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10th ANNUAL DEPARTMENT OF PATHOLOGY YOUNG INVESTIGATORS' DAY POSTER SESSION

Thursday, April 17th, 2008
TURNER CONCOURSE

REGISTRATION FORM

Applicant's Name: _Yuan Tian_____ Degree: _Ph.D_____

Applicant's Division: _____ clinical chemistry_____

Faculty Preceptor: _____Hui Zhang_____
(Must hold a primary appointment in Pathology)

Appointment Category: _____House Staff _____Clin Fellow __X___Research Fellow

_____Medical Student _____Graduate Student (Program:_____)

Register for: _____ Clinical Research _____Translational Research _X__Basic Research

Full Poster Title * ___Specific Profiling of Sialylated Glycoproteins form Breast Cancer_____
_____

Where has the work been presented?

Meeting Name ____Fifth EDRN Scientific Workshop_____

Meeting Date ____March 17-19, 2008 _____

Not Previously Presented _____

Where is this work being published? _____Not yet_____

Journal Name, Volume, Page, Date _____

In Preparation (Y/N) - Where? _____

Author(s) (First & Last) _____

In-House Address: _____Rm200, Bondstreet Building_____
(Room # and Building Name, Lab, etc.)

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Fax: ___2-7882_____ E-mail: __ytian10@jhmi.edu_____

***INCLUDE A ONE-PAGE ABSTRACT (including title and all authors) OF THE WORK YOU WILL BE PRESENTING**

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E-mail COMPLETED Registration form and abstract to:
Stacey Morgan (smorgan9@jhmi.edu) on or before
Friday, March 14th, 2008

If you have questions or problems regarding your submission, please contact Stacey Morgan via e-mail (smorgan9@jhmi.edu)

(Paste abstract here)

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Specific Profiling of Sialylated Glycoproteins from Breast Cancer

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Abstract

Glycosylation, one of the most important modifications to proteins, is known of heterogeneity and being varied associated with health state. The heterogeneity of glycosylation was presented by the modification of various sugars and a number of potential glycosylation sites on proteins. The question of which specific glycosylation related to a specific disease becomes urgent to be addressed for early-stage diagnosis and therapy of diseases. To determine the breast cancer related glycosylation, Lectin microarray was employed in this study. Sialic acid glycoproteins showed consistent changes in breast cancer and normal tissues. A specific isolation of sialylated glycoproteins was developed and reported here to identify and quantify sialylated glycoproteins in breast cancer tissues. The *N*-linked sialylated glycopeptides were profiled from three paired breast cancer and normal tissues. The patterns generated from *N*-linked sialylated glycopeptides were compared with the patterns generated from total *N*-linked glycopeptides and total tryptic peptides from the same specimens. The specific sialylated glycopeptides associated with cancer were determined.