As Director of the Center for Structural Biology (CSB) and Professor in the Department of Biochemistry & Molecular Biology, Dr. Agbandje-McKenna leads the university’s efforts in research that reveals relationships between biologic structure and function. Under her leadership, the CSB facilitates interdisciplinary collaboration among investigators from across campus to investigate important structure-function questions and provides students training in structural biology.

Dr. Agbandje-McKenna’s research is centered on defining structural elements of viruses that give rise to pathogenicity and immunogenicity. She studies ssDNA viruses in the Parvoviridae family, which is composed of pathogenic viruses that cause disease in animals and humans and nonpathogenic viruses (e.g., Adeno-Associated Virus) that are used as gene therapy vectors. With over 170 publications, researchers from around the world go to Dr. Agbandje-McKenna for insight into parvovirus structure and function.

Her current research is funded by two NIH R01s, an R21 and two industry research contracts. She also supports research in other laboratories by serving as a co-investigator on four additional grants. These research projects define structural features of viral capsids that are important for entry into different cell types, that affect capsid dynamics needed to release viral genomes into cells, and that give rise to antigenicity. This work is important for defining both host and cell tropism of viruses, and for determining how viruses interact with the immune system. Ultimately, Dr. Agbandje-McKenna’s research will lead to the development of new therapeutic treatments for viral diseases and improvements in the efficacy of gene therapy vectors.

We in the Department of Biochemistry & Molecular Biology extend our heartfelt congratulations to Dr. Mavis Agbandje-McKenna in receiving this highly merited honor!

April Newsletter
Special Announcement
Spring 2017
The 42nd annual Medical Guild-sponsored graduate student research competition is scheduled for Friday, April 7 from 2:00pm—4:00pm in the Cancer & Genetics Research Complex, auditorium room 101. As the 2017 winner of the Department of Biochemistry and Molecular Biology’s Wanda and Richard Boyce Award for outstanding graduate research in Biochemistry and Molecular Biology, Rosha Poudyal will be participating in this competition. Rosha will give a 15-minute presentation and respond to a 5-minute Q&A session on her topic, The Epigenomes of Latent and Lytic Kaposi’s Sarcoma-associated Herpesvirus. Please extend your congratulations and best wishes to Rosha as she represents our department!

Each Biomedical Sciences advanced concentration nominates one graduate student for participation in this competition, and presentations are evaluated by a panel of faculty judges. The students also submit an abstract of their research and their CV, as the awards are determined based on their overall research accomplishments including publications, presentations, awards, and academic performance, in addition to their Guild presentation. Each finalist will receive a cash award based on the judges’ rankings: one Gold Medalist, two Silver Medalists, and three Bronze Medalists. In addition, these students’ names will be inscribed on a plaque on permanent display in the Office of Graduate Education.
The University of Florida Black Graduate Student Organization held its **First Annual Diversity Graduate Research Symposium** on Wednesday, 3/22/17, in the Grand Ballroom of the Reitz Union.

The Department of Biochemistry and Molecular Biology was pleased to be very well represented in this event by our outstanding graduate students. We are proud to announce that **Nikea Pittman** received a **First Place Award** in the Biological Sciences session for an Oral Presentation. We would also like to recognize and congratulate **Akilah (Brianna) Murray** and **Mam Mboge** who were two of the six organizers of this very successful inaugural event.

The all-day symposium was opened by an address from the Dean of the Graduate School, Dr. Henry Frierson, who noted the dedication of those who worked hard to make this event happen. There were three tiers of oral presentations: Math/Physical Sciences, Engineering and Technology, Biological Science. In each tier, the organizers, from a large pool of applicants, selected seven students to present their work. In addition, a poster session was coordinated around the oral presentations and included 46 participants. The organizers also recruited judges from across the campus to provide evaluation of both the oral and poster presentations. Dr. Juan Gilbert, Chair of the Department of Computer and Information Science and Engineering at UF, gave the keynote address.

Please be sure to extend your congratulations to Nikea as an award recipient, and if you see Mam and Bri "hanging around", please extend your appreciation to them for their leadership in organizing and highlighting the scientific contributions of our minority graduate students from across the UF campus.

Additionally, our own Center for Structural Biology (CSB) was one of five financial supporters of this symposium.

Sponsors/Organizers of this symposium included the Black Graduate Student Organization, the College of Medicine Biomedical Sciences Diversity Committee, the Graduate School, and the Office of Graduate Minority Programs.
CENTER FOR STRUCTURAL BIOLOGY SEMINAR SERIES

These sessions meet the third Monday of every month in the McKnight Brain Institute, DeWeese Auditorium (LG-101A), unless stated otherwise. Remaining sessions are as follows:

April 17  Greg Bowman, Ph.D., Associate Professor, Department of Biophysics, Johns Hopkins University, Baltimore, MD  
**Topic:** Action and Regulation of the Chd1 Chromatin Remodeler on the Nucleosome

May 15  Bruno Franzetti, Professor, CNRS  
Institute of Structural Biology  
Grenoble, France  
**Topic:** TBA

June 12  Michael Gilson, M.D.  
Division of Cardiovascular Medicine  
UC San Diego School of Medicine  
**Topic:** TBA

CENTER FOR EPIGENETICS

These sessions are held at 4:00pm in Cancer and Genetics Research Complex 451A, unless stated otherwise. Last session of the semester is as follows:

April 10  Alex Ruthenburg, Ph.D.  
Assistant Professor, Department of Molecular Genetics and Cell Biology  
University of Chicago  
**Title:** A cartography of chromatin’s terra incognita: redefining the contours of the epigenetic landscape and discovering new layers of regulation

BMB FACULTY RESEARCH DISCUSSIONS

This series meets weekly on Wednesdays from 4:00—5:00pm. Remaining sessions are as follows:

**April Schedule:**

April 5  Dr. Michael Kladde—POSTPONED; New Date TBA
  ARB R3-265

April 12  Dr. Thomas Yang, Professor, Department of Biochemistry and Molecular Biology; Director, Center for Epigenetics  
**Topic:** A Tale of Two Epigenomes: Contrasting Epigenetic Responses to Different Prenatal Environments
  ARB R3-265

April 19  Dr. Thomas Mareci, Professor, Department of Biochemistry and Molecular Biology  
**Topic:** Induced Electrical Current in the Brain
  ARB R3-265
# BMB Journal Clubs

## BMB JOURNAL CLUB/BCH 6936

**Tuesdays, 11:45am—12:45pm, ARB R3-265.**

Remaining sessions are as follows:

<table>
<thead>
<tr>
<th>Date</th>
<th>Speaker</th>
<th>Location</th>
<th>Topic</th>
<th>Articles</th>
</tr>
</thead>
<tbody>
<tr>
<td>April 4</td>
<td>Mengxiao Luo</td>
<td></td>
<td></td>
<td>Communication between viruses guides lysis–lysogeny decisions</td>
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<tr>
<td>April 6</td>
<td>Peter Baumann, PhD</td>
<td>CANCELLED DUE TO WEATHER/NEW DATE TBA</td>
<td>4:00pm</td>
<td>MBI LG-101</td>
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<tr>
<td>April 11</td>
<td>Nivetha Babu</td>
<td></td>
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<td>Inhibition of CRISPR-Cas9 with Bacteriophage Proteins</td>
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<td>April 18</td>
<td>Srishti Singh</td>
<td></td>
<td></td>
<td>Cryo-EM structure of a metazoan separase–securin complex at near-atomic resolution; <a href="#">link to article</a></td>
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## Epigenetics Journal Club/GMS 6195

No sessions the remainder of the semester.

## Structural Biology Journal Club/BCH 6875

**Mondays, 3:00-4:00pm, ARB R3-265**

Remaining sessions are as follows:

**April Schedule:**

<table>
<thead>
<tr>
<th>Date</th>
<th>Speaker</th>
<th>Location</th>
<th>Articles</th>
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<tbody>
<tr>
<td>April 3</td>
<td>Carrie Lomelino</td>
<td></td>
<td>Gentle, fast and effective crystal soaking by acoustic dispensing</td>
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<tr>
<td>April 10</td>
<td>No Session</td>
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<tr>
<td>April 17</td>
<td>Brianna Murray</td>
<td></td>
<td>Hyperquenching for protein cryocrystallography</td>
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<tr>
<td>April 24</td>
<td>Nikea Pittman</td>
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<td>TBA</td>
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