

MMPC - Analytical Resources Core

Keywords: [hormone](#) [lipid](#) [pathology](#) [Core](#) [assay](#) [diabetes](#)

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The Analytical Resources Core (ARC) consists of three subcores: 1) Hormone Assay and Analytical Services, 2) Lipids, Lipoproteins, and Atherosclerosis 3) Mouse Pathology. The ARC provides services to investigators both inside and outside Vanderbilt. This Core is directed by MacRae Linton, M.D.



## 1. Hormone Assay and Analytical Services Subcore

Preston Research Building, Room 703



Director: [Dale Edgerton, Ph.D.](#)

The primary goal of the Hormone Assay & Analytical Services Subcore is to provide investigators with sensitive, inexpensive, and reproducible analyses that facilitate research in diabetic, cardiovascular, and obese animal models. The continuum of assays offered requires unique instrumentation and methods. The range of services is impractical to establish with consistent and reproducible results in the laboratories of individual investigators. In addition to technical support, the Subcore provides training with regards to methods, interpretation of results and advisement on advantages and limitations of various procedures.

**NOTE: If you want to place an order for mouse hormone assays, please go to the [Hormone Assay & Analytical Services Core website](#).**

[Services](#)

[Cost for Investigator-initiated Services](#)

[Cost for Industry-initiated Services](#)

## 2. Lipids and Lipoproteins Subcore

Medical Center North, Room CC-3327



Director: [Larry Swift, Ph.D.](#)

The Lipids and Lipoproteins Subcore provides quantitative and qualitative measurements of plasma and tissue lipids and lipoproteins to researchers who use mice to study atherosclerosis, dyslipidemia, diabetes, obesity, hypertension, and other metabolic diseases. Some of the services provided are routine assays (e.g., plasma lipid and lipoprotein levels) that have widespread applicability. However, most of the assays available through our Subcore are unique services, not offered by other centralized laboratories at VUMC or elsewhere. For example, we can quantitate a variety of cellular or tissue lipids by gas chromatographic techniques. In addition, we can provide fatty acid composition data for all the lipid esters (e.g., cholesterol esters, triglycerides, diglycerides, phospholipids) as well as levels and distribution of plasma free fatty acids. The Lipids and Lipoproteins Subcore provides investigators with efficient, high quality, low cost analyses that for the most part are not available through any other mechanism.

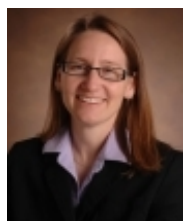
#### [Services](#)

[Cost for Investigator-initiated Services](#)

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### **3. Mouse Pathology Subcore**

Translational Pathology Shared Resource



Director: [Kelli Boyd, D.V.M.](#)

Accurate evaluation and interpretation of disease processes into the global framework of translational medicine requires individuals trained in histopathology, molecular and cellular sciences, and comparative medicine. The uniqueness of the mouse model requires a deep knowledge of each disease process studied to put in proper perspective differences and similarities with the human disease, the ultimate target of our work. The Mouse Pathology Subcore is a resource charged with meeting the need for centralized and generalist mouse pathology expertise. Services include standard pathology testing in hematology, clinical chemistry, parasitology, microbiology, serology, molecular diagnostics, necropsy, and research histology and pathology expertise and counseling. This Subcore provides the tools required to evaluate the mouse as a whole and assess systemic changes outside of the standard cardiovascular and metabolism studies. This Subcore provides a centralized resource for pathology expertise and comprehensive pathology testing that cannot be accomplished in individual investigator laboratories. The data produced by the Mouse Pathology Subcore is crucial for phenotyping and characterization of mouse model systems when unexpected secondary disease processes occur in metabolic disease models.

#### [Services](#)

[Cost for Investigator-initiated Services](#)

[Cost for Industry-initiated Services](#)

[See our List of Working Antisera](#)

[Translational Pathology Shared Resource Core](#)

[See our website here](#)