

SEN16D007

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Issue

The first annual report on enterprise across UEA to Senate

Recommendation

Recipients are invited to receive the authors report on UEA enterprise activities.

Resource Implications

None

Risk Implications

None

Equality and Diversity

None

Timing of decisions

None

Further Information

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Background

This is the first in what will be an annual report to Senate covering enterprise activity across the University

Attachments

Summary report below

**Enterprise at the University of East Anglia
Report for University Senate November 2016**

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1. Introduction

a. Enterprise in a university context

The term “enterprise” covers a wide range of activities undertaken both by UEA as an institution and its members (both staff and students) as individuals.

In this paper the term is used to refer to all activities where an external party is making a payment to the University outside the standard grant funding or donations processes. Enterprise can involve interactions with a wide range of external parties including the private, public and third sectors. This report includes work undertaken with all of these types of organisations and is not limited to interactions with private sector companies.

b. Enterprise within a framework of other activities

Enterprise activities are not separated from other activities at UEA but form a key element in its contribution to knowledge exchange. While enterprise creates useful sources of both direct and indirect additional income it is just as important in developing relationships with external organisations, helping the development of research and teaching programmes, providing evidence of research impact and contributing to student employability. The model of technology transfer as a linear activity, starting with an idea within the research base and ending with a company producing a product, that has informed constructs such as technology readiness stages, is increasing being replaced by a more circular model of sharing knowledge between organisations for their mutual benefit. This can be reflected in terminology, with terms such as knowledge exchange being substituted for technology transfer and knowledge transfer. This change in terminology also reflects that knowledge exchange and associated enterprise covers all academic disciplines and is not limited to those with technical outputs.

The knowledge being exchanged can be derived from a number of different sources including research outputs but also UEA’s expertise in other areas.

One key relationship is that between enterprise and research impact. Enterprise based activities can provide key evidence of research impact, although the two terms are not synonymous.

Around 25% of the 235 impact case studies being developed by the University include at least an element of enterprise activity.

c. Intellectual Property and Enterprise

A lot of enterprise activity involves the use of UEA’s intellectual property. These intangible assets go much wider than the patenting of inventions and include in addition copyright, knowhow, design rights and trademarks. The University has a set of regulations governing the use of its intellectual property and aims to maximise its value. Value may be realised through enterprise activities but the University takes a long term view of benefits and

manages intellectual property not only to generate income but also to facilitate relationship management and the evidencing of impact from research outputs.

One feature of enterprise activities is that they frequently involve a degree of confidentiality. In some cases not only the details of an agreement but also the existence of an agreement are required to be kept confidential. While UEA seeks to ensure that any confidentiality agreements are proportionate to the activity being undertaken they can hamper widely publicising projects. At the last REF five impact case studies, of the 64 submitted from UEA had to be reviewed and assessed confidentially and redacted prior to any publication.

2. HEBCIS and HEIF

Each year HEFCE requires universities to complete the Higher Education Business and Community Interaction Survey (HEBCIS). This return captures activity in a number of areas related to enterprise and provides a useful resource to both benchmark activity over time and between different institutions. UEA's performance in key enterprise areas is discussed in the following section.

The HEBCIS survey is of importance as some elements that include a financial transaction are used by HEFCE to allocate the Higher Education Innovation Fund (HEIF). We are just approaching the end of the HEIF 5 period during which the UEA income from HEIF has grown for £1.8Mpa (2011/12) to £3Mpa (2016/17) reflecting both a general increase in HEIF during this period and also an uplift for UEA's allocation due to improved performance.

HEIF 4 and HEIF 5 were both allocated by looking at performance over a number of years and then making a five year funding allocation. The latest round (HEIF 6) is moving to a more dynamic model where performance in one year will directly impact on funding for the next with the potential for allocations to vary by +/- 10% each year.

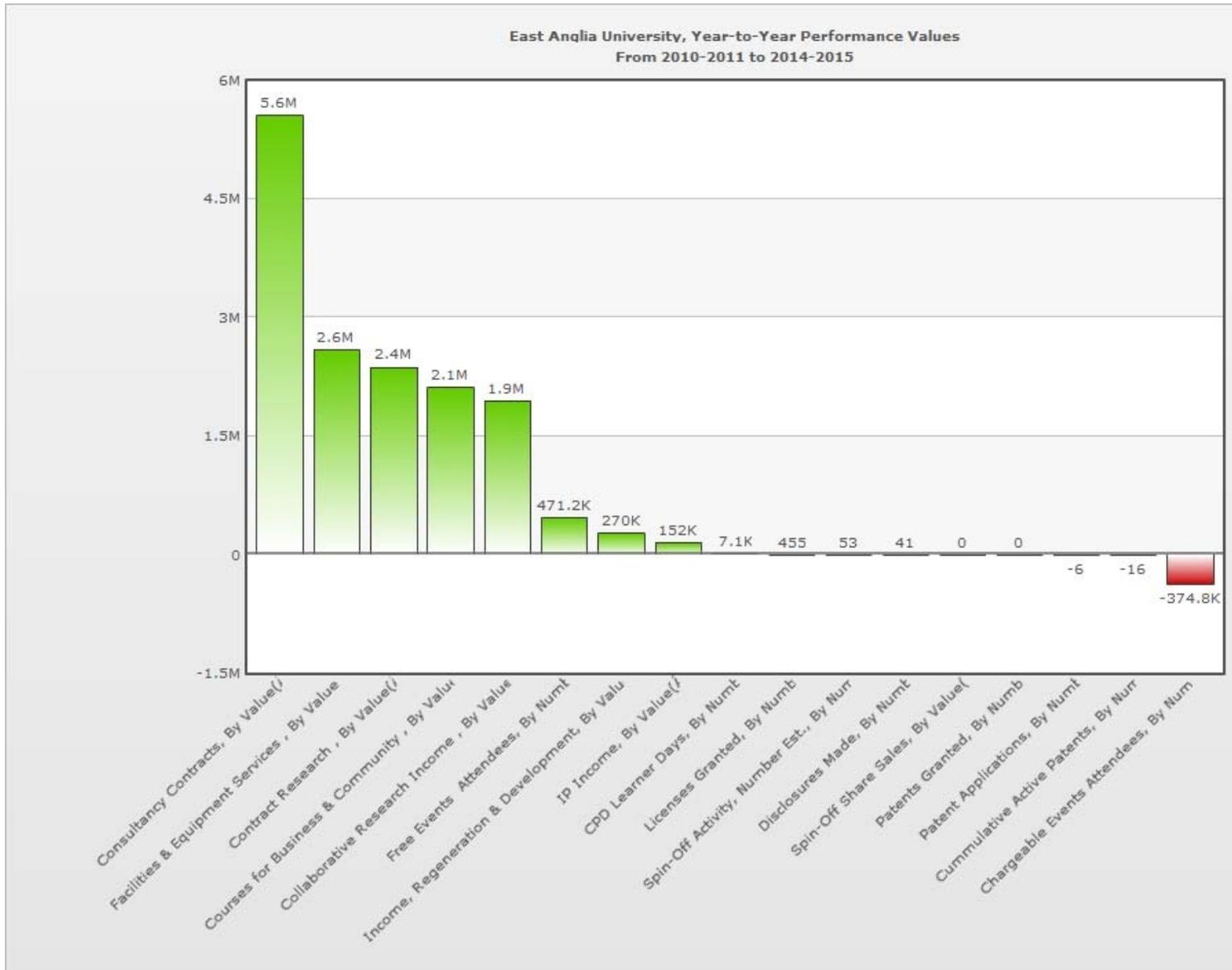
The key elements used to allocate HEIF to an institution are the gross income from:

- Contract Research
- Consultancy
- Facilities and Equipment Services
- Courses for business and the community (CPD)
- Income for Regeneration and Development
- IP Income (licences)

While the allocation is based on a restricted number of indicators the HEIF grant can be spent on a wider range of activities but these have to be based around enterprise and engagement and it cannot be used for general research, teaching or associated support activities. For example at UEA the recent investment in impact awards, together with the associated staffing posts, and student enterprise and employability has been enabled by contributions from the HEIF grant. Each year UEA has to submit a report on its HEIF spending showing it is consistent with a plan agreed to by HEFCE.

3. Classes of Enterprise Activity

HEBCIS data is submitted annually in December covering the previous financial year's activity. This means that the most recent comparative data available is for the 2014-2015 financial year and UEA is currently preparing its submission for the 2015-2016 financial year. The figure below shows UEA's overall performance in the period 2010-2011 to 2014-2015 against the full range of HEBCIS metrics.



The following tables cover the key areas in the HEBCIS return that are used for the HEIF allocation in more detail showing UEA's performance over time and listing both the top ranked university and the 20th ranked university. Included are summaries of the HEFCE definitions of the activities.

a. Contract Research

Contract research must be identifiable as the institution meeting the specific research needs of external partners. The increase in income 2011-12 was partly due to changes in the guidance as to projects that were eligible to be returned in this class and also a small number of large projects. The drop in 2014-15 was due to these large projects completing at the same time.

Table 1: UEA's ranking (out of 160) and income from contract research.

Year	Ranking	Income (£M)
2014-2015	56	2.8
2013-2014	38	6.6
2012-2013	35	7.2
2011-2012	35	6.5
2010-2011	109	0.4

Highest Ranking University: Oxford £142M
 20th ranked university: Strathclyde £14M

b. Consultancy

Consultancy is defined as the provision of expert advice and work, which while it may involve a high degree of analysis, measurement or testing, is crucially dependent on a high degree of intellectual input from the institution to the client (commercial or non-commercial) without the creation of new knowledge. Consultancy income at UEA has been improving year on year.

Table 2: UEA's ranking (out of 160) and income from consultancy.

Year	Ranking	Income (£M)
2014-2015	13	9.6
2013-2014	16	8.5
2012-2013	14	8.5
2011-2012	21	5.6
2010-2011	28	4.0

Highest Ranking University: Southampton £27M
 20th ranked university: Dundee £7M

c. Facilities

Use by an external party of the institution's physical academic resources. This aims to capture provision which can be uniquely provided by an HEI (conference facilities are excluded but use of a specialised facility such as a media suite, stage or studio space could be included). The increase in activity 2014-15 is due to the impact of the NRP LLP and the availability of the specialist facilities it offers. As UEA is a partner it is able to return a portion of the NRP LLP's income.

Table 3: UEA's ranking (out of 160) and income from facilities and equipment.

Year	Ranking	Income (£M)
2014-2015	21	2.9
2013-2014	53	0.7
2012-2013	37	0.9

2011-2012	35	0.9
2010-2011	63	0.3

Highest Ranking University: Southampton £12M
 20th ranked university: Wolverhampton £2.9M

d. IP income

Income from the sale or licensing of intellectual property.

Table 4: UEA's ranking (out of 160) and income from IP (not including income from sale of shares in spin-out companies)

Year	Ranking	Income (£M)
2014-2015	33	0.4
2013-2014	40	0.2
2012-2013	37	0.9
2011-2012	42	0.2
2010-2011	41	0.2

Highest Ranking University: Institute of Cancer Research £25M
 20th ranked university: Kings College London £1M

e. CPD (courses for business and the community)

A range of short and long training programmes for learners already in work who are undertaking the course for purposes of professional development/upskilling/workforce development. The CPD income increased in 2014-15 due to a number of non-standard teaching contracts such as in Pharmacy and some in FMH which have been in addition to the previous NHS contracts.

Table 5: UEA's ranking (out of 160) and income from non-accredited courses for business and the community (CPD).

Year	Ranking	Income (£M)
2014-2015	47	5.2
2013-2014	59	3.3
2012-2013	58	3.6
2011-2012	62	3.2
2010-2011	63	3.1

Highest Ranking University: London Business School £42M
 20th ranked university: University College London £9M

f. Economic Development Funding

Regeneration funding is an important way for HEIs to invest intellectual assets in economic, physical and socially beneficial projects. Funding in this category is uneven as much of the income returned represents ERDF funding into the Low Carbon Innovation Fund operated by UEA.

Table 6: UEA's ranking (out of 160) and income from funding for economic development.

Year	Ranking	Income (£M)
2014-2015	46	0.7
2013-2014	49	0.7

2012-2013	4	8.5
2011-2012	11	5.0
2010-2011	77	0.4

Highest Ranking University: Lancaster - £32M
20th ranked university: Loughborough - £3M

g. Other activities

In addition to the metrics above, HEBCIS also contains a number of other measures, which while not contributing to HEIF indicate the level of activity at UEA. These include the number of licences granted (UEA ranks 7th) and number of graduate start-up companies created (UEA ranks joint 7th).

4. Enterprise Support

a. Staff

Each UEA Faculty has an Associate Dean for Enterprise (ADE), and many Schools have a Director of Enterprise. The ADE and REN report to the Enterprise Executive that is chaired by the PV-C Research and Enterprise.

UEA supports enterprise activities through a combination of specialist support services supplied by REN, internal funding allocated by the Enterprise Executive and external grants and investment. All of the specialist support provided to staff can be accessed through REN, with Project Officers acting as a single point of contact for academic enquiries into both research and enterprise services. Within REN the main areas of support include identification of opportunities, relationship management, IP management, costing and pricing of work, negotiation of terms and conditions, external fund raising, contracts and legal agreements, and financial arrangements.

The comprehensive support package for the development of enterprise projects forms an integrated incubation process providing a combination of finance (either direct financial support or access to external funders); advice (mentoring, guidance and training); and identification of physical space (suitable accommodation and access to facilities) creating an enterprise acceleration programme co-ordinated and appropriate to the development stage of any project.

UEA has two wholly owned subsidiaries to assist in its enterprise activity, UEA Enterprises Ltd and UEA Consulting Ltd. UEA Enterprises holds equity in UEA spin-out companies and is responsible for licensing the UEA patent portfolio. UEA Consulting Ltd operates the UEA managed consultancy activity which in the past 12 months has signed consultancy contracts worth over £4M. Staff using the managed consultancy service benefit from support including assistance in tendering for work, advice on setting day rates, contract negotiation, cover from UEA insurance, an invoicing and payment collection service and receive payments through payroll avoiding the need to make a separate tax return.

Institutional relationships and their management are also increasingly important, feeding into multiple facets of activity including enterprise but also employability, research and teaching. UEA's success in increasing its HEIF allocation has enabled recent investment in relationship

management. The Relationship Manager role is external facing, promoting the multiple ways external organisations can work with UEA academics (and students), and facilitating the effective growth of these relationships. Each of the Relationship Manager roles focusses on an industry sector as follows:

- Business, Financial and Legal Services
- Creative, Digital and Heritage
- Engineering
- Healthcare and Social Sciences
- Marine, Agriculture and Environmental Sciences.
- Medical and Life Sciences

Once an academic has approached REN with an enterprise idea REN colleagues will advise on the most appropriate actions to develop the enterprise project based on the support and resources needed. This will likely involve an application to one of the Enterprise funding sources available internally in the first instance and if successful may lead onto applying for external enterprise funding. Table 7 below summarises the various sources of enterprise and impact funding available for institutional enterprise projects.

There are also a team in the Adapt Group who specialise in the low carbon economy, whose responsibilities include the management of the space within the Enterprise Centre for private companies, consultancy activities, and the operation of the Low Carbon Innovation Fund.

Individuals at the University may also undertake enterprise activities in their own right. This can be related to intellectual property which UEA either does not own, or over which it has agreed not to claim. If the University does not wish to exploit a piece of intellectual property it will offer to assign it back to the inventor.

Table 7: Sources of Enterprise and Impact Funding for institutional projects

	Funding Stream	Awarded by	Amount £k	Comments
Internal Funds	Associate Dean for Enterprise awards	Associate Dean for Enterprise	0 < > 5	Method of allocation varies across Faculties. Supported from HEIF.
	Associate Deans Impact Awards	Either Associate Dean for Enterprise or Associate Dean of Research	0 < > 5	Method of allocation varies across Faculties. Supported from HEIF
	ESRC IAA Funding	ESRC IAA Lead (Jacqueline Collier with advice from ESRC IAA Board)	Variable depending on project	External steering group advises on major projects. All proposals are considered by the ESRC IAA Committee. Supported from ESRC award
	Proof of Concept Fund	PVC R&E (with advice from Enterprise Executive)	5 < > ~15	Applications are reviewed by Enterprise Executive. Supported from HEIF
	Impact Award	PVC R&E (with advice from	5 < > 20	Potential Impact Case Studies are reviewed at a School and Faculty level Supported from HEIF

		Enterprise Executive)		
	Strategic Fund	PVC R&E (with advice from Enterprise Executive)	>50	Applications are reviewed by Enterprise Executive. Supported from HEIF
NRP Funding	NRP Translational Fund	Fund Board	10< >50	Applications require both academic and Knowledge Exchange leads Currently fully allocated and alternative sources of funding in this area are being explored.
External Funding	Pathways to Impact	Research Council Funding Committee	Varies depending on proposal	Application is made as part of a research application
	Research Council Follow-on Funds	Research Council Funding Committees	Varies depending on scheme	Names and schemes may vary between Research Councils. Funding is in the form of grants.
	Departmental Funding	Various	Varies depending on scheme	Includes NIHR funding. Funding normally in the form of grants but may contain restrictive intellectual property terms
	Small Investment Schemes	Various	~25< >~75	Would include LCIF small investment scheme that is planned to re-open in early 2017
	Seed-corn Funding	Fund	~100< >500	Would include Rainbow Fund. Funding is as an investment, anticipating a return.
	Business Angel Funding	Individual or consortium	Highly variable	Small investments may be made by individuals at the start of a project. Consortiums normally require product or service to be ready for market.

b. Student

UEA Support for student enterprise is provided through the student enterprise service within the Careers service. Support is also available via the activities of the UEA Students Union. The range of activities supported are detailed in Table 8 below. Enterprise training and support for students not only encourages them to establish their own business but also contributes to the general employability of those students involved in the programme. There is a wide variety of support schemes and activities available to suit the ambitions of each student (demonstrated in the table below) with many first engaging with the Careers Service through attending an enterprise event or through approaching the UEA Enterprise and Employability Development Officer for advice.

The Careers Service has made a recent investment in supporting student enterprise with the introduction of a further Enterprise Development post which will particularly focus on postgraduate student enterprise and developing the lifecycle from enterprise start up through to scale and growth.

An exciting new initiative is the UEA Enterprise Fund that is being established with funding from specific donations from alumni. This fund is initially being targeted at students and recent graduates who will be able to apply for small grants and initial investments for new enterprises. In addition to the funding applicants will also benefit from support to develop their

propositions, mentoring and assistance with establishing their companies. A pilot investment round is running in November 2016 with the main Fund opening to applications in 2017. Currently around £800k has been pledged to the Fund and an Investment Committee including UEA representatives and successful alumni has been established to review its operation and review applications.

UEA has also recently launched a MSc in Business Creation, providing students on the course with an academic background in the ability to develop their own business propositions as part of the course. Graduates from this course will be able to apply for funding from the UEA Enterprise Fund to help launch their businesses.

UEA does not claim intellectual property independently created by its students.

Table 8: Sources of funding and support for student enterprise projects (from both the University and Students Union)

Activities supported by the UEA Careers Service	
UEA Student Enterprise support	<p>Approx. 400 students engage in Enterprise activities through the Careers service annually. There are approx. 35-40 trading companies and approx. 35 enterprise events held annually.</p> <p>Activities focus on the following areas</p> <p>Gaining skills and experience</p> <ul style="list-style-type: none"> • Workshops and events by local entrepreneurs to develop business skills • Promotion of a range of competitions open to students • Volunteering opportunities in a start up <p>Support</p> <ul style="list-style-type: none"> • One to one business coaching - advice from a Student Enterprise Officer • Start-up mentoring - one off information sessions and six month mentoring programmes • Enterprise Panel - a think tank to support student entrepreneurs <p>Funding</p> <ul style="list-style-type: none"> • Small grants to "Try it" (up to £500) and "Do it" (up to £3,000) to explore an idea or launch a venture <p>Visa support</p> <ul style="list-style-type: none"> • For non-European students wishing to extend their stay in the UK after graduation to establish a business <p>Online and Physical resources</p> <ul style="list-style-type: none"> • Online information to support all stages of business start up • Student Enterprise Space in the Enterprise Centre and Careers Central available for confidential meetings, small workshops and hot desking.
i-Teams	i-Teams combines multi-disciplinary teams of students with industry mentors and University inventions to assess the commercial viability of new technologies and product designs. Teams of up to 7 PG students or early career researchers from across all disciplines work with UEA researchers and an industry mentor to investigate potential markets for a new technology and report their findings to an audience of business and academic experts at the end of the 11 week programme.
Institute of Directors Student Branch	IOD student branch supported by IOD Norfolk – a student business initiative. Students gain access to Young Directors Forum, National student events, local networking opportunities, business information and access to the IOD placement and internship noticeboard
Sync the City	Sync the City is a 54 Hour annual event during which groups of developers, business managers, startup enthusiasts, marketing gurus and students and more pitch ideas for new startup companies. The event is supported by SyncNorwich, UEA, Norfolk County Council, Aviva, Barclays, Adnams, Liquid 11 etc.
Social Storm	Within an intensive 24 hours students will work within an international team to develop a business solution to help solve the social issue, validate your ideas, and submit a video pitch to a team of judges. Plus, there will be a range of workshops and lots of mentors to tap into for advice.
UEA Writers Service	The writers service provides copy writing and content and copy writing services to UEA and external clients. UG and PG students interested in writing for a career are given SEO training and an opportunity to secure paid work and develop skills and experience in freelance writing for businesses

Activities supported by the UEA Students Union	
UEA SU Enterprise	A range of events, activities, workshops, competitions and volunteering opportunities for students to participate in including UEA Student Pop Up Market, £50 grants for enterprising activities in societies, free places at Norfolk Network events.
Student Societies	Enactus - entrepreneurial students working with organisations in industry to create social enterprises, to empower disadvantaged groups of society. Enactus is a global organisation which operates through university student teams.
	UEA Bright Futures – student society holding careers events including networking events, dinner with industry, training sessions, socials and career workshops. Bright Futures is the largest network of careers and skills societies in the UK, operating in over 50 universities.
	UEA Entrepreneur Society – aimed at students who have started a business already, wish to start a business or are interested in entrepreneurship. The society provides workshops, meet and greets, competitions and networking opportunities.
	UEA Women in Business - organise events in Norwich with professional female speakers from a variety of industries. Advertise and organise trips to national events and opportunities
	UEA Business Society - started in September. Organise business talks, seminars and networking events
	UEA Investment Society - aims to bridge the gap between investment practices taught in lectures and practiced finance. Hosts several mock investment and trading games, provides guidance in working with trading platforms and hosts investment professionals to provide advice.
National Student Enterprise Competitions	
<p>UEA students also engage in a number of National Enterprise competitions supported via the Careers Service, Faculties and Schools and the Students Union. These include:</p> <ul style="list-style-type: none"> • Biotechnology Young Entrepreneurs Scheme (Biotechnology YES) • China UK Entrepreneurship Challenge • Environment Young Entrepreneurs Scheme (YES) • Goldman Sachs Student Challenge • The International Genetically Engineered Machine (iGEM) • Npower Future Leaders competition • Santander Universities Entrepreneurship Awards, Big ideas and 60 second pitch competitions • Tata Consultancy Services (TCS) tech challenge • Young Enterprise awards 	