin, M.S., Department of Microbiology, Immunology and Parasitology (PI: Jennifer Cameron), “Determining the Prevalence of HPV-90 in the Greater New Orleans Area,” awarded May 2018.
2017-2020	Katelyn Robillard, M.D./Ph.D., Neuroscience Center (PI: Jennifer Lentz), “Genetic Strategies to Treat Vision Loss in a Murine Model of Acadian Usher Syndrome,” awarded May 2020.
2017-2021	Jarrold Harman, PhD, Department of Biochemistry (PI: Jeff Giddy), “Adaptive epigenetics for retinal protection: Effects of sex and strain on resting, injured, and injury-resilient phenotypes,” awarded May 2021.
2019-2022	Celeste Faia, PhD, Department of Microbiology, Immunology and Parasitology (PI: Francesca Peruzzi), awarded May 2022.
2020-present	Callie Scull, PhD candidate, Microbiology, Immunology and Parasitology (PI: Guoshun Wang), expected graduation May 2023.
2022-present	Kristina Larter, PhD candidate, Genetics (PI: Lucio Miele), expected graduation May 2023.
2022-present	Connie McKnight, DNS candidate, School of Nursing (PI: Demetrius Porche), expected graduation May 2023.

Department of Pathology Residency Rotation Advisor – Molecular and Cytogenetics

2020	Walter Beversdorf, M.D.
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Updated 6/7/2023

2020	Hina Khokhar, M.D.
2020	Christopher Girardo, D.O.
2020	Nibras Fakhri, M.D.
2021	Jack Harbert, M.D.
2022	Fernanda Lameira, M.D.
2022	Wenjing Qiu, M.D.
2022	Maryam Sadough, M.D.
2023	Zaid Khreefa, M.D.

Junior Faculty Mentoring Activity:

2016-2018	Tanja Milosavljevic, Ph.D. Instructor-Research, LSUHSC Department of Surgery. I regularly reviewed manuscripts, grant proposals and gave constructive scientific feedback on experimental design/approaches.
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Research Staff Trained:

2009-2010	Peter J. Hickman, B.S.
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Rotation Student Advisor:

2009	Jyothi Vijayaraghavan, Ph.D. candidate, Department of Genetics
2010	Jack DePaolo, M.D./Ph.D. candidate, Department of Genetics
2010	Elaine Maggi, Ph.D. candidate, Interdisciplinary Program
2015	Ciera Singleton, Ph.D. candidate, Interdisciplinary Program
2016	Meredith Juncker, Ph.D. candidate, Interdisciplinary Program
2016	Ngozi Ogbonnaya, Ph.D. candidate, Interdisciplinary Program
2017	Katherine Adler, M.S. candidate, Interdisciplinary Program
2019	David Woods, Ph.D. candidate, Interdisciplinary Program

Examiner – Departmental Preliminary/Qualifying Exams:

2010	Sun-Mi Choi, M.D./Ph.D. candidate (Genetics)
2011	Jacob Loupe, Ph.D. candidate (Genetics)
2012	Michael Ripple, M.D./Ph.D. candidate (Genetics)
2013	J. Gavin Daigle, Ph.D. candidate (Genetics)
2015	Kirsten Wood, Ph.D. candidate (Genetics)
2019	Steven Scahill, Ph.D. candidate (Pharmacology)
2019	Samantha Edenfield, Ph.D. candidate (Pharmacology)

Postgraduate Medical Summer Intern Advisor:

2009	Jack DePaolo, LSUHSC M.D./Ph.D. student
2012	Vilija Vaitaitis, LSUHSC M.D. student
2012	Claire Noell, Tulane University M.D. student
2021-2023	Mallory Varnado, LSUHSC M.D. student
2021-present	Grace Kim, LSUHSC M.D./Ph.D. student

Undergraduate Summer Intern Advisor:

2015-2017	Denicka Wilson, Undergraduate REU student, Howard University
2021	Emily Miller, Undergraduate student, University of Oklahoma

High School Summer Intern Advisor:

2017	Alina Mohiuddin, high school senior, Ursuline Academy
2019	Mary Tebbe, high school senior, Country Day Academy

Other Mentoring Activities:

2012-2013& 2015-present	Basic Science Facilitator and House Faculty Mentor for first- and second-year medical students, Science and the Practice of Medicine/Clinical Skills Integration, Decatur House
2014-2018	Co-coordinator and Mentor, Sci-Fly Speed Mentoring event for summer students on the LSUHSC campus. This was a mentoring event for high school and undergraduate summer students that is akin to speed dating. Each mentee spent 8 minutes talking with a mentor before moving to a new mentor in a round-robin format.
2016	AACR Faculty Mentor , American Association for Cancer Research 11 th Annual Undergraduate Student Caucus and Poster Competition, AACR Annual Meeting, New Orleans, LA on April 16-20, 2017. I mentored 15 high school students by walking them through the poster session, vendor booths and attending the mentor luncheon.
2015-2017	REU Faculty Mentor , National Science Foundation. I had been a faculty mentor for the same REU student for three years. In 2016, I attended the NSF Council on Undergraduate Research's "Research Experiences for Undergraduates" National Symposium as mentor to my summer student Denicka Wilson. Denicka was selected in a competitive application process to attend this two-day mentoring meeting held in Washington, D.C. This mentoring experience included a didactic workshop and meeting held at the NSF, but as part of my mentoring activities I also took Denicka to the campus of the National Institutes of Health. She was able to meet successful NIH researchers and learn about the many internship programs available at the NIH.
2019-present	WHRC Faculty Advisor – Research Design , Women's Health Research Consortium. This is a group of medical students who are performing clinical research focused on Women's Health. My role is to help students with hypothesis generation and study design.
2022-present	BIO Faculty Advisor , Biology Interest Organization for students interested in bioinnovation and biotechnology development.

RESEARCH AND SCHOLARSHIP**Grants and Contracts:**Funded, Ongoing:

1. "Proposal SARS-CoV-2 genetic variant monitoring across the State of Louisiana"
Funding agency: State of Louisiana, LaGOV 2000574452
Role on grant: Co-investigator, 0.6 person months (PI: A. Feehan/Courtney Park)
Funding period: 07/01/2021 – 06/30/2023
Direct costs: \$1,170,950

The *major purpose* of this grant was to assemble a collaborative team of investigators who have established ability and willingness to collect SARS-CoV-2 positive specimens, perform SARS-CoV-2 whole genome sequencing, and perform lineage analyses to identify variants of SARS-CoV-2 following the guidelines requested by LDH. This is one of two such awards, and we process samples from the entire southern half of Louisiana.

2. "SARS-COV-2 Sequence Surveillance: Molecular Epidemiology, Clinical Correlations and Prospective Monitoring"

Funding agency: NIGMS/NIH, 3U54GM104940-07S1

Role on grant: Co-investigator, .2 person months (PI: J. Kirwan, L.Miele)

Funding period: 06/01/2022 – 05/31/2023

Direct costs: \$742,441

The *major purpose*: This study proposes SARS-CoV-2 viral genome sequencing and analysis studies using samples from COVID-positive individuals. It will expand on the ongoing SARS-CoV-2 sequencing program to leverage clinical data and resources and deliver results quickly to help address the urgent challenge of SARS-CoV-2 genomic surveillance.

Funded, Completed:

1. "miRNA Regulation of Menin in Obesity."

Funding agency: RFP Seed Grant #104631 LSUHSC, Department of Genetics

Role on grant: Primary Investigator, 20% effort

Funding period: 07/01/10-06/30/11

Direct costs: \$14,555

The *major purpose* of this grant was to provide supplies to develop a project for extramural funding applications. The *major goal* of this project was to perform initial confirmatory studies of miRNAs predicted to inhibit menin function in the hyperplastic pancreatic islet in response to obesity.

2. "Mouse xenograft model generation to support *in vivo* investigations of CARM1 function."

Funding agency: Louisiana State Board of Regents, LEQSF (2011)-PFUND-249

Role on grant: Primary Investigator, 20% effort

Funding period: 03/01/11-02/29/12

Direct costs: \$10,000

The *major purpose* of this grant was to support animal model studies as preliminary data for an extramural R01 grant submission. The *major goal* of this study was to investigate the role of CARM1 in uterine leiomyoma tumorigenesis.

3. "MicroRNA profiling of expanded pancreatic islets as a result of increased metabolic demand in the mouse."

Funding agency: Louisiana State Board of Regents Research Competitiveness Program, LEQSF (2013-15)-RD-A-04

Role on grant: Primary Investigator, 25% effort

Funding period: 06/01/13 – 06/31/15

Direct costs: \$94,438

The *major purpose* of this grant was to support supplies and personnel to develop a project to apply for extramural funding. The *major goal* of this project was to perform mRNA and miRNA sequencing to identify which miRNA and mRNAs are dysregulated in the hyperplastic islet of the pancreas in response to obesity.

4. "Targeting Gamma-Secretase in Breast Cancer"
 Funding agency: NCI/NIH 5P01CA166009
 Role on grant: Co-Primary Investigator, 12% (PI: L. Miele)
 Funding period: 9/1/14-8/31/19
 Direct costs: \$250,000/year
 The *major purpose* of this grant is to leverage the strong collaboration between the Osborne Lab at the University of Massachusetts Amherst, the Golde Lab at the University of Florida Gainesville, and the Crabtree and Miele Labs at LSUHSC to understand the role of gamma secretase inhibitors in breast cancer. The *major goal* of this project is to test whether combined therapeutic use of gamma secretase inhibitors with traditional chemotherapy regimens is efficacious for chemotherapy resistant breast cancers.

5. "CC* Networking Infrastructure: Science DMZ and Research Network Upgrade for LSU Health Sciences Center New Orleans"
 Funding agency: National Science Foundation NSF ACI 1657895
 Role on grant: Co-Primary Investigator, 0% (Co-PIs M. Qayoom, B. Owens, J. Zabaleta, C.M. Taylor)
 Funding period: 03/2017-2/2019
 Direct costs: \$499,640
 The *major purpose* of this grant is to support an IT infrastructure hardware upgrade. The *major goal* of this project is to increase the speed and ability of our network to handle big data from large genomics projects and to establish a Science DMZ (demilitarized zone) within the LSUHSC firewall for increased data sharing capability. My role on this grant is as co-PI and Director of the School of Medicine Genomics Core, justifying the need for improved infrastructure as an end user of big data. *There is no percent effort associated with this grant – it is exclusively to upgrade the campus-wide physical hardware within our IT infrastructure to support the use and transfer of large datasets.*

6. "Center for Translational Viral Oncology (CTVO)"
 Funding agency: NIGMS/NIH 5P20GM121288
 Role on grant: Primary Investigator of pilot project 2, 30% (PI: K. Reiss)
 Funding period: 10/30/18-05/31/19
 Direct costs: \$100,000 total
 The *major purpose* of this COBRE grant is to develop and strengthen the biomedical research infrastructure in Louisiana by training promising junior investigators studying virus-associated cancers. The *major goal* of the pilot project is to investigate the utility and efficacy of adeno-associated virus therapy that delivers receptor decoys and ligands as a treatment for chemotherapy-resistant ER+ breast cancers.

7. "Could the SARS-CoV-2 virus be triggering or worsening small fiber neuropathy?"
 LSUHSC SOM Resident Research Program
 Resident: Aditi Varma-Doyle, MD
 Funding period: 2019
 Direct costs: \$2,500
 My role was to providing antibody testing for SARS-CoV-2
 The *major purpose* of this grant was to support resident Aditi Varma-Doyle in her study looking at the correlation between SARS-CoV-2 and small fiber neuropathy.

8. "Health Disparities and SARS-CoV-2 Evolution: A Focused Viral Genomics Study"
 Funding agency: NIGMS/NIH, U54GM104940-06S2
 Role on grant: Co-investigator, 0.48 person months (PI: J. Kirwan, L.Miele)
 Funding period: submitted 07/01/2021-06/30/2022
 Direct costs: \$737,607
 The *major purpose*: The DSR Cohort will leverage longstanding collaborative efforts at UAB, the University of South Alabama (USA; Mobile) and LSUHSC New Orleans to enroll participants into the national RECOVER cohort. The cohort will include patients at risk of or experiencing Post-Acute Sequelae of COVID-19 (PASC, also known as "Long COVID-19.")

Pending applications:

1. "SARS-COV-2 Genomic Sequencing"
 Funding agency: NIGMS/NIH, 3U54GM104940-06W1
 Role on grant: Co-investigator, 0.2 person months (PI: J. Kirwan, L. Miele)
 Funding period: 06/01/2022 – 05/31/2023
 Direct costs: \$94,593
 The *major purpose* of this grant was to develop a working group across the NIGMS-funded SARS-CoV2 surveillance sequencing programs to efficiently tackle emerging technical problems, improve approaches, and facilitate collaboration across the NIGMS-funded group.

Non-funded applications (last three years)

1. "An Epigenetic platform to Diagnose Respiratory Pathogens including SARS-CoV-2 and Predict COVID-19 Related Outcomes"
 Funding agency: NIH – University of Colorado
 Role on grant: Co-investigator, 10% effort (PI: L. Miele)
 Direct costs: \$264,643
 Funding period: submitted 6/18/2020
2. "Precision combinatorial viral therapy for solid tumors"
 Funding agency NCI/NIH
 Role on grant: Co-investigator, 10% (PI: L. Miele)
 Direct costs: \$2,158,000
 Funding period 9/1/20-8/31/25
 The *major purpose* of this grant was to investigate adeno-associated virus delivery modalities as therapy for solid tumors. The major goal of my portion is to investigate delivery of AAV-Notch receptors and decoys for ER+ breast cancer therapy.
3. "Air Pollution and Lung Cancer in Black/African Americans"
 Funding agency: NIEHS/NIH
 Role on grant: Co-Investigator, 5% effort (PI: V. Seewaldt, L. Miele)
 Direct costs: \$1,958,208.40
 Funding period: submitted 1/22/2021
 The major purpose of this grant was to develop a highly diverse multi-institutional cohort, to investigate the impact of environmental exposures (particularly particulate matter and nitric oxides) on aggressive lung cancers in AA/Blacks using genetic signatures that reflect exposure.

4. "Role of AT1 receptor in COVID-19 prevalence to metabolic syndrome"
 Funding agency: NIDDK/NIH
 Role on Grant: Co-investigator, 10% effort (PI: E. Lazartigues)
 Direct costs: \$529,000/year
 Funding period: submitted June 2021, 5 year R01 application
 The major purpose of this grant was to understand the role of AT1 receptor in enhancing SARS-CoV-2 infection in patients with metabolic syndrome.

Journal Publications: h-index=33

Refereed

1. S.L. Chissoe, Y.F. Wang, S.W. Clifton, N. Ma, H.J. Sun, **J.S. Lobsinger**, S.M. Kenton, J.D. White, and B.A. Roe. Strategies for rapid and accurate DNA sequencing. *Methods: A Companion to Methods in Enzymology* 3(1), 55-65 (1991).
2. H.Q. Pan, Y.P. Wang, S.L. Chissoe, A. Bodenteich, Z. Wang, K. Iyer, S.W. Clifton, **J.S. Crabtree**, and B.A. Roe. The complete nucleotide sequences of the SacBII Kan domain of the P1 pAD10-SacBII cloning vector and three cosmid cloning vectors: pTCF, svPHEP, and LAWRIST16. *Genetic Analysis Technical Applications* 11(5-6), 181-186 (1994).
3. S.L. Chissoe, A. Bodenteich, Y.F. Wang, Y.P. Wang, D. Burian, S.W. Clifton, **J.S. Crabtree**, A. Freeman, K. Iyer, L. Jian, Y. Ma, H.J. McLaury, H.Q. Pan, O.H. Sarhan, S. Toth, Z. Wang, G. Zhang, N. Heistercamp, J. Groffen, and B.A. Roe. Sequence and analysis of the human *ABL* gene, the *BCR* gene, and regions involved in the Philadelphia Chromosomal translocation. *Genomics* 27(1), 67-82 (1995). PMID: 7665185.
4. J. Ballard, **J. Crabtree**, B. A. Roe, and R. K. Tweten. The primary structure of *Clostridium septicum* alpha toxin exhibits similarity with *Aeromonas hydrophila* aerolysin. *Infect. Immun.* 63(1), 340-344 (1995). PMID: 7806374.
5. X. Wu, C.E. Robinson, H.W. Fong, **J.S. Crabtree**, B.R. Rodriguez, B.A. Roe and J.M. Gimble. Cloning and characterization of the murine activin receptor like kinase-1 (ALK-1) homolog. *Biochemistry and Biophysics Research Communications* 216, 78-83 (1995). PMID: 7488127.
6. S.C. Guru, S.E. Olufemi, P. Manickam, C. Cummings, L.M. Gieser, B.L. Pike, M.L. Bittner, Y. Jiang, A.C. Chinault, N.J. Nowak, A. Brzozowska, **J.S. Crabtree**, Y. Wang, B.A. Roe, J.M. Weismann, M.S. Boguski, S.K. Agarwal, A.L. Burns, A.M. Spiegel, S.J. Marx, W.L. Flejter, P.J. deJong, F.S. Collins, S.C. Chandrasekharappa. A 2.8 Mb clone contig of the multiple endocrine neoplasia, type 1 (MEN1) region at 11q13. *Genomics* 42:436-445 (1997). PMID: 9205115.
7. S.C. Chandrasekharappa, S.C. Guru, P. Manickam, S.E. Olufemi, F.S. Collins, M.R. Emmert-Buck, L.V. Debelenko, Z. Zhuang, I.A. Lubensky, L.A. Liotta, **J.S. Crabtree**, Y. Wang, B.A. Roe, J. Weismann, M.S. Boguski, S.K. Agarwal, M.B. Kester, Y.S. Kim, C. Heppner, Q. Dong, A.M. Spiegel, A.L. Burns, S.J. Marx. Positional cloning of the gene for multiple endocrine neoplasia, type 1. *Science* 276(5311):404-407 (1997). PMID: 9103196.
8. S.C. Guru, S.K. Agarwal, P. Manickam, S.E. Olufemi, **J.S. Crabtree**, J.M. Weismann, M.B. Kester, Y.S. Kim, Y. Wang, M.R. Emmert-Buck, L.A. Liotta, A.M. Spiegel, M.S. Boguski, B.A. Roe, F.S. Collins, S.J. Marx, L. Burns, and S.C. Chandrasekharappa. A transcript map for the 2.8 Mb region containing the multiple endocrine neoplasia type 1 locus. *Genome Research* 7(7):725-35 (1997). PMID: 9253601.

9. Z. Zhuang, A.O. Vortmeyer, S. Pack, S. Huang, T.A. Pham, C. Wang, W.S. Park, S.K. Agarwal, L.V. Debelenko, M. Kester, S.C. Guru, P. Manickam, S.E. Olufemi, F. Yu, C. Heppner, **J.S. Crabtree**, M.C. Skarulis, D.J. Venzon, M.R. Emmert-Buck, A.M. Spiegel, S.C. Chandrasekharappa, F.S. Collins, A.L. Burns, S.J. Marx, I.A. Lubensky, et al. Somatic mutations of the MEN1 tumor suppressor gene in sporadic gastrinomas and insulinomas. *Cancer Research* 57(21):4682-6 (1997). PMID: 9354421.
10. Z. Zhuang, S.Z. Ezzat, A.O. Vortmeyer, R. Weil, E.H. Oldfield, W.S. Park, S. Pack, S. Huang, S.K. Agarwal, S.C. Guru, P. Manickam, L.V. Debelenko, M.B. Kester, S.E. Olufemi, C. Heppner, **J.S. Crabtree**, A.L. Burns, A.M. Spiegel, S.J. Marx, S.C. Chandrasekharappa, F.S. Collins, M.R. Emmert-Buck, L.A. Liotta, S.L. Asa, I.A. Lubensky. Mutations of the MEN1 tumor suppressor gene in pituitary tumors. *Cancer Research* 57(24):5446-51 (1997). PMID: 9407947.
11. P. Manickam, S.C. Guru, L.V. Debelenko, S.K. Agarwal, S.E. Olufemi, J.M. Weisemann, M.S. Boguski, **J.S. Crabtree**, Y. Wang, B.A. Roe, I.A. Lubensky, Z. Zhuang, M.B. Kester, A.L. Burns, A.M. Spiegel, S.J. Marx, L.A. Liotta, M.R. Emmert-Buck, F.S. Collins, and S. C. Chandrasekharappa. Eighteen new polymorphic markers in the multiple endocrine neoplasia type 1 (MEN1) region. *Human Genetics* 101(1):102-8 (1997). PMID: 9385379.
12. L.V. Debelenko, E. Brambilla, S.K. Agarwal, J.I. Swalwell, M.B. Kester, I.A. Lubensky, Z. Zhuang, S.C. Guru, P. Manickam, S.E. Olufemi, S.C. Chandrasekharappa, **J.S. Crabtree**, Y.S. Kim, C. Heppner, A.L. Burns, A.M. Spiegel, S.J. Marx, L.A. Liotta, F.S. Collins, W.D. Travis, and M.R. Emmert-Buck. Identification of MEN1 gene mutations in sporadic carcinoid tumors of the lung. *Human Molecular Genetics* 6(13):2285-90 (1997). PMID: 9361035.
13. S.K. Agarwal, L.V. Debelenko, M.B. Kester, S.C. Guru, P. Manickam, S.E. Olufemi, M.C. Skarulis, C. Heppner, **J.S. Crabtree**, I.A. Lubensky, Z. Zhuang, Y.S. Kim, S.C. Chandrasekharappa, F.S. Collins, L.A. Liotta, A.M. Spiegel, A.L. Burns, M.R. Emmert-Buck, and S.J. Marx. Analysis of recurrent germline mutations in the MEN1 gene encountered in apparently unrelated families. *Human Mutation* 12(2):75-82 (1998). PMID: 9671267.
14. S.C. Guru, P. Manickam, **J.S. Crabtree**, S.E. Olufemi, S.K. Agarwal and L.V. Debelenko. Identification and characterization of the multiple endocrine neoplasia type 1 (MEN1) gene. *Journal of Internal Medicine* 243(6):433-9 (1998). PMID: 9681840.
15. S.J. Marx, S.K. Agarwal, M.B. Kester, C. Heppner, Y.S. Kim, M.C. Skarulis, L.A. James, P.K. Goldsmith, S.K. Sagggar, S.Y. Park, A.M. Spiegel, A.L. Burns, L.V. Debelenko, Z. Zhuang, I.A. Lubensky, L.A. Liotta, M.R. Emmert-Buck, S.C. Guru, P. Manickam, **J. Crabtree**, M.R. Erdos, F.S. Collins, S.C. Chandrasekharappa. Multiple endocrine neoplasia, type 1: Clinical and genetic features of the hereditary endocrine neoplasias. *Recent Progress in Hormone Research* 54:397-438; discussion 438-9 (1999). PMID: 10548885.
16. S.J. Marx, S.K. Agarwal, C. Heppner, Y.S. Kim, M.B. Kester, P.K. Goldsmith, M.C. Skarulis, A.M. Spiegel, A.L. Burns, L.V. Debelenko, Z. Zhuang, I.A. Lubensky, L.A. Liotta, M.R. Emmert-Buck, S.C. Guru, P. Manickam, **J.S. Crabtree**, F.S. Collins, and S.C. Chandrasekharappa. The gene for multiple endocrine neoplasia, type 1: Recent findings. *Bone* 25 (1):119-122 (1999). PMID: 10423035.
17. S.C. Guru, **J.S. Crabtree**, K.D. Brown, K.J. Dunn, P. Manickam, N.B. Prasad, D. Wangsa, A.L. Burns, A.M. Spiegel, S.J. Marx, W.J. Pavan, F.S. Collins, S.C. Chandrasekharappa. Isolation, genomic organization, and expression analysis of

- Men1, the murine homolog of the MEN1 gene. *Mammalian Genome* 10(6):592-6 (1999). PMID: 10341092
18. I. Dunham, N. Shimizu, B.A. Roe, S. Chissoe, et al. The DNA Sequence of Human Chromosome 22. *Nature* 402(6761):489-495 (1999). (See end of article for complete author listing). PMID: 1059128.
 19. The Genome International Sequencing Consortium. Initial sequencing and analysis of the human genome. *Nature* 409(6822), 860-921 (2001). (See web site supplemental information for complete author listing). PMID: 11237011.
 20. **J.S. Crabtree**, P.C. Scacheri, J.M. Ward, L. Garrett-Beal, M.R. Emmert-Buck, K.A. Edgemon, D. Lorang, S.K. Libutti, S.C. Chandrasekharappa, S.J. Marx, A.M. Spiegel, and F.S. Collins. A mouse model of multiple endocrine neoplasia, type 1 develops multiple endocrine tumors. *Proceedings of the National Academy of Sciences, USA* 98(3):1118-1123 (2001). PMID: 11158604.
 21. P.C. Scacheri*, **J.S. Crabtree***, E.A. Novotny, L. Garrett-Beal, A. Chen, K.A. Edgemon, S.J. Marx, A.M. Spiegel, S.C. Chandrasekharappa and F.S. Collins. Bidirectional activity of PGK-neomycin and unexpected embryonic lethality in heterozygous chimeric knockout mice. *Genesis* 30:259-263 (2001). *equal contribution. PMID: 11536432.
 22. K.E. Sukhodolets, A.B. Hickman, S.K. Agarwal, M.V. Sukhodolets, V.H. Obungu, E.A. Novotny, **J.S. Crabtree**, S.C. Chandrasekharappa, F.S. Collins, A.M. Spiegel, A.L. Burns, and S.J. Marx. The 32-kilodalton subunit of replication protein A interacts with menin, the product of the MEN1 tumor suppressor gene. *Molecular and Cellular Biology* 23(2):493-509 (2003). PMID: 12509449.
 23. **J.S. Crabtree**, P.C. Scacheri, J.M. Ward, S.R. McNally, G.P. Swain, J.H. Hager, D. Hanahan, H. Edlund, M.A. Magnuson, L. Garrett-Beal, A.L. Burns, S.C. Chandrasekharappa, S.J. Marx, A.M. Spiegel, and F.S. Collins. Of Mice and MEN1: Insulinomas in a conditional mouse knockout. *Molecular and Cellular Biology* 23(17): 6075-6085 (2003). PMID: 12917331.
 24. S.K. Agarwal, E.A. Novotny, A. Burgess-Hickman, **J.S. Crabtree**, J.B. Weitzman, M. Yaniv, A.L. Burns, S.C. Chandrasekharappa, F.S. Collins, A.M. Spiegel, and S.J. Marx. Transcription factor JunD, deprived of menin, switches from growth suppressor to growth promoter. *Proceedings of the National Academy of Sciences, USA* 100(19):10770-10775 (2003). PMID: 12960363.
 25. S.K. Libutti, **J.S. Crabtree**, D. Lorang, A.L. Burns, C. Mazzanti, S. Hewitt, J.M. Ward, M. Emmert-Buck, A. Remaley, M. Miller, E. Turner, H.R. Alexander, A. Arnold, S.J. Marx, F.S. Collins, and A.M. Spiegel. Parathyroid gland-specific deletion of the mouse Men1 gene results in parathyroid neoplasia and hypercalcemic hyperparathyroidism. *Cancer Research* 63(22):8022-8028 (2003). PMID: 14633735.
 26. S.K. Agarwal, A.L. Burns, K.E. Sukhodolets, P.A. Kennedy, V.H. Obungu, A.B. Hickman, M.E. Mullendore, I. Whitten, M.C. Skarulis, W.F. Simonds, C. Mateo, **J.S. Crabtree**, P.C. Scacheri, Y. Ji, E.A. Novotny, L. Garrett-Beal, J.M. Ward, S.K. Libutti, H.R. Alexander, A. Cerrato, M.J. Parisi, S. Santa-Anna, B. Oliver, S.C. Chandrasekharappa, F.S. Collins, A.M. Spiegel, and S.J. Marx. Molecular Pathology of the MEN1 Gene. *Annals of the New York Academy of Science*. 1014:189-198 (2004). PMID: 15153434.
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29. **J.S. Crabtree**, X. Zhang, B.J. Peano, Z. Zhang, R.C. Winneker, H.A. Harris. Development of a Mouse Model of Mammary Gland versus Uterine Tissue Selectivity Using Estrogen- and Progesterone-Regulated Gene Markers. *Journal of Steroid Biochemistry and Molecular Biology* 101(1): 11-21 (2006). PMID: 16920353.
30. M.M. Cotreau, V.C. Chennathukuzhi, H.A. Harris, L. Han, A.J. Dorner, G. Apseloff, U. Varadarajan, E. Hatstat, M. Zakaria, A.L. Strahs, **J.S. Crabtree**, R.C. Winneker and S.A. Jelinsky. A study of 17beta-estradiol-regulated genes in the vagina of postmenopausal women with vaginal atrophy. *Maturitas* 58:366-376 (2007). PMID: 17997058.
31. **J.S. Crabtree**, B.J. Peano, X. Zhang, B.S. Komm, R.C. Winneker and H.A. Harris. Activity of three selective estrogen receptor modulators on hormone-dependent responses in the mouse uterus and mammary gland. *Molecular and Cellular Endocrinology* 287(1-2): 40-46 (2008). PMID: 18367319.
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33. B.J. Peano, **J.S. Crabtree**, B.S. Komm, R.C. Winneker and H.A. Harris. Effects of various selective estrogen receptor modulators with or without conjugated estrogens on mouse mammary gland. *Endocrinology* 150:1897-1903 (2009). PMID: 19022889.
34. H. Harris, B. Peano, **J. Crabtree**, B. Komm, R. Winneker. Effects of Bazedoxifene and the tissue selective estrogen complex (TSEC), Bazedoxifene + conjugated estrogens on the ovariectomized mouse mammary gland. *Maturitas* 63:S25 (2009).
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36. A.S. McCampbell, H.A. Harris, **J.S. Crabtree**, 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). PMID: 20179297.
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1. B. Roe, **J. Crabtree**, and A. Khan. *DNA Isolation and Sequencing*. John Wiley and Sons Ltd, New York, NY, 1996. ISBN: 0471963240
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1. S.J. Marx, S.K. Agarwal, M.B. Kester, Y.S. Kim, C. Heppner, A.M. Spiegel, A.L. Burns, M.R. Emmert-Buck, L.V. Debelenko, Z. Zhuang, I. Lubensky, L.A. Liotta, **J.S. Crabtree**, Y. Wang, B.A. Roe, J. Weismann, M.S. Boguski, J.L. Doppman, M.C. Skarulis, R.H. Alexander, S.C. Guru, P. Manickam, S.E. Olufemi, F.S. Collins, and S.C. Chandrasekharappa. “Multiple Endocrine Neoplasia, Type 1: From Clinical Physiology to the Gene” in *Parathyroid Diseases: From the Gene to the Cure*. (Edited by M.L. Brandi) SEE Editrice-Firenze, Firenze, 1997. ISBN: 8884650151
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3. **J.S. Crabtree** “Fundamentals of Heredity” in *Clinical Precision Medicine: A Primer* (Edited by J.S. Crabtree) Elsevier, Cambridge, MA 2019. ISBN: 9780128198346
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5. **J.S. Crabtree** “Pharmacogenomics” in *Clinical Precision Medicine: A Primer* (Edited by J.S. Crabtree) Elsevier, Cambridge, MA 2019. ISBN: 9780128198346
6. **J.S. Crabtree** “Technology of Clinical Genomic Testing” in *Clinical Precision Medicine: A Primer* (Edited by J.S. Crabtree) Elsevier, Cambridge, MA 2019. ISBN: 9780128198346
7. C.S. Singleton, L.L. Chan, K.J. McCulley, S.L. Kessel, L. Del Valle, and **J.S. Crabtree** “ER+ Breast Cancer Mammosphere Formation and Analysis” in lab protocol series *Methods in Molecular Biology - Immunohistochemistry and Immunocytochemistry* (edited by L. Del Valle) p.233-245. Springer Nature Publishing Group, New York, NY 2021. ISBN: 9781071619476

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3. E.A. Novotny, **J.S. Crabtree**, S.K. Agarwal, S. Chandrasekharappa, A. Spiegel, S.J. Marx, and F.S. Collins. "Characterization of murine MEN1-/- cell lines established to study the function of menin." Eighth International Workshop on Multiple Endocrine Neoplasia, Grand Rapids, MI (2002).
4. S.K. Agarwal, K. Sukhodolets, **J.S. Crabtree**, S.C. Guru, L. Burns, A. Spiegel, F.S. Collins, and S.J. Marx. "Menin-JunD Interaction." Eighth International Workshop on Multiple Endocrine Neoplasia, Grand Rapids, MI (2002).
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12. **J.S. Crabtree**, S.A. Jelinsky, H.A. Harris, S.E. Choe, M.M. Cotreau, M.L. Kimberland, E. Wilson, K.A. Saraf, W. Liu, A.S. McCampbell, B. Dave, R. Broaddus, E. Brown, W. Kao, J.S. Skotnicki, M. Abou-Gharbia, R.C. Winneker and C.L. Walker. "Identification of dysregulated mTOR pathway in human and rat uterine leiomyoma." The Endocrine Society Annual Meeting, San Francisco, CA (2008).
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15. E.C. Maggi, J. Vijayaraghavan and **J.S. Crabtree**. "Dysregulation of RBP2 in Neuroendocrine Tumors." Abstract #1693. American Society of Cell Biology, New Orleans, LA (2013).
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20. C. Singleton, L. Miele, and **J.S. Crabtree**. "Notch Signaling in SCLC and other Lung NET Cell Lines." Abstract #4624 American Association for Cancer Research Annual Meeting, New Orleans, LA (2016).
21. A.D. Hollenbach, J.M. Loupe, P.J. Miller, B.P. Bonner, E.C. Maggi, J. Vijayaraghavan, J. Zabaleta, C.M. Taylor, F. Tsien and **J.S. Crabtree**. "The PAX3-FOXO1 oncogene drives aneuploidy and overrides aneuploidy associated proliferation defects in alveolar rhabdomyosarcoma." Abstract #2013. American Association for Cancer Research Annual Meeting, New Orleans, LA (2016) Cancer Research 76 (14 Supplement):2013.
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26. S. Majumder, **J.S. Crabtree**, F. Hossain, M. Murone, R. Lehal and L. Miele. "A novel, first in class Notch transcriptional inhibitor, CB-103, has activity on luminal breast cancer stem cells in combination with fulvestrant. Abstract P4-07-05. San Antonio Breast Cancer Symposium, San Antonio, TX. (2019) Cancer Research 79 (4 Supplement): P4-07-05.
27. C. Singleton, L. Miele, and **J.S. Crabtree**. "Notch signaling in ER+ breast cancer in response to endocrine therapy agents." Cancer Research 79:13.

Scientific Presentations:

Scientific Poster Presentations at National/International Meetings

1. **J.S. Crabtree**, E.A. Novotny, L. Garrett-Beal, A. Chen, K.A. Edgemon, S.J. Marx, A.M. Spiegel, S.C. Chandrasekharappa and F.S. Collins. "Knockout of the mouse Men1 gene gives a lethal phenotype in the heterozygous chimera." American Society of Human Genetics Annual Meeting, Philadelphia, PA (2000).
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8. **J.S. Crabtree**, B.J. Peano, X. Zhang, B.S. Komm, R.C. Winneker and H.A. Harris. "Estradiol and Progesterone Regulated Gene Markers in the Mouse Mammary Gland." The Endocrine Society Annual Meeting, San Diego, CA (2005).
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12. J. Vijayaraghavan, E.C. Maggi and **J.S. Crabtree**. "miR24-1 Targets MEN1 To Enhance Beta Cell Expansion in Pancreatic Islets." Endocrine Rev 33: MON-106. The Endocrine Society Annual Meeting, Houston, TX (2012).
13. E.C. Maggi, J. Vijayaraghavan and **J.S. Crabtree** "Dysregulation of RBP2 in Neuroendocrine Tumors" #1693 American Society of Cell Biology, New Orleans, LA (2013).
14. J. Vijayaraghavan, E.C. Maggi, and **J.S. Crabtree** "MicroRNA-24 promotes beta cell proliferation by targeting MEN1" #1786. American Society of Cell Biology, New Orleans, LA (2013).
15. J. Vijayaraghavan, E.C. Maggi, and **J.S. Crabtree** "MicroRNA-24 promotes beta cell proliferation by targeting MEN1" SAT#0954 The Endocrine Society Annual Meeting, Chicago, IL (2014).
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****Presidential Award-winning poster***

17. J. Vijayaraghavan, E. Blanchard, J. Trillo-Tinoco, E.C. Maggi, J. Garai, J. Zabaleta, C.M. Taylor, L. Del Valle, and **J.S. Crabtree**. "MicroRNA expression profiling in mouse models of compensatory beta cell mass expansion." SAT#667. The Endocrine Society Annual Meeting, San Diego, CA (2015).
18. C. Singleton and **J.S. Crabtree** "Notch Signaling in SCLC and other Lung NET cell lines." #4624 American Association for Cancer Research Annual Meeting, New Orleans, LA (2016).
19. A.D. Hollenbach, J.M. Loupe, P.J. Miller, B.P. Bonner, E.C. Maggi, J. Vijayaraghavan, J. Zabaleta, C.M. Taylor, F. Tsien and **J.S. Crabtree**. "The PAX3-FOXO1 oncogene drives aneuploidy and overrides aneuploidy associated proliferation defects in alveolar rhabdomyosarcoma." #2013. American Association for Cancer Research Annual Meeting, New Orleans, LA (2016).
20. D.D. Wilson, C.S. Singleton, and **J.S. Crabtree**. "Notch signaling in pancreatic cell lines" #11. Council on Undergraduate Research's Research Experiences for Undergraduates National Symposium, National Science Foundation, Washington, D.C. (2016).

21. F. Hossain, C. Sorrentino, A. Bilyeu, **J.S. Crabtree**, A. Pannuti, T. Golde, B.A. Osborne, and L. Miele. "Targeting cancer stem-like cells in triple negative breast cancer cells through non-canonical notch signaling" #2904 American Association for Cancer Research Annual Meeting, Washington, DC (2017) Cancer Research 77 (13 Supplement):2904.
22. C.S. Singleton, L. Miele, and **J.S. Crabtree**. "Notch signaling in ER+ breast cancer in response to endocrine therapy agents" Notch Signaling in Development, Regeneration and Disease, Gordon Research Conference, Lewiston, ME (2018).
23. F. Hossain, A.D. Ucar, C. Sorrentino, **J.S. Crabtree**, A. Pannuti, M. Matossian, M.E. Burow, T. Golde, B.A. Osborne, L. Miele. "Targeting cancer stem-like cells in triple negative breast cancer." #157 American Association for Cancer Research Annual Meeting, Chicago, IL (2018) Cancer Research 78(13 Supplement):157.
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26. A. Duhon, A. Schachter, M. Roth, S. Kamal, S. Scheib, **J.S. Crabtree**, A. Jernigan. "The Women's Health Research Consortium: improving medical student satisfaction of research opportunities." American Medical Student Association National Convention, Washington, D.C. (2020) *held online due to coronavirus pandemic
27. W. Qui, J. Chen, M. Webber, Z. Khreefa, **J.S. Crabtree**, G.B. Athas, G.L. Love, S.E. Fox. "Molecular Methods in the Identification of Pulmonary Pathologic Traits of the SARS-CoV-2 Delta Variant at Autopsy." Abstract#1033. United States and Canadian Academy of Pathology Annual Meeting, Los Angeles, CA (2022).
28. G.J. Kim, M. Varnado, **J.S. Crabtree**, and L. Miele. "A bioinformatic analysis exploring the impact of Delta and Omicron variants on T cell epitope diversity." Joint meeting of American Physician Scientist Association, American Society for Clinical Investigation, and Association of American Physicians, Chicago, IL (2023).

Scientific Poster Presentations at Local/Regional Meetings

1. E.C. Maggi, J. Vijayaraghavan, J.S. DePaolo, S. Aggarwal, W. Hansel, H. Allila and **J.S. Crabtree**. "Targeting LHRH Receptors as a Therapy for Uterine Fibroids." Graduate Student Research Day Poster Session, LSUHSC, New Orleans, LA (2011).
2. J. Vijayaraghavan, E.C. Maggi, J.S. DePaolo and **J.S. Crabtree**. "miR24-1 targets MEN1 to enhance beta cell expansion in pancreatic islets." Graduate Student Research Day Poster Session, LSUHSC, New Orleans, LA (2011).
3. J.S. DePaolo, E.C. Maggi, J. Vijayaraghavan and **J.S. Crabtree**. "Inhibition of HMGA2 by miR-26a may regulate uterine fibroid proliferation." Graduate Student Research Day Poster Session, LSUHSC, New Orleans, LA (2011).
4. J.S. DePaolo, E.C. Maggi, J. Vijayaraghavan and **J.S. Crabtree**. "Inhibition of HMGA2 by miR-26a may regulate uterine fibroid proliferation." Medical Student Research Day Poster Session, LSUHSC, New Orleans, LA (2011).
5. D. Guo, D.J. Tate, Jr., J. Patterson, IV, A. Bedoya, **J.S. Crabtree**, and A.H. Zea. "Eker rat cell line responses to IFNs as a model of RCC treatment." Summer Student Poster Session, Stanley S. Scott Cancer Center, LSUHSC, New Orleans, LA (2011).

6. E.C. Maggi, J. Vijayaraghavan, and **J.S. Crabtree**. "Dysregulation of RBP2 in Pancreatic Neuroendocrine Tumors." Graduate Student Research Day Poster Session, LSUHSC, New Orleans, LA (2012).
7. J. Vijayaraghavan, E.C. Maggi, and **J.S. Crabtree**. "miR24-1 enhances beta cell expansion by targeting menin." Graduate Student Research Day Poster Session, LSUHSC, New Orleans, LA (2012).
8. V. Vaitaitis, E.C. Maggi, J. Vijayaraghavan and **J.S. Crabtree**. "The impact of microRNA-24 on menin in mouse insulinoma 6 (MIN6) cells." Medical Student Research Day Poster Session, LSUHSC, New Orleans, LA (2012).
9. E.C. Maggi, J. Vijayaraghavan and **J.S. Crabtree**. "Dysregulation of RBP2 in Neuroendocrine Tumors." Graduate Student Research Day Poster Session, LSUHSC, New Orleans, LA (2013).
10. J. Vijayaraghavan, E.C. Maggi, and **J.S. Crabtree**. "MicroRNA-24 promotes beta cell proliferation by targeting MEN1." Graduate Student Research Day Poster Session, LSUHSC, New Orleans, LA (2013).
11. J. Vijayaraghavan, E. Blanchard IV, J. Trillo-Tinoco, E.C. Maggi, J. Garai, J. Zabaleta, C.M. Taylor, L. Del Valle, and **J.S. Crabtree**. "MicroRNA profiles associated with adaptive islet expansion under different metabolic stress conditions." Graduate Student Research Day Poster Session, LSUHSC, New Orleans, LA (2014). ***First Place Award-winning poster**
12. E.C. Maggi, J. Vijayaraghavan and **J.S. Crabtree**. "Dysregulation of RBP2 in Neuroendocrine Tumors." Graduate Student Research Day Poster Session, LSUHSC, New Orleans, LA (2014).
***First Place Award-winning poster**
13. E.C. Maggi, J. Trillo-Tinoco, A. Parker-Struckhoff, J. Vijayaraghavan, L. Del Valle, and **J.S. Crabtree**. "The Oncogenic Role of RBP2 Overexpression in Neuroendocrine Tumors." Louisiana Cancer Research Consortium Annual Retreat, LSUHSC, New Orleans, LA (2015).
14. D.D. Wilson, C.S. Singleton, L. Del Valle, and **J.S. Crabtree**. "Expression of Notch in NETs." Summer Student Research Symposium, LSUHSC, New Orleans, LA (2015).
15. C. Singleton, and **J.S. Crabtree**. "Notch Signaling in Lung NET Cell Lines." Graduate Student Research Day Poster Session, LSUHSC, New Orleans, LA (2015).
16. D.D. Wilson, C.S. Singleton, and **J.S. Crabtree**. "Notch signaling in pancreatic cell lines." Summer Student Research Symposium, LSUHSC, New Orleans, LA (2016).
***Third Place Award-winning poster**
17. S. Khosravi, A.M. Rushing, A. Scarborough, J.S. Jenkins, J.P. Reilly, **J.S. Crabtree**, D.J. Lefer, and T.T. Goodchild. "Impact of Catheter-based Renal Denervation on Blood Pressure and Gene Expression in an LDLr^{-/-} Swine Model of Hypertension." Medical Student Research Day Poster Session, LSUHSC, New Orleans, LA (2016). ***First Place Award-winning poster**
18. C. Singleton, I. Espinoza, L. Miele, and **J.S. Crabtree**. "Endocrine Therapy Resistant Breast Cancer Promotes the Notch Signaling Pathway" Graduate Student Research Day Poster Session, LSUHSC, New Orleans, LA (2016)

19. A. Mohiuddin and **J.S. Crabtree**. "RBP2 and Notch Signaling Crosstalk in ER+ Breast Cancer." Summer Student Research Symposium, LSUHSC, New Orleans, LA (2017).
20. D.D. Wilson and **J.S. Crabtree**. "Notch4 Signaling in NET Cellular Proliferation." Summer Student Research Symposium, LSUHSC, New Orleans, LA (2017).
21. C. Singleton, D. Ucar, F. Hossain, L. Miele, and **J.S. Crabtree** "Upregulation of Notch 4 Signaling in ER+ Breast Cancer." Graduate Student Research Day Poster Session, LSUHSC, New Orleans, LA (2017).
22. C. Singleton, L. Miele, and **J.S. Crabtree** "Notch Signaling in ER+ Breast Cancer in Response to Endocrine Therapy Agents" Graduate Student Research Day Poster Session, LSUHSC, New Orleans, LA (2018).
23. C. Singleton, L. Del Valle, L. Miele, and **J.S. Crabtree**. "Notch Signaling in ER+ Breast Cancer in Response to Endocrine Therapy Agents" Louisiana Cancer Research Center Annual Retreat, New Orleans, LA (2019).
24. C. Singleton, L. Del Valle, L. Miele, and **J.S. Crabtree**. "Notch Signaling in ER+ Breast Cancer in Response to Endocrine Therapy Agents" Louisiana Cancer Research Center Annual Retreat, New Orleans, LA (2020).
25. M.K. Varnado and J.S. Crabtree. "Asymptomatic COVID-19 on LSUHSC's Campus: Antibodies, PCR Tests and Variants" Medical Student Research Day, New Orleans, LA (2021).
26. G.J. Kim, **J.S. Crabtree**, L. Miele. "A Bioinformatics Analysis Exploring Impact of Delta and Omicron Variants on T Cell Reactivity". Medical Student Research Day, New Orleans, LA (2022).

Enduring Educational Materials:

- 2022 Submitted examination questions on COVID testing for licensure exams to the American Society of Clinical Pathologists (microbiology section) via Dr. Gordon Love

Videos, Electronic Media, and Multimedia:

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| 2002 | Discovery Channel School online interactive education session called "Ask Dr. Judy." This was a genetics question/answer forum wherein junior high and high school students could ask me questions online to aid in their understanding of basic genetics and the Human Genome Project. (links no longer active) |
| 2012 | Louisiana Genetics and Hereditary Health Care Education Center – Obesity section:
http://www.medschool.lsuhschool.edu/genetics/louisiana_genetics_and_hereditary_health_care.aspx (information has been updated and link is no longer active for my contribution). |
| 2012 | Louisiana Genetics and Hereditary Health Care Education Center – Pancreatic neuroendocrine tumors section:
http://www.medschool.lsuhschool.edu/genetics/louisiana_genetics_and_hereditary_health_care.aspx |
| 2014 | Gennovations – LSUHSC School of Medicine Genomics Core Newsletter produced and distributed to faculty and students. This quarterly newsletter was produced as a function of the SOM |

Genomics Core to educate on the latest advances in genome-wide technologies.

http://www.medschool.lsuhs.edu/research/genomics_core/newsletters.aspx

2017-present The Pulse – LSUHSC School of Medicine Newsletter produced and distributed bimonthly to faculty and students. I serve as Associate Editor and copy editor for the SOM quarterly newsletter.

Press Interviews/Articles:

2000 The Charlie Rose Show, interview of Dr. Francis S. Collins with Drs. Steven Lipkin, Olli-P. Kallioniemi, **Judy Crabtree** and David Duggan. This was a multi-part interview and commentary on the Human Genome Project and future implications.
Part II: <https://charlierose.com/videos/20458>

2000 Applied Genetics News, “Mouse Model of Multiple Endocrine Neoplasia.” This was an interview regarding the phenotype of MEN1 knockout mice that I generated and the utility of this model for understanding MEN1 pathogenesis and treatment.

2007 Interviewed by John Dougherty, The Valley Item News, Collegeville, PA. “Wyeth Partners with PVSD Teachers” This was an interview that resulted in three separate news articles to publicize the Wyeth Scholars Program and to provide a commentary on the benefits of this program for the Perkiomen Valley School District and the local community. I was selected from the pool of 20 Wyeth Scholars to be the public “face” of this program.
<http://www.montgomerynews.com/articles/2007/01/18/valley%20item%20news/17726539.txt?viewmode=fullstory>

<https://www.pottsmmerc.com/2007/01/22/partnership-between-pharmaceutical-company-schools-benefits-teachers-students/>

<https://www.thereporteronline.com/2007/01/17/wyeth-partners-with-pvsvd-teachers/>

2010 Interviewed by Shana Rose, WWL Radio, AM870/FM105.3, New Orleans, LA. “Bad news for wannabe dads living the typical bachelor lifestyle.” Commentary on heritable epigenetic reprogramming in male rodents and how this may translate to humans.

2014 Interviewed by Oliver Thomas, WBOK Radio, AM1230, New Orleans, LA. Interview promoting the 2014 Breast Cancer Awareness Campaign at LSUHSC.

2020 UF Innovate, University of Florida, Gainesville, FL newsletter on emerging technologies and companies. “BioInfoExperts Expands FoxSeq Licensing Partnerships in Healthcare and Oil and Gas Industries.” This article highlights the Ochsner/BioInfoExperts/

LSUHSC collaboration for SARS-CoV-2 genomic sequencing.
<https://innovate.research.ufl.edu/2021/11/03/bioinfoexperts-data-contact-tracing-covid/>

- 2020 Ochsner Annual Report 2020-2021. "Ochsner and LSUHSC-NO Researchers Team Up on Genomic Sequencing Project." p.16. This article highlights the Ochsner/BioInfoExperts/LSUHSC collaboration for SARS-CoV-2 genomic sequencing.
<https://webbykate.com/annualreport/2021/>

CAP Clinical Laboratory Inspector:

Once certified and licensed as a Specialist in Molecular Biology, I was invited to join inspection teams on behalf of the College of American Pathologists. These inspection teams are the basis for CAP accreditation of clinical laboratories nationwide.

- 2023 Cleveland Clinic, Cleveland, OH (NGS and Molecular Pathology)

Research Review Committee:

International Review Panels:

- 2015-present **Reviewer**, The Netherlands Organization for Health Research and Development (ZonMw), Innovational Research Incentives Scheme. (1-5 grants/year)
- 2018-present **Reviewer**, Cancer TMOI of the French National Alliance for Life and Health Sciences (AVIESAN) jointly with the French National Cancer Institute (INCa), French National Institute for Health and Medical Research (INSERM) (1 grant/year).
- 2018-present **Reviewer**, Medical Research Council (MRC), Molecular and Cellular Medicine (1 grant/year).

National Review Panels:

- 2012-2018 Selected for the **National Institutes of Health Early Career Reviewer** program at the Center for Scientific Review, Bethesda, MD.
- 2013-present **Reviewer**, Oklahoma Center for the Advancement of Science and Technology (OCAST) Health Research Grant Program, Oklahoma City, OK. I perform *ad hoc* progress report assessments as needed, typically 8-10 per year, and participate in an annual study section where I review 8-12 grants per year.
- 2014-present **Reviewer**, The Endocrine Society's Annual Meeting. I review 40 abstracts per year for suitability for the annual meeting and make recommendations on oral and poster presentations, and those abstracts of significant interest to the lay press.
- 2015-present **Subject Matter Expert in Endocrinology** for The Jackson Laboratory. I review mouse strains/model submissions for suitability and validity of model prior to acceptance as a Jackson Labs Genetically Modified Mouse Model. I review 1-2 submissions per year.
- 2017 **National Science Foundation/NIGMS**, Research at the Interface of the Biological and Mathematical Sciences - a joint initiative between NSF, Division of Mathematical Sciences and NIH, National Institute

2018-present	of General Medical Sciences. DMS/NIGMS study section, panel B (Panel ID P180576), December 6-8, 2017. I reviewed 8 grants. Reviewer , Oklahoma Center for the Advancement of Science and Technology (OCAST) Health <u>Fellowship</u> Grant Program, Oklahoma City, OK. I participate in an annual study section for Fellowship Grants where I review 4-6 grants per year.
2018	Review Panel Chair , Oklahoma Center for the Advancement of Science and Technology (OCAST) Health Research Grant program, Oklahoma City, OK. I chaired the Cancer Review Panel at the annual study section, discussing 15 grants.
2019	Review Panel Chair , Oklahoma Center for the Advancement of Science and Technology (OCAST) Health Research Grant Program, Oklahoma City, OK. I chaired the Physiology/Pharmacology Review Panel at the annual study section, discussing 19 grants.
2020	Review Panel Chair , Oklahoma Center for the Advancement of Science and Technology (OCAST) Health Research Grant Program, via ZOOM. I chaired the Cancer Review Panel at the annual study section, discussing 18 grants.
2021	Review Panel Chair , Oklahoma Center for the Advancement of Science and Technology (OCAST) Health Research Grant Program, via ZOOM. I chaired the Cancer Review Panel at the annual study section, discussing 21 grants.
2022	Review Panel Chair , Oklahoma Center for the Advancement of Science and Technology (OCAST) Health Research Grant Program, via ZOOM. I chaired the Molecular Biology Review Panel at the annual study section, discussing 21 grants.

Statewide and Local Review Panels:

2013-present	Reviewer , Louisiana Clinical and Translational Science Center (LACaTS), Pilot Grants Program, New Orleans, LA. I review 1-2 grants per year for this program.
2014-present	Reviewer , LSUHSC School of Medicine Research Enhancement grant program, New Orleans, LA. As an <i>ad hoc</i> reviewer on this panel, I review 1-4 grants per year.
2015-present	Reviewer , LSUHSC/LSU Biomedical Collaborative Research Grants Program, New Orleans, LA. I review 2 grants per year for this program.

Industry Advisory Panel:

2021-present	Amgen Expert Advisory Panel on Neuroendocrine Tumors
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Inventions and Patents:

1. Invention: A mouse model of Multiple Endocrine Neoplasia, Type I (2002). Patent application was filed but protection was not pursued by the NIH.
2. Inventor: WO2006099610A3/US20060216295 Patent Application entitled "Methods of identifying therapeutic targets for the treatment of vulvovaginal atrophy" (2006).

Invited Presentations and Seminars:

Plenary Sessions at National/International Meetings:

1. **J.S. Crabtree**, F.S. Collins. "A mouse model of MEN1 develops multiple endocrine tumors." American Society of Human Genetics Annual Meeting, Philadelphia, PA (2000). ***Late-Breaking Science plenary session**
2. **J.S. Crabtree**, F.S. Collins. "Mouse Models of MEN1." Eighth International Workshop on Multiple Endocrine Neoplasia (MEN2002), Grand Rapids, MI (2002).
3. **J.S. Crabtree**, F.S. Collins. "Of Mice and MEN1: Mouse knockout models of MEN1." American Society of Human Genetics Annual Meeting, Baltimore, MD (2002).
4. S.K. Agarwal, E.A. Novotny, A. Cerrato, A.B. Hickman, **J.S. Crabtree**, et al. "Partnering and functioning of the MEN1 tumor suppressor gene." Ninth International Workshop on Multiple Endocrine Neoplasia (MEN2004), Bethesda, MD (2004).
5. **J.S. Crabtree**, F.S. Collins. "Of Mice and MEN1 – Mouse models of multiple endocrine neoplasia, type I." The Endocrine Society Annual Meeting, New Orleans, LA (2004).
6. **J.S. Crabtree**, B.J. Peano, R.K. Winneker, B. Komm, H.A. Harris. "Activity of three selective estrogen receptor modulators on hormone-dependent responses in the mouse uterus and mammary gland." The Endocrine Society Annual Meeting, Toronto, CA (2007).

Invited seminars - International

1. **J.S. Crabtree** and B.A. Roe "Sequencing of Human Chromosome 22" Genetique Reproduction & Developpement (GReD), Université Blaise Pascal, Clermont-Ferrand, France (1994).

Invited seminars - National

1. "Of Mice and MEN1: Mouse knockout models of MEN1." Invited Endocrinology Grand Rounds (CME), NIH Clinical Center, Bethesda, MD (2001).
2. "MEN1 and cancer models" Cornell University School of Veterinary Medicine, Department of Pathology Seminar Series, Ithaca, NY (2002).
3. "MEN1 and cancer models." AIMM/ASBMR John Haddad Young Investigator's Meeting, Snowmass, CO (2002).

***Young Investigator Award Winner Lecture**

Invited seminars – Regional/Local

1. "Endocrine tumor biology: Uterine leiomyoma and multiple endocrine neoplasia, type I." LSUHSC Department of Biochemistry and Molecular Biology Seminar Series, New Orleans, LA (2009).
2. "Endocrine tumor biology: Uterine leiomyoma and multiple endocrine neoplasia, type I." LSUHSC Department of Physiology Seminar Series, New Orleans, LA (2009).
3. "Endocrine tumor biology: Uterine leiomyoma and multiple endocrine neoplasia, type I." Pennington Biomedical Research Center, Stem Cell Interest Group, Baton Rouge, LA (2009).
4. "Endocrine tumor biology: Uterine leiomyoma and multiple endocrine neoplasia, type I." Tulane University Pharmacology Department Seminar Series, New Orleans, LA (2010).
5. "Of Mice and MEN1: Mouse Models of Multiple Endocrine Neoplasia, type 1." Invited Grand Rounds Seminar (CME), Ochsner Endocrinology, New Orleans, LA (2010).

6. "Genetics and Epigenetics of Uterine Leiomyoma." Invited Grand Rounds Seminar (CME), LSUHSC Obstetrics and Gynecology, New Orleans, LA (2011).
7. "Of Mice and MEN1: Epigenetics of MEN1." Tulane University Human Genetics/COBRE Interest Group, New Orleans, LA (2011).
8. "LHRH Conjugates as Therapy for Uterine Fibroids and Ovarian Cancer." Pennington Biomedical Research Center Work in Progress Seminar Series, Baton Rouge, LA (2012).
9. "MEN1 and miRNAs in the pancreatic islet." LSUHSC Department of Physiology Seminar Series, New Orleans, LA (2013).
10. "MEN1 and miRNAs in the pancreatic islet." LSUHSC Department of Pharmacology Seminar Series, New Orleans, LA (2013).
11. "Pancreatic Islet Plasticity: diabetes to tumors." LSUHSC Department of Biochemistry Seminar Series, New Orleans, LA (2014).
12. "LSUHSC Genomics Core." LSUHSC Department of Biochemistry Seminar Series, New Orleans, LA (2014).
13. "Pancreatic Islet Plasticity: diabetes to tumors." LSUHSC Department of Cell Biology and Anatomy Seminar Series, New Orleans, LA (2014).
14. "LSUHSC Genomics Core.", LSUHSC Department of Pharmacology Seminar Series, New Orleans, LA (2014).
15. "LSUHSC Genomics Core." LSUHSC Department of Physiology Seminar Series, New Orleans, LA (2014).
16. "LSUHSC Genomics Core." LSUHSC Department of Microbiology, Immunology and Parasitology Seminar Series, New Orleans, LA (2014).
17. "RBP2 and Notch Crosstalk in ER+ Breast Cancer" Department of Genetics Work in Progress Seminar Series, LSUHSC, New Orleans, LA (2017).
18. "Precision Medicine at LSUHSC." BIO on the Bayou: An Academic Research Expo, New Orleans, LA (2018)
19. "AAV-directed virotherapy against Notch signaling in resistant ER+ breast cancer" COBRE Work in Progress Seminar Series, LSUHSC, New Orleans, LA (2018).
20. "Pharmacogenomics in the Clinic" School of Nursing Seminar Series, LSUHSC, New Orleans, LA (2018).
21. "Genetics and the Kidney" School of Medicine, Department of Nephrology Seminar Series, LSUHSC New Orleans, LA (2019).
22. "Clinical Study Design" School of Medicine Women's Health Research Consortium, LSUHSC New Orleans, LA (2019).
23. "Poster Presentation and Design" School of Medicine Medical Student Research Committee, LSUHSC New Orleans, LA (2020).
24. "Genetics and the Kidney" School of Medicine, Department of Nephrology Seminar Series, Virtual, LSUHSC New Orleans, LA (2021).
25. "Genetic Variation in Health" LSUHSC School of Nursing Doctorate in Nursing Science Program, Research Scholarly Community Discussion, Virtual, LSUHSC New Orleans, LA (2021).
26. "Genetic Variation in Health" LSUHSC School of Nursing Doctorate in Nursing Science Program, Research Scholarly Community Discussion, Virtual, LSUHSC New Orleans, LA (2022).
27. "Precision Medicine" OmicsLogic Research Spring Symposium, Virtual, New Orleans, LA (2022). <https://bit.ly/3v9ZDJ4>

CME Presentations:

1. "Of Mice and MEN1: Mouse knockout models of MEN1." NIH Clinical Center, Endocrinology Grand Rounds, Bethesda, MD. (2001). Certified for 1 hour of CME credit.
2. "Of Mice and MEN1: Mouse Models of Multiple Endocrine Neoplasia, type 1." Ochsner Endocrinology Department Grand Rounds, New Orleans, LA. (2010). Certified for 1 hour of CME credit.
3. "Genetics and Epigenetics of Uterine Leiomyoma." LSUHSC Obstetrics and Gynecology Grand Rounds, New Orleans, LA. (2011). Certified for 1 hour of CME credit.
4. "Precision Medicine: Integrating Genetics and Genomics into the Clinic." This is a stand-alone 4.5-hour CME course for physicians and other medical professionals (including PT, OT, and NPs). The session was held on April 7, 2017. The course includes didactic instruction on the fundamental concepts of genetics, chromosome structure, molecular biology, and heredity, and then expands into the genetics of disease and the role of genetic variation in drug metabolism and clinical decision-making. I organized this offering and taught one lecture during the event.

Editorial Posts and Activities:Journal Editor or Associate Editor

2013-present	Academic Editor , PLoS ONE (3-4 manuscripts/year)
2015-2018	Language Editor, Journal of Cancer Metastasis and Treatment (3-6 manuscripts/year)
2015-present	Editorial Board , Journal of Neoplasm
2016-2022	Editorial Board , Journal of Cancer Metastasis and Treatment
2016-2019	Associate Editor , BMC Cancer (25+ manuscripts/year)
2017-2022	Review Editor , Frontiers in Endocrinology - Cancer Endocrinology section (5+ manuscripts/year)
2018-present	Editorial Board , Biomedicines (2+ manuscripts/year)
2019-present	Section Editor , BMC Cancer, Cell and Molecular Biology section (20+ manuscripts/year)
2022-present	Associate Editor , Frontiers in Endocrinology – Cancer Endocrinology section (10+ manuscripts/year)

Reviewer

BMC Cancer	Journal of Clinical Endocrinology and Metabolism
BMC Genomics	Journal of Neoplasm
Cancer Letters	Medicina
Cell and Tissue Repair	Molecular Cancer
Clinical Cancer Research	Molecular and Cancer Therapeutics
Endocrinology	Molecular and Cellular Biology
Experimental Biology and Medicine	Nutrition and Diabetes
Molecular Endocrinology	Oncogenesis
Frontiers in Endocrinology	Oncotarget
Frontiers in Oncology	PLoS Genetics
Human Reproduction	PLoS One
Journal of Cancer Metastasis and Treatment	

SERVICE AND ADMINISTRATION

University/Institutional Service:

Departmental committees

2009-2023	Emergency Response Floor Leader, Clinical Sciences Research Building, 7 th floor
2010-present	Member, Department of Genetics Graduate Student Oversight Committee
2010-present	Member, Department of Genetics Graduate Student Curriculum Committee

School committees

School of Medicine:

2009-present	Member, LSUHSC School of Medicine Women's Affairs Committee
2011-2019	Member, LSUHSC School of Medicine Communications Committee
2011-present	Member, LSUHSC School of Medicine, Faculty Assembly (elected position)
2011	Member, LSUHSC School of Medicine Faculty Assembly subcommittee on Promotion and Tenure
2012-2013	Member, LSUHSC School of Medicine Faculty Assembly Awards subcommittee
2014-2019	Chair , LSUHSC School of Medicine Faculty Assembly Awards subcommittee (appointed position)
2013-2015, 2016-2018, 2020-2022	Basic Science Representative to Administrative Council , LSUHSC School of Medicine Faculty Assembly (elected position)
2013-present	Member, LSUHSC School of Medicine Research Advisory Committee, LSUHSC School of Medicine
2013-present	Member, LSUHSC School of Medicine Research Advisory Committee Genomics Core Steering Subcommittee
2016-2017	Member, LCME Self Study Committee 3 – Academic and Learning Environment

School of Graduate Studies:

2018	Chancellor's Award Selection Committee
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LSUHSC (campus-wide) committees

2016-2023	Faculty Senate Representative of LSUHSC School of Medicine (elected position)
2017	Member, search committee for the Director of the LSUHSC Isché Library
2018, 2021	Faculty Senate President-Elect (elected)
2019, 2022	Faculty Senate President (elected)
2019-present	Member, HSC Facilities and Property Oversight Committee (appointed by Chancellor Larry Hollier)
2019-present	Member, Faculty Performance Management Committee (appointed by Chancellor Larry Hollier)
2019	Administrative 360 Review Panel, reviewing Chancellor Larry Hollier
2020, 2023	Faculty Senate Past-President (elected)

2020	Member, Search Committee for the Assistant Vice Chancellor for Human Resources (appointed by John Harman, Vice Chancellor for Administration and Finance)
2020-present	Member, COVID-19 Response Committee
2020	Member, search committee for Chief of Staff (appointed by Chancellor Larry Hollier)
2021	Member, search committee for Assistant Director of Benefits, Human Resources Management (appointed by Louis Colletta, Chief of Staff)
2021	Member, search committee for Assistant Director of Human Resources Information Systems and Compensation , Human Resources Management (appointed by Louis Colletta)
2021	Member, search committee for Assistant Director of Talent Management , Human Resources Management (appointed by Louis Colletta)
2021-present	Member, Faculty Handbook Revision Committee (appointed by Dr. Demetrius Porche, Interim Vice Chancellor for Academic Affairs)
2021-present	Member, SACSCOC Committee (appointed by Faculty Senate President Tekeda Ferguson)
2021-present	Member, search committee for Vice Chancellor for Academic Affairs (appointed by Interim Chancellor Steve Nelson)
2022-present	Member, search committee for Dean of School of Dentistry (appointed by Interim Chancellor Steve Nelson)
2022-present	Member, Institutional Scholarship Committee (Faculty Senate appointee)
2022	Member , Appeals Committee, Council on Student Professional Conduct
2022	Chair , Faculty Senate Wellness and Faculty Development Committee
2023	Juneteenth Celebration Planning Committee

LSU System-Wide

2020	Board of Supervisors special meeting with AGB regarding job separation of System President and Chancellor, LSU-BR (appointed by Chancellor Larry Hollier).
2021-2022	Member, search committee for Associate Ombudsperson to serve the LSUHSC-NO campus (appointed by Interim Chancellor Steve Nelson)

Special Assignments:

Departmental Service:

2010-2018	Copy editor , The Department of Genetics. I was responsible for proofreading the Departmental Annual Report for the years 2010-2015. Between 2016-2018, I regularly proofread Genetics Department faculty meeting minutes.
2013-2018	Professionalism seminar for incoming graduate students. Within the Department of Genetics, I updated and annually delivered a professionalism seminar to incoming graduate students to outline the Departmental code of conduct and professionalism expectations.

Updated 6/7/2023

School of Medicine Service:

- 2013-2018 **Webmaster**, LSUHSC School of Medicine Research webpages. I maintained, organized, and regularly updated the Research web pages for Dr. Wayne Backes, Associate Dean for Research.
- 2017-present **Scientific and Education Director, Precision Medicine Program** (PMP), Department of Genetics. In collaboration with the Department of Pathology, we have established a Precision Medicine clinical testing laboratory here at LSUHSC. Currently this laboratory conducts testing for SARS-CoV-2 by RT-PCR using an assay and SOPs that I implemented as a result of a Hyundai philanthropic donation towards SARS-CoV-2 testing in April 2020. More recently, I was instrumental in selecting and purchasing a Tecan Fluent automated liquid handling robot, and this instrument has been successfully deployed to do RNA extractions to support our Next Generation Sequencing endeavors to identify variants in SARS-CoV-2. I implemented and established the SOPs for COVIDSeq, as well as trained all the technical staff to run this three-day workflow. This laboratory has now received CAP accreditation and is completing a \$1.2M state contract through LDH in collaboration with Ochsner and BioInfoExperts to sequence and identify variants of SARS-CoV-2 for all of Southern Louisiana. More information on my role in COVID testing is below. This laboratory will soon pivot to offer cancer mutation identification as a strong pillar of support for the NCI Cancer Center designation bid in the coming years.
- 2017 **Member**, LCME Standard 3.5 subcommittee on Learning Environment and Professionalism. For the LCME reaccreditation process, I was invited to participate in the LCME committee for standard 3 that was chaired by Dr. Cathy Lazarus. This subcommittee entailed working with Dr. Murtuza Ali to describe the longitudinal thread of professionalism that is woven throughout our medical school curriculum.
- 2017-2020 **Director**, Dean's Research Seminar Series. I was responsible for identifying, scheduling, and coordinating the LSUHSC School of Medicine Dean's Research Seminar Series. This included working with the CME office in the School of Medicine to get lectures approved for CME credit and maintaining an updated website.

Institutional Service:

- 2014-2018 **Co-coordinator and Mentor**, Sci-Fly Speed Mentoring event for the 90+ summer students on the LSUHSC campus. This is a mentoring event for high school and undergraduate summer students that is akin to speed dating. Along with other coordinators, I was responsible for recruitment and preparation of mentors, room setup/breakdown, and lunch catering for students and mentors.
- 2016-2017 **Faculty facilitator**, Annual Interprofessional Education Day. I served as a faculty facilitator for students from all six schools on campus.

(Medicine, Dental, Allied Health, Public Health, Nursing, and Graduate Studies) working together on case studies. Along with other faculty mentors, I was responsible for 5 groups totaling 50 students in 2016, and for 12 groups totaling 120 students in 2017.

- 2018 **Faculty Liaison**, Human Resources Hostile Workplace Investigation
This was a 2-month investigation in collaboration with Jason Johnson and Simone Dideaux in HR Employee Relations on a complaint of hostile workplace on one of our campuses.
- 2019 **Library Promotion Review Committee** (Candidate: Julie Schiavo)
- 2020 **Faculty Liaison**, Human Resources Gender Discrimination Investigation. This was a 4-month investigation in collaboration with Simone Dideaux and Cori Higginson in HR on a complaint of gender discrimination on one of our campuses.
- 2020- present **COVID Testing – RT-PCR and Antibody.**
In the early days of the pandemic, I set up and implemented the Seegene Allplex 2019-nCoV RT-PCR based assay for clinical testing of SARS-CoV-2 (April-May 2020). As a part of this setup process, I cleaned out vacant laboratories, secured appropriate electrical supply, ordered supplies and reagents, and wrote SOPs for implementation. I trained two volunteer medical technologists from Children's Hospital (Myranda Thapa and Noel Clay) as well as Dr. Grace Athas and Fannie Jackson from the Pathology Department on the assay and workflow. I performed the validation testing for CAP compliance. This testing line went live in June 2020 on samples collected by the LSU Health Care Network from First Responders and other at-risk, front-line personnel.
In July 2020, LSUHSC launched an additional surveillance program on the 3rd floor of the Seton Building to test individuals from our campus for antibodies to SARS-CoV-2. Individuals who tested positive for antibodies were reflex tested with the Seegene Allplex RT-PCR test. The goal at the time was to identify asymptomatic members of our LSUHSC community who were virus positive and needed quarantine to avoid further spread on campus. In this clinic, I was initially tasked with setting up the RT-PCR side of the testing, while volunteers (faculty, medical students, etc.) would staff the antibody side. In reality, volunteers were few and I ended up running the entire testing clinic every day from 7:30am – 3:30pm, including volunteer scheduling (very few student volunteers once classes started in the Fall), patient intake, antibody blood testing via finger stick, results communication and patient return, and overseeing swab collection for reflex testing by RT-PCR (including making sure we had School of Nursing coverage, primarily Paula Kensler, for swab collection). In November 2020, the antibody testing program was discontinued, and swab collection for the Seegene Allplex RT-PCR assay was moved under the direction of the LSUHCN and the Campus Health Clinic on the first floor of the Seton Building. The volunteer medical technologists returned to Children's Hospital.

- For the next four months, Dr. Grace Athas, Fannie Jackson, and I each took turns running specimens for the Seegene Allplex RT-PCR testing line since we no longer had volunteer med techs. In December 2020, the testing laboratory itself was moved from the CSRB to the MEB into space earmarked for the Precision Medicine Program within the Pathology Department. I performed all the CAP-required validation experiments for the Seegene Allplex RT-PCR assay because of this move. In February and March 2021, we hired two medical technologists as full-time staff in the Precision Medicine Laboratory, Darlene Tazier and Elizabeth Gravois, and I (along with Grace Athas and Fannie Jackson) trained them on the Seegene Allplex RT-PCR workflow that they now run daily.
- 2022 In January of 2022, in the middle of the Omicron variant surge, supply chain challenges meant we were unable to get the Seegene Allplex 2019-nCoV RT-PCR assay that we had been using since the pandemic began in early 2020. To circumvent this problem, I ordered a different Seegene kit called the Novaplex SARS-CoV2 Variant VII RT-PCR assay. I performed the extensive validation of this test as required by our CAP accreditation, trained our med techs, wrote up the 11-page validation report that was approved by Dr. Gordon Love, and had it **deployed in one week** (before we ran out of Allplex tests) so that testing could continue without interruption.
- 2022 Through my oversight and the work of the Precision Medicine team (Drs. Lucio Miele, Gordon Love, Grace Athas, and Fannie Jackson, Darlene Tazier, Liz Gravois), we obtained **College of American Pathology (CAP) accreditation** for our Precision Medicine Clinical Laboratory in January 2022.
- 2020-2023 **COVID Variant Sequencing.**
In August/September 2020, we purchased a Tecan Fluent robotic system and an Illumina NextSeq550Dx for the Precision Medicine Program to enable variant detection of SARS-CoV-2 using the platform called COVIDSeq. The NextSeq was delivered in September 2020 and the Tecan was delivered in November 2020. In the subsequent months, I oversaw the installation of the Tecan robot, then set up and implemented the 3-day workflow protocols for using these instruments to isolate RNA from COVID swab specimens and generate viral genomic sequencing data for SARS-CoV-2. I trained the two Precision Medicine medical technologists on these SOPs and performed some validation studies for CAP accreditation. The sequencing data allowed for variant detection and lineage assignment – **this work identified the first Delta variant and the second Omicron variants in the state of Louisiana**. This effort enabled two funding streams – one from the NIH in the form of a LACaTS supplement grant in collaboration with Pennington to understand breakthrough specimens (i.e. patients with symptomatic COVID post-vaccine), and the second from the LDH in the form of a \$1.2M contract in collaboration with BioInfoExperts and Ochsner for state-wide surveillance of SARS-CoV-2 prevalence and mutation. As of this writing, we have sequenced over 4500 specimens for the LDH,

with our DNA sequences being uploaded to the national SARS-CoV-2 database, GISAID, and the NCBI which allows for contact tracing strategies through the Epidemiology department of the LDH. The LDH program ended in May 2023, when the emergency declaration for COVID ended.

- 2022 **Library Promotion Review Committee** (M. Bishop and R. Bealer)
- 2023 **Chief Human Resources Officer Search Committee**

Administrative Responsibilities:

Departmental:

- 2012-2019 **Director**, Department of Genetics Seminar Series, LSUHSC School of Medicine. I have served as Co-director (with Dr. Hollenbach from 2012-2014) or as Director (2015-present) of the Departmental Invited Speaker Seminar Series since 2012. In this capacity, I established the seminar series schedule each year, contacted faculty to solicit potential local, regional, or national speakers, and acted as the faculty point of contact for scheduling and organization of the seminar speaker's visit.

School of Medicine:

- 2013-present **Director, School of Medicine Genomics Core.**
In this capacity, I assist investigators with large scale genomics-based projects including whole genome sequencing, exome sequencing, transcriptome, and miRNA analysis. I have interacted with faculty from each of the basic science departments through seminars and individual meetings to advertise the core functions. This has slowly morphed into my functions as the Scientific and Education Director of Precision Medicine.
- 2014 I generated and produced a series of two-page educational newsletters on genomics-based technologies in a series called "Gennovations".
These materials are available at
http://www.medschool.lsuhschool.edu/research/genomics_core/newsletters.aspx.
- 2017-2020 **Director**, Dean's Seminar Series for the School of Medicine. I was responsible for identifying and scheduling internal faculty for this seminar series on behalf of then-Dean Steve Nelson. This activity is approved for CME credit (requiring my interaction with the CME Office) and is meant to foster collaboration between LSUHSC faculty.
- 2017-present **Associate Editor and Copy Editor**, The Pulse School of Medicine bimonthly newsletter. In this capacity, I assist the Head Editor with the production schedule, content, editing and layout of the wholly electronic newsletter that is distributed to the faculty and alumni base of the School of Medicine.

Community Service Activities:

- 2003 **NHGRI Ambassador to Science Education.** National DNA Day marked the completion of the human genome and the 50th anniversary of Watson/Crick's Nature paper on the structure of DNA. This program supported travel to my home state where I presented programs on the impact of the Human Genome Project.
- 2004-2007 **Science Fair Judge,** St. Vincent Elementary School, Phoenixville, PA
- 2006-2007 **Wyeth Scholars Program,** scientist mentor to program teachers. Perkiomen Valley High School, Collegeville, PA. Program Teachers were Amy Brecht and Janice Wagman. I visited high school classrooms and taught basic DNA biology to students through a hands-on activity isolating DNA from strawberries.
- 2009 **Poster judge,** LSUHSC Summer Medical Student Research Day. I judged 5 posters from medical students who performed summer research.
- 2009-2019 **Poster and presentation judge,** LSUHSC Graduate Student Research Day. I scored 5-6 poster presentations per year and in 2016, I additionally judged the 3-minute talks.
- 2009-2019 **Poster judge,** Annual LSUHSC Summer Student Research Day. At the end of the summer, our summer interns present the results of their research. I judged 5-6 poster presentations per year.
- 2012 **Laboratory tour/presentation,** Louise McGehee High School sophomores, LSUHSC Department of Genetics, New Orleans, LA. Students from this high school toured my laboratory and learned about our ongoing research in pancreatic neuroendocrine tumors.
- 2014-2017 **Organizer and chair,** the Breast Cancer Awareness campaign. This is a campus-wide effort to increase awareness of breast cancer. Held the entire month of October, this campaign includes educational outreach to our community, seminars, a survivor board, and a team for the Susan G. Komen 5k Race for the Cure (race organized by Dr. Donna Neumann). I was co-chair in 2014 and was chair of this campaign from 2015-2017.
- 2016-2017 **LSU Health representative** for St. Martin's Episcopal High School Breast Cancer Research fundraiser volleyball Pink Match, Metairie, LA. Each year in October, the St. Martin's volleyball team holds its annual Pink Match, during which they sell T-shirts and accept donations as a fundraiser for breast cancer awareness. In 2016, all the money that was raised at this event (\$1225.00) was donated to a special Foundation account for use by breast cancer researchers in the Department of Genetics. I facilitated the creation of the breast cancer Foundation account and attended the volleyball match as a

representative of the LSUHSC department for whom they were raising research money.

- 2016 **LSU Health representative** at ¿Que Pasa? Latin Festival, Breast Cancer Awareness, Metairie, LA. I helped staff the booth and pass out literature regarding breast cancer risk and breast cancer screening that was specific to the Latino community. For the kids, we also had lab coats, masks, and gloves to “dress up like a scientist” to encourage STEM.
- 2016 **Poster judge**, American Association for Cancer Research 11th Annual Undergraduate Student Caucus and Poster Competition, AACR Annual Meeting, New Orleans, LA on April 16-20, 2017. In this capacity I judged 95 poster abstracts prior to the meeting, 25 posters on site.
- 2016-present **Science Fair judge**, Greater New Orleans Science and Engineering Fair, New Orleans, LA. I judge ~20 posters at this event for high school students.
- 2018 **Science Fair judge**, Kenner Discovery Health Sciences Academy, Kenner, LA. I judged 20 science fair posters at this event for middle school students.
- 2018 **Poster judge**, LSUHSC Medical Research Day. I judged 4 translational research posters.