

THE UNIVERSITY OF  
ALABAMA AT BIRMINGHAM

**COURSE No. and TITLE:** GBSC 718, Epigenetics

**SEMESTER OFFERED:** Spring semester, 2020 (April 6-May 1, 2020)

**LOCATION:** 637 Kaul Building

**CONTACT HOURS:** 8:00-10:00 AM

**CREDIT HOURS:** 2 credit hours

**COURSE DIRECTORS:**

Runhua (Runa) Liu, MD & PhD	Lizhong Wang, PhD
Associate Professor	Associate Professor
Office: 705 Kaul Building	Office: 740A Kaul Building
Phone: 934-7308	Phone: 934-5948
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**OFFICE HOURS:** 9:00AM-5:00PM

**COURSE DESCRIPTION:** This course introduces the fundamentals of epigenetic controls and how epigenetic regulation is being investigated and utilized in basic and translational research. Specifically, students learn of changes in gene expression or cellular phenotype caused by mechanisms other than changes in the underlying DNA sequence. Students also gain an understanding of the differences between genetic and epigenetic influences on gene expression; epigenetic mechanisms that regulate gene expression; how epigenetic modifications are propagated; and the phenotypic consequences of normal versus abnormal epigenetic regulation in disease, d

# Course Syllabus

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**COURSE NUMBER and TITLE:** GBS720 – Genomic Structure and Function

**COURSE DESCRIPTION:** This course will cover the general concepts of genomics including gene structure and function, genomic technologies and their applications, comparative genomics and cancer genomics.

**SEMESTER(s) OFFERRED:** Spring 2020

**LOCATION:** Shelby 1115

**CLASS DATES and TIMES:** Monday through Friday from 8:00 to 10:00 am (February 10th to March 6<sup>th</sup>2020)

**CREDIT HOURS:** Two

**COURSEMASTER:** Michael R. Crowley, Ph.D.

Associate Professor

Department of Genetics, University of Alabama at Birmingham

Kaul Genetics Building, Room 420A

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The logo for UAB Graduate Biomedical Sciences features the letters 'UAB' in a large, bold, green font. To the right of 'UAB', the words 'GRADUATE' and 'BIOMEDICAL SCIENCES' are stacked vertically in a smaller, black, sans-serif font.

**COURSE NUMBER and TITLE:** GBS724 - Principles of Human Genetics

**COURSE DESCRIPTION:** This course will cover the general concepts of human genetics, including population genetics, dominant, recessive, X-linked, multifactorial, and mitochondrial inheritance and disease, as well as cytogenetics, chromosomal abnormalities, molecular genetics, and triplet repeat disorders.

**SEMESTER OFFERED:** Spring 2020

**LOCATION:** Shelby building, Room SHEL 105

**CLASS DATES and TIMES:** Monday through Friday from 8:00 to 10:00 am (January 13<sup>th</sup> to February 7<sup>th</sup> 2020)

**CREDIT HOURS:** Two

**COURSEMASTER:** Fady Mikhail, MD, PhD  
Professor, Department of Genetics  
University of Alabama at Birmingham  
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