

# 第423回 難研セミナー

下記により難研セミナーを開催しますので、多数御来聴下さい。  
記

日 時： 2009年6月24日（水）17:30～19:30

場 所： 臨床講堂I（医科新棟A：地下1階）

演 著者： Ajay Chawla, M.D., Ph.D.

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Medicine)

演 題：PPAR $\delta$ , Apoptotic Cell Clearance and Autoimmunity

Macrophages rapidly engulf apoptotic cells to limit the release of noxious cellular contents and to restrict autoimmune responses against self antigens. Although factors participating in recognition and engulfment of apoptotic cells have been identified, the transcriptional basis for the sensing and silently disposing of apoptotic cells is unknown. Here we show that peroxisome proliferator activated receptor  $\delta$  (PPAR $\delta$ ) is rapidly induced when macrophages engulf apoptotic cells and functions as a transcriptional sensor of dying cells. Genetic deletion of PPAR $\delta$  dramatically decreases expression of opsonins resulting in impairment of apoptotic cell clearance and reduction in anti-inflammatory cytokine production. This increases autoantibody production and predisposes PPAR $\delta$  deficient mice to autoimmune kidney disease, a phenotype resembling the human disease systemic lupus erythematosus. Thus, PPAR $\delta$  plays a pivotal role in orchestrating the timely disposal of apoptotic cells by macrophages, ensuring that tolerance to self is maintained.

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