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

Thursday, April 17th, 2008
TURNER CONCOURSE
REGISTRATION FORM

Applicant’s Name: Joseph Maleszewski         Degree: M.D.
Applicant’s Division: Cardiovascular Pathology
Faculty Preceptor: Marc K. Halushka, M.D., Ph.D.
(Must hold a primary appointment in Pathology)
Appointment Category: X House Staff _____Clin Fellow _____Research Fellow
 _____Medical Student _____Graduate Student (Program:___________)
Register for:     X Clinical Research _____Translational Research _____Basic Research

Full Poster Title *  Histopathologic Findings in Ascending Aortas from Individuals
With Loeys-Dietz Syndrome

Where has the work been presented?
Meeting Name   The USCAP Annual Meeting 2008
Meeting Date   March 1, 2008 – March 2, 2008
Not Previously Presented ____________________________________________________________________

Where is this work being published? __________________________________________________________
Journal Name, Volume, Page, Date  __________________________________________________________
In Preparation (Y/N) - Where? ________________________________________________________________

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*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)
Abstract

Histopathologic Findings in Ascending Aortas from Individuals with Loeys-Dietz Syndrome.

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Loeys-Dietz syndrome (LDS) is an autosomal dominant connective tissue disorder resulting from genetic mutations in the transforming growth factor beta receptors 1 and 2 (TGFBR1 and TGFBR2). The mutations result in a characteristic phenotype as well as an increased propensity for aortic dissection. Ascending aortic tissue was compared between fifteen patients with confirmed LDS, eleven patients with confirmed Marfan syndrome (MFS) and eleven control aortas to identify the range of histopathologic changes in LDS. Standard hematoxylin & eosin (H&E) and Movat pentachrome stains were performed. By H&E, LDS samples were somewhat less remarkable than the MFS samples, showing a more subtle but diffuse form of medial degeneration. Movat staining revealed increased collagen within the tunica media of the vessels of LDS patients compared to controls and, to a lesser extent, the MFS cases. Overall, the histologic findings of LDS are best appreciated with special stains to evaluate fibrosis and elastic fiber fragmentation.