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**Biochemical Mechanisms of Selective Modulators:
Potential Therapeutic Strategies for
Inflammatory Disorders and Metabolic Syndrome**

ABSTRACT:

Corticosteroids that are currently in clinical use bind to the glucocorticoid receptor (GR) to exert anti-inflammation effects, yet are associated with undesirable side effects. Vamorolone is a recently developed drug for Duchenne muscular dystrophy; it decreases muscle inflammation and reduces side effects observed in other corticosteroid-based treatments. Our biophysical chemistry studies provide insights into how subtle modifications on a drug exploits structural and dynamic properties in the receptor to dissociate downstream side effects from therapeutic benefits. The second part of my story covers the structure, enzymology and inhibitor design on Them1, a crucial enzyme catalyzing the lipid metabolism and tipping the balance between energy storage and expenditure.

BIO:

Experienced Biochemist with a demonstrated history of working in the top institutes. Skilled in Biophysical Chemistry, X-ray crystallography, Nuclear Magnetic Resonance (NMR), and Mass Spec. Strong research experience on characterizing protein/ligands (or drugs) interactions from structural, dynamic, affinities, specificities and enzymatic activities perspectives.

2022/04-present
2022/08-present

Emory University
Emory University

Assistant Professor of Biochemistry
Member of Biological Discovery through Chemical
Innovation (BDCI) Program

2020/05-2022/03
2015/05-2020/04

Emory University
Emory University

Instructor of Biochemistry
Postdoctoral Research Fellow

2008-2014
2005-2008
2004-2005

The University of Iowa
BNU/IBP, CAS
SDNU

Graduate Research Assistant
Graduate Research Assistant
Undergraduate Research Assistant