Academic-industry partnerships 2012

Brady Huggett

An analysis of 387 public-private partnerships (including research institutes) in 2012 shows cancer (70 deals) and infectious disease (64) as major areas of interest, as well as diagnostics/pharmacogenetics (68) (Fig. 1). Harvard University and the University of Texas system top the list of universities with the most industry deals, and University College

London lands ahead of the University of Oxford and the University of Cambridge (Table 1). Gene-editing pioneer Horizon Discovery (Cambridge, UK) notably closed five academic deals last year, which was more than several big pharma companies (Fig. 2).

Brady Huggett is Business Editor, Nature Biotechnology.

Table 1 Academic-private partnerships 2012

Institution	Partners	Focus	Terms
Harvard University (7 deals)	Yale, Columbia, Rockefeller, Biogen Idec Evotec, Brigham and Women's Hospital Biogen Idec UCB Boehringer Ingelheim Evotec, Janssen Pharmaceuticals UCB	Amyotrophic lateral sclerosis Kidney damage Human interactome Autophagy in neurodegeneration Cancer, cardiometabolic disease, others Regeneration of insulin-producing cells Human microbiome	\$10 million, 3-year collaboration Formed CureNephron for biomarker discovery. Financials not disclosed Biogen provides single-digit millions over 4 years and 200 proteins UCB to develop small molecules. Harvard eligible for milestones, royalties Joint research committee awards funds to identify signaling pathways and targets Janssen granted an exclusive license to products from CureBeta Initiative UCB will provide up to \$4.5 million over 3 years
University of Texas system (7 deals)	Southern Research Institute, UTMB Onyx, MD Anderson Trovagene, MD Anderson GlaxoSmithKline, MD Anderson Profectus Biosciences, UTMB LoneStar Heart, UT Southwestern University of Washington, Kineta, UTMB	Viruses Multiple myeloma, lymphoma Pancreatic cancers with K-Ras mutations Tumor necrosis factor family member 4 Ebola and Marburg viruses Diabetes Viruses	Co-develop screening platform. Financials not disclosed Nonexclusive license to Onyx's proteasome inhibitors. Financials not disclosed Collaboration on urine markers. Financials not disclosed GSK responsible for development. UT eligible for up to \$335 million \$5.4 million, 5-year grant from National Institute of Health's NIAID Company gains rights to develop isoxazoles. Financials not disclosed \$8.1 million NIAID grant split between parties
University College London (6 deals)	Sarepta Therapeutics, Institute of Child Health, UCL's Dubowitz Neuromuscular Centre Eli Lilly Ark Therapeutics Oxford Pharmascience Horizon Discovery Eisai	Duchenne muscular dystrophy Neurodegeneration Fetal growth restriction Safestat drug delivery technology Huntington's disease Neurological diseases	EU Health 2012 Innovation-1 research grant of undisclosed amount Wellcome Trust Pathfinder Award of up to £100,000 (\$162,220) for 18 months Six-year, €6 million grant from European Commission's Framework Programme 7 Company exercised licensing option on products Horizon granted exclusive rights to university-generated cell lines and option on new IP Target discovery. University receives undisclosed milestones and royalties
University of California system (6 deals)	International Serious Adverse Events Consortium, UC San Diego Sanofi, UC San Francisco NexDx, UC San Diego Intellect Neurosciences, UC Irvine Gilead, UC San Francisco Islet Science, UCLA	Drug-induced renal injury Type 1 and type 2 diabetes Rheumatoid arthritis Alzheimer's disease HIV/AIDS Type 1 diabetes	2,000 patients with drug-induced renal injury examined for genetic variation database Target discovery. University receives \$3.1 million NexDx gets exclusive rights to commercialize research from Gary Firestein's lab Partnership fully funded by company to develop its drug RV03 University funds \$11.2 million to evaluate Truvada as prophylaxis. Gilead supplies drug Islet Science gets small molecules for islet expansion technology. UCLA receives royalties
Broad Institute of MIT and Harvard (4 deals)	Affymetrix Fluidigm AstraZeneca Roche	Cancer Single-cell genomics Antibacterials, antivirals Repurposing compounds	Partnership focuses on Cancer Genome Atlas. Financials not disclosed Launched the Single-Cell Genomics Center. Financials not disclosed Two-year deal. Institute identifies drug candidates. Company develops. Financials not disclosed Collaboration will span 2 years to identify new therapies from Roche's 300 undisclosed compounds

Duke University, University of Oxford: 4 deals apiece; Yale, Stanford, University of Pennsylvania, University of Edinburgh: 3 deals apiece

Source: SciBX: Science-Business eXchange UTMB=University of Texas Medical Branch

Figure 1 Number of deals by business area 2012

Source: SciBX: Science-Business eXchange

Figure 2 Most active pharma

Source: SciBX: Science-Business eXchange