

# An emerging educational hub

MALAYSIA is leaving no stone unturned in becoming the region's educational hub. Below is evidence of Malaysia's tremendous progress in research and development since the inception of public research universities in 2008.

- There are five public research universities in Malaysia, namely Universiti Malaya (UM), Universiti Teknologi Malaysia (UTM), Universiti Sains Malaysia (USM), Universiti Putra Malaysia (UPM) and Universiti Kebangsaan Malaysia (UKM).

UM was ranked 114th in the QS World University Rankings 2018. The four other public research universities made it into the QS Top 50 Under 50 and were ranked 15th, 16th, 21st and 23rd respectively.

- UPM, UKM, UTM and USM were each rated five stars in the QS Stars University Rating, which evaluates universities' excellence indicators across at least eight categories including quality of facilities, programme strength and graduate employability.

- The number of Malaysian research publications grew by a whopping 251% between 2008 and 2014 to a rate of 331 scientific articles per million inhabitants, which is three times the average in Asia.

Between 2013 and 2015, Malaysian research authors collaborated with researchers from 179 countries to produce 27,891 publications in various indexed journals.

- According to the World Intellectual Property Organisation, Malaysia's highest

total patent applications in a year was 2,661 in 2014.

- Six professors from USM, UM and UKM were recognised by Clarivate Analytics as the most influential scientific minds in 2014 and 2015. This recognition comes from them being in the top 1% most cited researchers in their fields.

- Malaysian researchers performed well in the Clarivate Analytics' Highly Cited Papers ranking (the most highly cited 1% of all papers published worldwide), topping the charts with 149 papers in 2016 compared to only 18 papers in 2006.

Malaysian researchers have participated in large collaborative groups to produce research papers on particle physics and clinical medicine studies that are among the most highly cited globally.

Other highly cited papers from Malaysians include those focused on nanomaterials, biofuels and agricultural waste.

- Since 2015, the Higher Education Ministry has collaborated with Clarivate Analytics on Malaysia's Research Star Award last year and Malaysia's Rising Star Award in 2015 and 2016 to encourage and reward local research talent.

- The 20 public universities in Malaysia have generated a 28.5% return on research investment from 2007 to 2015, which amounts to RM7.17bil in revenue against the Government's RM5.58bil investment in research.