一般講演(ポスター発表)募集要項

第2回アジア太平洋国際カンファレンスのポスター発表を下記の要領で開催します。

会期:平成26年1月25日(土)場所:九州歯科大学講堂ホワイエ

○参加申込○

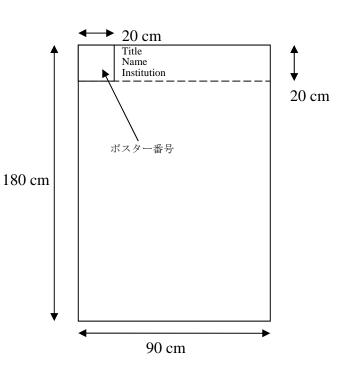
12月24日(火)までに予稿集を提出してください(厳守)。

別紙「APC Abstract Format」に原稿を作成し、事務局に電子データを提出してください(電子データ提出先 apc2014125@gmail.com)。

○発表○

1月25日(土) 16:15-17:10 に発表してください。

- 発表はポスター形式です。CP パネル (1800 ×900×7mm)を使用します。 ポスター番号はあらかじめ貼付パネル に表示してあります。貼付に用いる画 鋲は持参してください。
- ポスターは英文とします。
- ・ ポスター番号は後日お知らせ致します。
- 会場設営:1月25日午後1時からポスター会場の設営・ポスターの貼り付けを開始します。
- ・ 撤収は閉会挨拶終了後に開始してください。



Title (Times New Roman 16 points)

Name (Times New Roman 14 points)

Institution (Times New Roman 14 points)

Abstract (Times New Roman 12 points) 300 words limit

Disruption of NF-κB1 prevents bone loss caused by mechanical unloading

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Mechanical unloading, such as in a microgravity environment in space or during bed rest (for patients who require prolonged bed rest), leads to a decrease in bone mass because of the suppression of bone formation and the stimulation of bone resorption. To address the challenges presented by a prolonged stay in space and the forthcoming era of a super aged society, it will be important to prevent the bone loss caused by prolonged mechanical unloading. Nuclear factor κB (NF-κB) transcription factors are activated by mechanical loading and inflammatory cytokines. Our objective was to elucidate the role of NF-κB pathways in bone loss that are caused by mechanical unloading. Eight-week-old wild-type (WT) and NF-κB1-deficient mice were randomly assigned to a control or mechanically unloaded with tail suspension group. After 2 weeks, a radiographic analysis indicated a decrease in bone mass in the tibiae and femurs of the unloaded WT mice but not in the NF-κB1-deficient mice. An NF-κB1 deficiency suppressed the unloading-induced reduction in bone formation by maintaining the proportion and/or potential of osteoprogenitors or immature osteoblasts, and by suppression of bone resorptionthrough the inhibition of intracellular signaling through the receptor activator of NF-κB ligand (RANKL) in osteoclast precursors. Thus, NF-kB1 is involved in two aspects of rapid reduction in bone mass that are induced by disuse osteoporosis in space or bed rest.