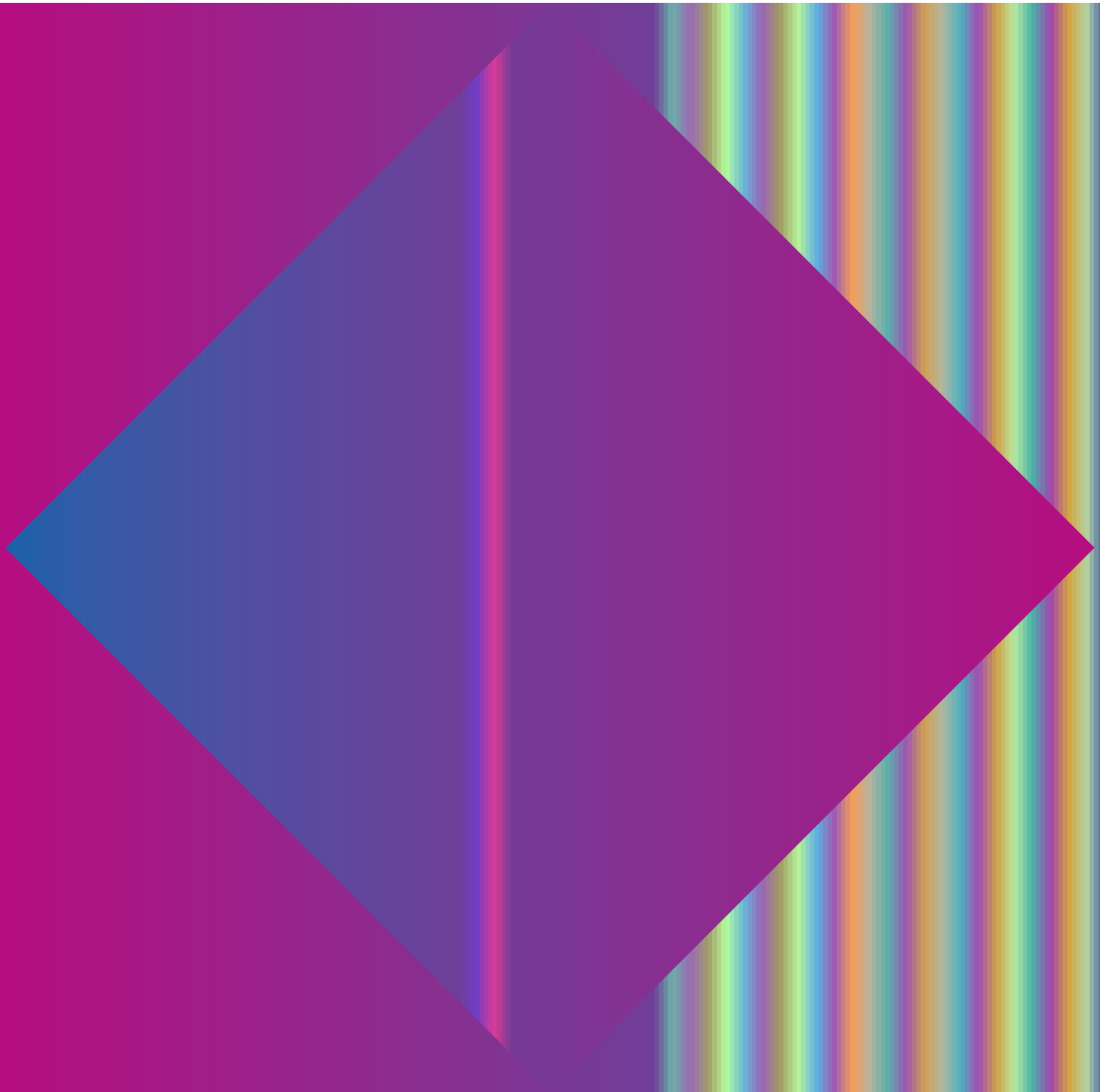


CONSULTANCY
REPORT

UNIVERSITY INDUSTRY COLLABORATION

NOVEMBER
2020





UNIVERSITY-INDUSTRY COLLABORATION

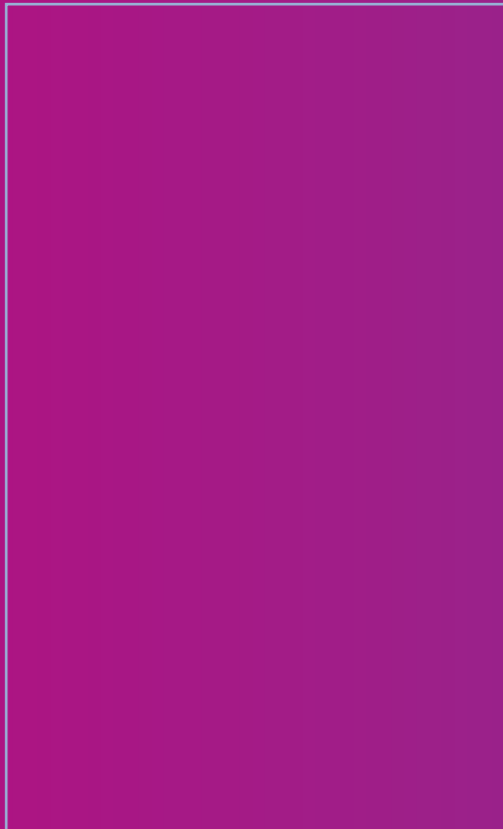


FOREWORD

\$36k

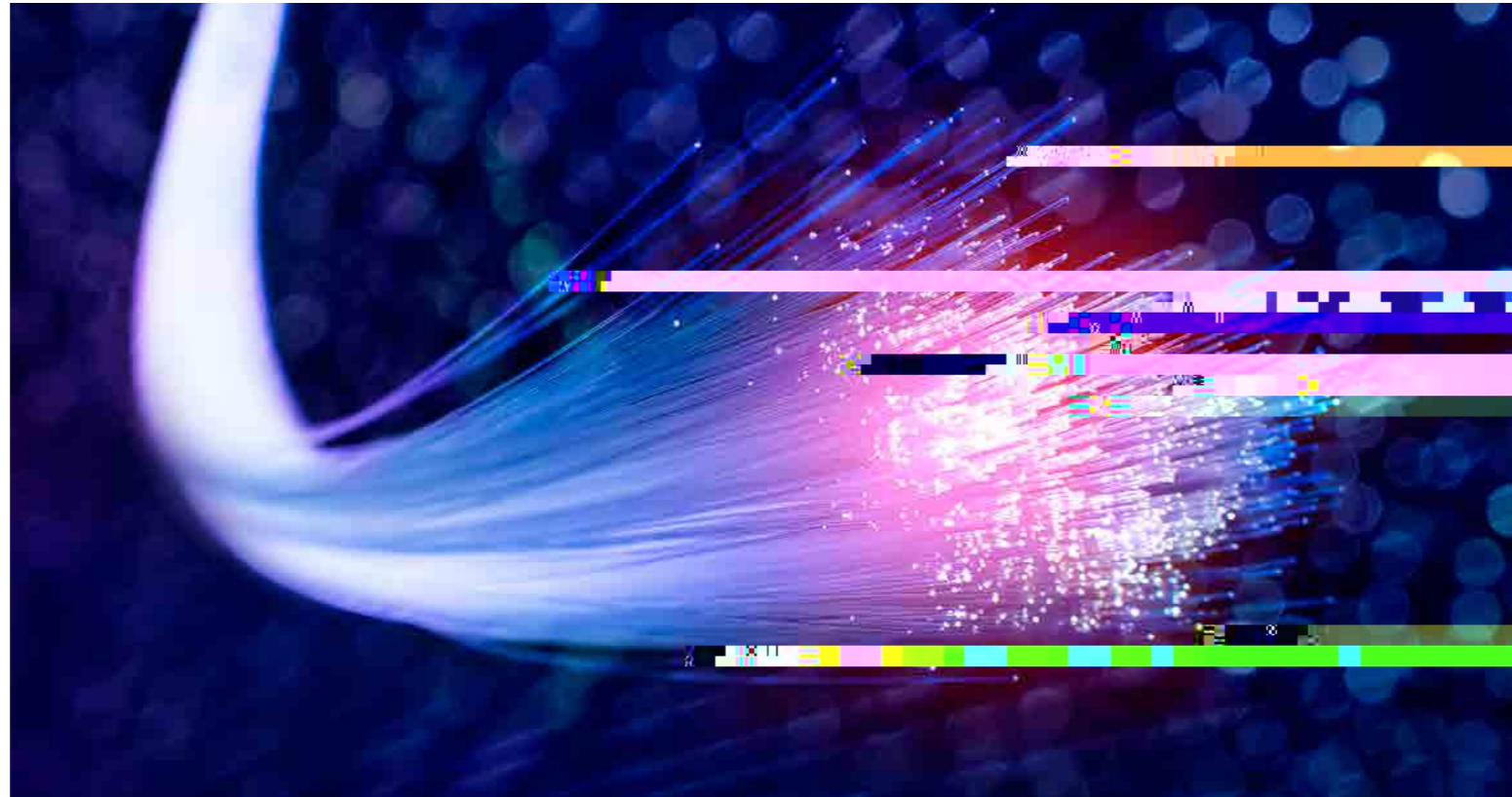
The median industry research income of

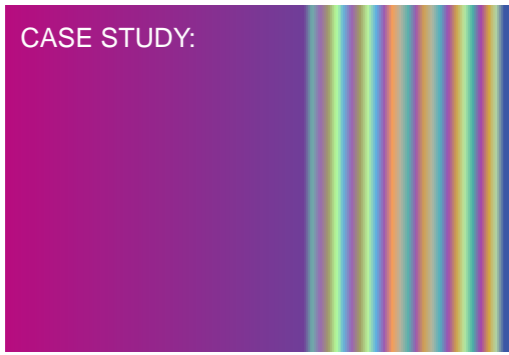
FROM THE UK, THE UNIVERSITY OF OXFORD REPORTED AN AVERAGE RESEARCH INCOME FROM INDUSTRY OF \$57,000 USD PER ACADEMIC STAFF MEMBER.



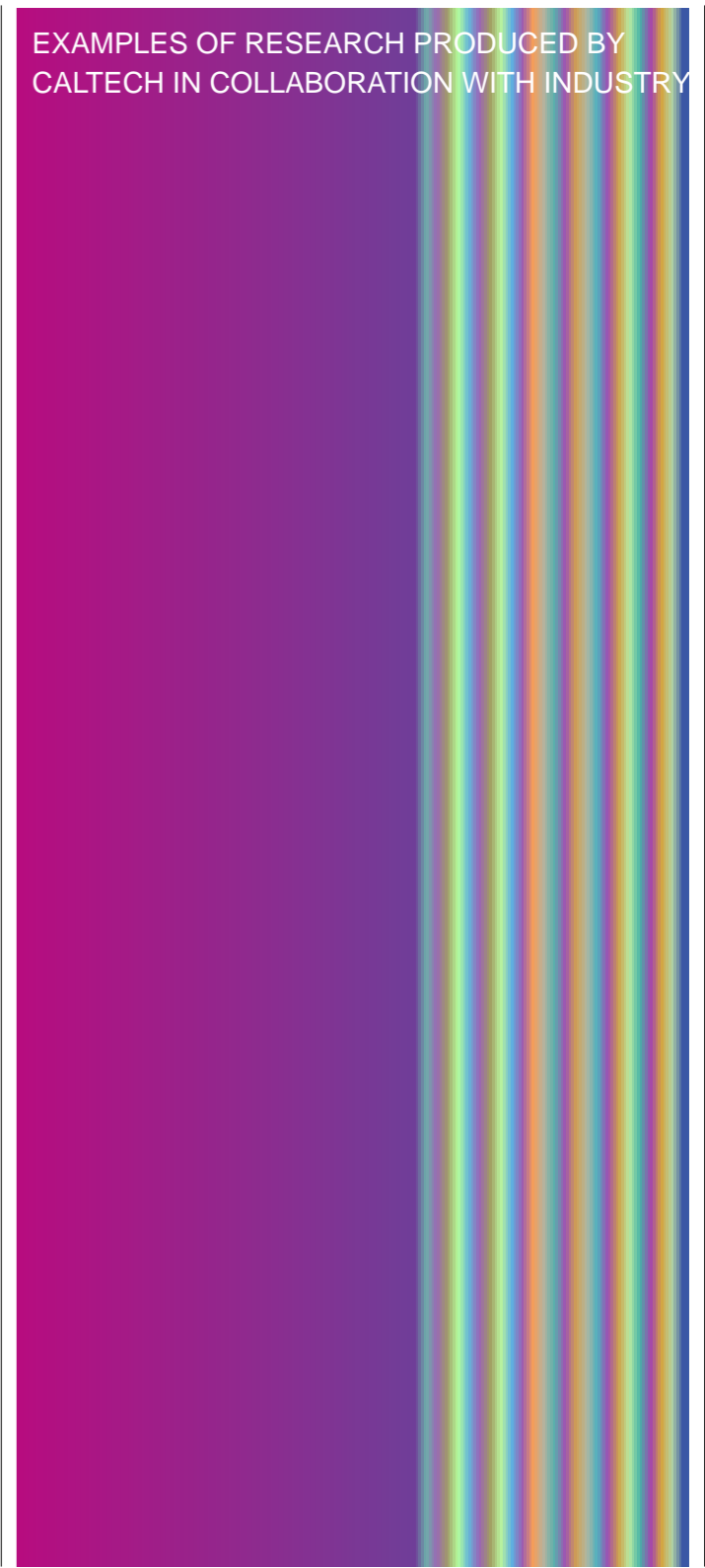








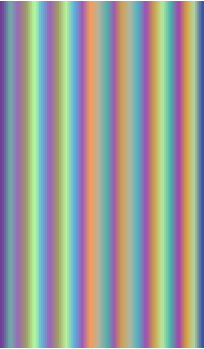
CASE STUDY:



EXAMPLES OF RESEARCH PRODUCED BY CALTECH IN COLLABORATION WITH INDUSTRY



CASE STUDY:



EXAMPLES OF RESEARCH PRODUCED BY MCMASTER UNIVERSITY IN COLLABORATION WITH INDUSTRY

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INDUSTRY COLLABORATOR: **IBM**

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UNIVERSITY-INDUSTRY COLLABORATION



SECTION 3



Whilst global tech giants continue to invest vast sums of money in R&D to support higher education institutions' research innovation, they also work collaboratively to produce quality research outputs.

Our bibliometric analysis conducted using the MAG shows that amongst the tech companies investing the most in R&D, (Microsoft, Google, Huawei and Samsung) Microsoft has published the largest volume of academic papers in which it is listed as a co-author. Although this number has fluctuated over the period analysed (2015 – 2019), in 2019 Microsoft published an estimated total of 1,775 pieces of collaborative academic research globally. This was followed by Google (1,653), Huawei (912) and Samsung (62).

Further analysis of commercial collaboration in each of the European countries selected for analysis shows a variety of companies investing in each nation. Our MAG analysis has shown that between 2015 and 2019, Philips is the top collaborator in the Netherlands, IBM in Switzerland, Bosch in Germany, Hoffmann-La Roche in France, and Microsoft in the UK.

“

NETHERLANDS

Philips	219
IBM	111
Microsoft	83
NXP Semiconductors	78
Google	56

GERMANY

SWITZERLAND

IBM	168
Microsoft	104
DSM	79
Google	59
+ RÄPDQQ / D 5RFKH	38

CASE STUDY:

CASE STUDY:

SECTION 3



THE VITAL ROLE OF TECH COMPANIES' SUPPORT FOR HIGHER EDUCATION RESEARCH

However, at a national level, universities from the Netherlands on average attracted the most research income from industry (\$64,000 USD per academic staff) and produce more publications with commercial co-authorship (5.8%) than institutions in the other countries analysed. Comparative analysis of the proportion of commercial collaboration at university level shows universities in the Netherlands have the highest proportion, followed by their French, Swiss, German, British and American counterparts. Within these countries, industry collaborators are focusing their investment on subjects allied to Material Science, Engineering, Chemistry, Physics, Computer Science and Medicine.

The investment from global industry, particularly international tech companies, in R&D is significant and continues to grow. The financial outlay on R&D from these tech companies, such as Microsoft, Google, Huawei, and Samsung, provides a proxy to understand their year on year commitment to supporting university level R&D. Further evidence of their commitment to supporting innovation at this level is the volume of co-authorship and the scale of research publication. In all instances this collaborative commitment transcends national boundaries and, in many cases, involves institutional and commercial partners that span the globe. Our investigation has also highlighted the longevity of commitment from global tech giants to the provision of support for university level research.

