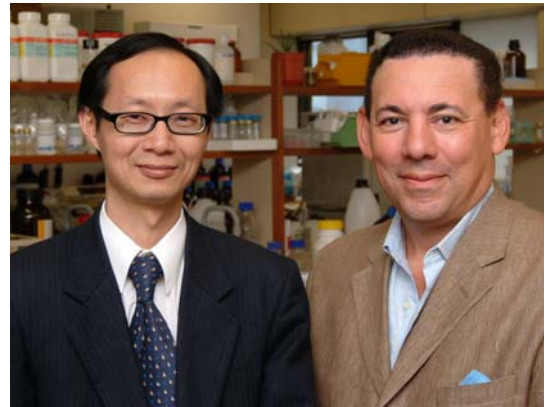


HKU Faculty of Dentistry honours Dr Ricky Wong for outstanding research

Dr Ricky WK Wong has been awarded the Faculty Research Output Prize 2008 in recognition of research excellence at the Faculty and HKU.

The University bestows only 10 such prizes annually, for each of the constituent faculties, to honour the lead author of a high-quality research article published in a peer-reviewed journal in the previous year.

Dr Ricky Wong (left in photo), Associate Professor in Orthodontics, and his co-author Prof Bakr Rabie (right in photo), Professor in Orthodontics, had published a paper in the journal *Osteoarthritis and Cartilage* in 2007 showing that the plant compound puerarin can enhance local bone production in rabbits when used in combination with the protein collagen.



The research paper described how puerarin, isolated from the plant *Pueraria lobata* (also known as *Gegen* in traditional Chinese medicine), was mixed with collagen matrix and used as a bone graft to fill holes made in the skull bone of rabbits. For comparison, some holes were left untreated, and some holes were filled with a graft of collagen matrix alone.



Flower of *Pueraria lobata*
or kudzu or Gegen
Source: Wikipedia

After 2 weeks, no new bone had formed in untreated holes, whereas holes treated with collagen on its own showed modest bone formation. However, puerarin mixed with collagen was able to induce the greatest amount of local bone production: 554% more than that achieved by collagen alone (average area of new bone formed, 2.68 mm² versus 0.41 mm²).

The two researchers concluded that puerarin could be “used for bone grafting or for bone induction often required in surgery” [*Osteoarthritis and Cartilage* 2007;15:894-9].

Dr Ricky WK Wong graduated from HKU with BDS, MOrth, and PhD degrees. He is also a Fellow of the Royal Australasian College of Dental Surgeons, an Orthodontic Member of the Royal College of Surgeons of Edinburgh, a Fellow of the Hong Kong Academy of Medicine (Dental Surgery), and a Fellow of the College of Dental Surgeons of Hong Kong in the specialty of Orthodontics. He has a keen research interest in bone biology, traditional Chinese medicine, bone induction, and bone necrosis.

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