Collaboration in Intellectual Property Education and Research

Professor Ruth Soetendorp
Centre for Intellectual Property Policy & Management
Bournemouth Law School
Bournemouth University
Poole Dorset UK BH3 7NF
rsoetend@bournemouth.ac.uk

Introduction

Intellectual property is intrinsically collaborative. It is impossible to think of intellectual property rights in isolation from the outputs of innovation and creativity. IP legislation embodies the outcome of political debate between cultural, industrial and commercial interests and IP specialists. Intellectual property litigation locates IP law at the cutting edge of science, technology, and the arts. Intellectual property rights pervade global social and economic life.

International governments' technology transfer and enterprise agendas show they consider interdisciplinary IP education and research to be vital for continued economic growth. The introduction to universities of technology transfer offices has done much to raise IP awareness on campus[1], especially since most tto's employ at least one IP person. Professional bodies are beginning to refer to IP competencies in accreditation guidelines[2]. Postgraduate programmes that combine intellectual property with disciplines as diverse as agriculture and sport[3] suggest a growing market for an interdisciplinary approach. There are imaginative collaborative initiatives which enable non-lawyers to study IP, at all levels of achievement and rigour[4].

All of which suggest the time is ripe for collaborative initiatives in IP education and research. But collaboration is not always easy. Inter-professional collaboration occurs whenever R&D teams from different disciplines contribute to complex problem solving. This happens more readily in industry than in the universities, where traditional academic discipline barriers disappear very slowly. Academic promotion boards, and the UK Research Assessment Exercise (which is used to determine university funding), tend to rely on single discipline research achievement as evidence of excellence. As a result collaborative interdisciplinary research [CIR] is difficult for universities to manage.

Teaching across disciplines requires an understanding of the relevance of law to the discipline in which you are working. Student learning must focus on context as well as content. Curriculum designers expecting to integrate cognitively disparate topics into the syllabus must develop new learning and teaching strategies and methods. They do so, working with strategies and methods taken from the pedagogic experiences of other disciplines. Lawyers teaching non-lawyers aim to create in students an organic awareness of essential legal knowledge, or specific values. Non-law academics must start the process of integrating law into their curriculum by recognising its relevance to their students.

Getting Started

It was felt important to have an idea of IP academics' attitudes to collaborative education and research. The Association of Intellectual Property Teachers and Researchers [ATRIP] and of the UK IP Teachers Network were invited to participate in an email survey. ATRIP and UKIPTN are self selecting organisations of people who teach IP. Although neither group has 'law' in the title, the responses suggest that their memberships are predominantly law based. Information from IP teachers who do not have law as their primary discipline will have to be sought in a separate survey.

58 of a total of about 240 responded. They represented 49 universities, 4 law practices 1 patent office. Four academics, responsible for IP education and research in their university, but not ATRIP/UKIPTN members, were invited to answer the same questions. Responses were primarily from Europe and North America, with a few each from Africa, South America and one from Asia. There were none from Australasia and the Pacific Rim, nor from the former FSU, China, Asia or India.

Coincidentally, a survey of a small group of UK and Australian engineering faculties was being undertaken at the same time[5]. Engineering academics were asked whether their students received intellectual property education, and if so how it was taught and by whom.

The literature on collaborative interdisciplinary education and research was searched, as was literature on the teaching of IP on non-law programmes.

Changing University Environment

Changing IP Management practice in universities has been a catalyst for the growth in intellectual property awareness across the sector. University knowledge and technology transfer centres are likely to include intellectual property expertise. Professional associations of university IP managers champion cpd programmes that include IP training, at increasingly sophisticated levels.[6] Most universities now have in place IP ownership policies that sit alongside revenue distribution agreements for staff, researchers and students. The effectiveness of such policies, alongside revenue share agreements, cannot be taken for granted. A project, funded by the UK National Council for Graduate Entrepreneurship[7], is measuring university awareness of IP policies, and their contribution to the student experience.[8]

Governments' requirement that universities engage with IP has stimulated good practice. The following statement appears in all Bournemouth University course documentation:

> Bournemouth University undertakes to encourage the recognition, protection and exploitation of intellectual property rights generated by participants in this programme, to the benefit, as appropriate, of students, staff industrial/other third parties/partners and the university

University engagement with intellectual property issues has stimulated non-law faculties to include intellectual property education in their academic programmes, as well as in training programmes for researchers. But the literature suggests that the growth of non-law engagement with IP is sporadic. Where it is resisted, it is for reasons familiar from studies of interdisciplinary teaching: Non-law academics complain 'I shouldn't have to teach this' 'There isn't time to teach this' 'If the students were any good, they wouldn't need to learn this'[9] Where it happens, it is usually well received by students, and perceived to be beneficial for their future careers.[10]

Delivering IP education to non-lawyers

There is no consistency in how IP education is delivered on non-law courses. A small project team of engineering and intellectual property academics[11] is currently engaged in a research project to identify a pedagogy and resources that will facilitate the integration of intellectual property into the non-law curriculum. A number of engineering faculties in UK and Australia has been surveyed to identify whether IP features on their courses, and if so how it is taught and by whom. The survey is still underway. Here is a 'snapshot' from responses received to date.

Providing IP education for engineers

UK

- We do a day course. The university lawyer does the general IP material and I give a summary of some of my experiences in starting 2 commercial companies. I have done a lot of the IP work with the lawyers and I wanted the students to share my experiences. I have developed a set of power point slides, which I use in conjunction with a model collaborative agreement.
- We do some IP teaching, using a lawyer and a patent agent as visiting speakers.
- IP is embedded in taught units, and is assessed as part of an overall project where students have to write a business plan and address the issue of IP
- IP is embedded in taught units, and delivered by an engineer and a visiting patent agent. Resources used include games and case studies. Understanding of IP is assessed through entrepreneurial projects and assignments
- This is covered in all Engineering undergraduate courses but the level and detail is not high. The work is assessed, but the focus is unlikely to be on IP
- IP is integrated into activities covered by the Knowledge Transfer Centre, it doesn't feature in the curriculum, it isn't assessed. Guest speakers provide guest lectures on some courses

Australia

- It's a small part embedded in 4th year unit *Introduction to Management*. We invite external speakers, a lawyer and a specialist lecturer from

Australian Technology Park. On undergraduate Software Engineering there is an IP compulsory.
- It is present, but not well developed in 4th year Management. We want to develop a stronger IP presence. Engineers teach, using IPAustralia handouts and case studies. We used IP Australia experts, until the service was suspended. Sometimes we use Senior Patent Attorney
- IP is embedded in several topics. It's a small presence, probably not consistent. We plan to do more
- It is taught by an engineer as a separate part of discrete final year business management unit
- It is taught by a visiting lawyer in the final year entrepreneurship unit
- Doesn't really feature in the curriculum – addressed ad hoc fashion in some design subjects
- Not addressed explicitly; implicit in some of our design subjects
- Touched upon in several subjects, taught by an engineer, sometimes with an IP academic from Law Faculty

Where IP is taught at all, it is embedded in another unit, often 'business' or 'management', often in the final year. Collaboration that involves participation from the Law faculty is rare. Collaboration that involves a non-law academic inviting an IP professional to deliver a guest lecture is more common. There is no clear pedagogy for delivering a course element that is cognitively disparate from core content.

UK respondents indicated that IP featured on their courses, but several commented 'not at a high level'. They suggested 'a general awareness'. Most popular delivery was by external speaker [lawyer or patent agent] in conjunction with a member of the engineering faculty (60%). Some use staff from the university technology transfer centre (about 30%) No-one mentioned working with the Law Faculty. IP featured as a small element of summatively assessed work in about 30% responses. Case studies and lecture notes are the most popular resources. One identified games, none mentioned web based resources. One university runs a MResearch in Clean Chemical Technology, which includes a unit 'IP, Business Opportunities and the Impact of Environmental Legislation'.

An Australian engineering academic commented 'I believe what stimulates undergraduate interest in IP is the fact that in my experience every student has a dream to create something that will make them a millionaire. There appears to be an inherent awareness that IP means money'. This contrasts with research undertaken at MIT[12] with postgraduate engineering design students. It showed them to be wary about patents, which some saw as 'unethical' or 'mystifying'. They were interested in patenting whilst at University because it is 'cool' to achieve the 'recognition' of a published patent. They appreciated the 'control' a patent gives in being able to influence how ideas are utilised by others. The institutional setting and support (implicit or formalized) had the greatest influence on the nature of IPR adopted.

The resources used most frequently in IP classes on engineering courses:
Lectures

Course notes
Australian Graduate School of Management text
Case studies
Teaching material
IP Australia (one)
Games (one)
There was no mention of interactive, customised resources, nor of databases, nor other internet based materials.

A number of innovative approaches to university teaching IP across the disciplines was recently reviewed in Intellectual Property Quarterly[13]. From the internet, it is possible to find other examples of intellectual property education embedded in research programmes [see Oxford example below] or in action learning programmes [see University of South Florida, below].

The Institute of Automotive Studies at Oxford University's Begbroke Science Park provides a focal point for the University's research and development in partnership with industry. One case study is the SPRINTcar (Short Production Run Innovative Technology Car) which 'will deliver collaborative intellectual property and new opportunities for UK business'. Management and marketing process, design and embodiment processes, and intellectual-property issues and commercialization processes are expected to form MBA and PhD projects.[14]

University of South Florida uses interdisciplinary teams (comprising graduate students from business, engineering, arts, science and medicine) that work together on an entrepreneurship programme. The tasks the students are sent enable the teams to evaluate intellectual property portfolios, produce competitive analyses of products and services currently in the marketplace and strategic alternatives for commercialising technologies. Applying the techniques learnt, "they have increased the number of new ventures launched to aid in the development and commercialisation of USF faculty new technologies."[15]

Understanding 'collaboration' in education and research

'Collaboration covers everything from two people in the same department working together, to major research projects involving scores of people across continents and disciplines'[16]. It covers situations where two IP academics from different institutions work together, as well as where academics with specific interest in any one or more of the specific IP regimes collaborate in education or research. Intellectual property is no longer a distinct area of law, studied only by those intending to qualify as legal practitioners. New careers involve management of IP portfolios in industries as diverse as genetic engineering, pop music, informatics, sport or agriculture. They require universities to respond with courses designed to marry a sound grounding in IP law with IP finance, marketing and industry specific IP issues.

Different Collaborative models
A natural starting point for students and academics could be 'the ethics of IP ownership', since ethics and IP are directly relevant to issues of authorship and use experienced in the production of work for publication or assessment. There are different models for combining ethics with IP in collaborative research or education:

The University of Wolverhampton, UK – hopes to develop **a centre** for research into intellectual property in developing countries. The rationale for establishing the new centre states 'researchers will work closely with economic and social units, administrators, managers, innovators and marketers to establish the causal links between forms of technological and economic progress on the one hand, and of IP on the other'.

Case Western Reserve University, USA runs *onlineeethics.org***, an online ethics centre** for engineering and science faculties, that includes IP and Ethics resources to be used to facilitate their students learning about IP ownership, responsible authorship, and use of IP.

IPRsonline is **a portal site** that involves NGOs including WIPO, UNCTAD, ICTSD working with academics commissioned to produce research reports which will inform ethical policy making.

The University of Leuven, Belgium is involved in **bidding for funding** to research into DNA and public health, in co-operation with the Faculty of Medicine and the Faculty of Theology.

Bournemouth University's LLM IP includes **a full unit** on Intellectual Property Policy and Ethics, with invited guest speakers from appropriate organisations.

The ASSOCIATION OF INTELLECTUAL PROPERTY TEACHERS AND RESEARCHERS and THE UK INTELLECTUAL PROPERTY TEACHERS NETWORK survey

The survey was sent to approximately 240 members of the two associations, whose memberships are understood to overlap. There were 61 responses. Respondents were predominantly academic members of ATRIP or UKIPTN, but 4 were IP legal practitioners who taught part time. 1 respondent had responsibility for Patent Office education programmes. Additionally 3 academics were involved in IP education and research, but were not members of either association, were invited to respond.

Responses by geographical region
Europe 37
North America 16
South America 4

Africa 3
Asia 1
Australasia & Pacific Rim 0
India 0

The majority of responses came from Western Europe and North America. There were a small number each from Africa and South America. There was one only from Asia [Japan] and one from a new European state. There were none from India, Australasia or the Pacific Rim.

IP teachers' primary discipline
It was surprising to note that the IP academics gave law as their primary discipline, but not all identified it as intellectual property law. It was anticipated that ATRIP/UKIPTN includes IP academics from a range of primary disciplines. It would be useful to target future survey questions to a wider group of IP academics, including members of societies representing IP in the context of a discrete discipline interest (e.g. Society for Economic Research on Copyright Issues).
Some teach one or two specific areas of IP law only. Others identified their prime discipline as a combination of IP law, patents, trade marks, copyright, private commercial, contract, antitrust, licensing, competition, civil, corporate, or business law, or jurisprudence. The four non-ATRIP/UKIPTN members' primary disciplines were physics, management, education and law.

Faculty location of IP teaching
Of the 57 ATRIP/UKIPTN respondents, 54 work in a Law School, Department or Faculty. The other three were in Management or Business faculties. The four non ATRIP/UKIPTN respondents were located in an IP faculty, business school, engineering faculty, and Patent Office. Again, it was anticipated that ATRIP/UKIPTN academics would be more evident in social science or business faculties than they are.

Size of IP teaching teams
The smallest 'team' comprises one person teaching alone, part time. The largest comprises 23 full time and 57 part time. In between, IP law is taught by teams of full time academics, supported by part time academics and practitioners. 5 respondents mentioned that IP doctoral researchers are involved in teaching.

COLLABORATIVE ACTIVITY
More than 50% of academics teach outside their own law faculty, and 25% teach in a non-law faculty. There is an eclectic mix of faculties that receive IP input. But there is no evidence that where in any university one faculty offers its students IP, other faculties will follow suit.

Teaching outside the Law Faculty
Of the respondents surveyed, 45% do no teaching outside their own law faculty. 54% of the respondents teach outside their own law faculty, often teaching IP at another institution. 25% of the respondents teach IP in a non law faculty. IP appears to be taught in only one or two of the faculties listed in

any university, with no clear reason why. Nor is it clear how the link is made between IP law and non-law faculties.

Teaching Collaboration – the disciplines
Chemistry
Industrial Design
Engineering
Bio Science
Computing
Literature
Media
Business
Medicine
Economics
Art History
Education
Architecture
Art & Design

There is evidence of IP classes offered to non-lawyers on courses at all levels, undergraduate and postgraduate, as well as professional courses. None of the respondents described innovative interdisciplinary teaching. Only one respondent expressed an unfulfilled aspiration to be involved in collaborative teaching [in her university's Film & Media School].

Collaborative IP Research

51% of respondents identified themselves as involved in collaborative IP research. They describe work with national government agencies, international bodies and other universities producing a wide variety of IP law and policy based outcomes. Research projects described include:

Collaborative IP research
aspects of patent law
IP education for schools, higher education and business
stemcell research patents; IPR in transition
research exemptions in patent law
IP policy and lawn in developing countries
copyright in information society, Opensource software & IPR
Brazil/Italy project on biodiversity
artists earnings, G.I's. Historical sources of ©
Copyright, IP History, EU projects, IPR helpdesk
implementation of EC directive on biotech, implementation of TRIPS
copyright ownership, copyright issues, moral rights
IP & conflicts of law
online digital archive codification of IP law, relating Slovak Private law

database right, geospatial information, digital curation centre
USPTO registry for secured transactions involving IP assets
IP research academy
IP policy making
IP scholars network; IP research network

Collaborative Interdisciplinary Research

20% of respondents described involvement in collaborative interdisciplinary research with academics from another faculty. Ten disciplines were identified as research partners in the survey

Collaborative interdisciplinary research - the disciplines:
Chemistry
Industrial Design
Literature
Economics
Engineering
Science
Social Science
Business Studies: Management, Finance
Medicine
Theology

30% of respondents are involved in both research and teaching outside their law faculty.

Several European respondents expressed an interest in future collaborative work, both teaching and research. This is not currently happening due to low staffing levels and resource commitments. One USA respondent pointed out that bidding for research funds is not widespread amongst US law schools. One European respondent commented that promotion boards do not encourage CIR.[17]

IP academics who undertake interdisciplinary work appear to enjoy it. No negative comments were recorded describing irritation or disappointment at being involved across disciplines. There were, however, comments recorded which expressed a desire to be involved in collaborative teaching or research.

Collaborative Interdisciplinary teaching and research – positive, or negative?

Universidad de la Republica and the Universidad de Montevideo, Uruguay, teach IP in Schools of Law, Chemistry and Engineering, as well as the Industrial Design Centre . 15 -40 IP academic colleagues meet for weekly discussion, and belong to GPI group, which brings together academics from law and information technology disciplines. Universidad de Republica Law School and Chemistry School are developing a study of 'phitoterapics' at the request of Uruguayan enterprises

WIPO's objectives for this seminar include recognition 'of a growing need for an interdisciplinary approach to IP education and IP research capacity'. Evidence for such an approach can be discerned. There are post graduate programmes that deliver IP in combination with non-law disciplines.[18] There are research projects that exploit the creative opportunities that occur at the junction between traditional disciplines. But these examples of good practice appear to occur by happenstance. As often as not they are the result of chance encounters between enthusiasts.

International collaborative research provides opportunities to question fundamental assumptions, to develop new methodologies. An international mix of research partners extends the range of questions asked, and broadens the experience base of the team. Researchers have described collaboration: 'fun and enjoyment' 'inspiring' 'you learn an awful lot'.[19]

There are challenges to collaborative work. Cheap and effective global communication makes it more attractive to build international interdisciplinary teams. But costing in global travel inflates research costs. Drafting proposals that include interdisciplinary questions can be difficult to write and find support for. Winning and distributing funds can present difficulties. As in any team, members' individual roles need to be agreed early on. Likewise, decisions on what outputs can be published when, and where need early agreement. Even IP research projects need to ensure the intellectual property produced in the course of the research is properly attributed.

The biggest problem posed by working cross-faculty however is the reluctance of universities to accommodate interdisciplinary appointments. At its most prosaic, it is the department that hires, appraises, reviews, and promotes – and these are procedures that do not work across faculty borders. Research undertaken amongst United States universities[20] found that as scholars move toward tenure, their intellectual contributions to works with many authors are challenged. That creates a disjuncture: lured into the collaborative research needed for progress in an interdisciplinary field, scholars are later held to the standards of the specific disciplines.

In UK the university funding model is based on the research assessment exercise. Therefore, the attitude of research councils to collaborative research is studied carefully. Some research councils are neutral (e.g. the British Academy and the EPSRC), some regard cross-disciplinary collaboration positively (ESRC). Nevertheless the Higher Education Funding Council admits there is a 'widespread perception amongst institutions that the RAE and the research funding model do not appropriately recognise and reward collaboration.'[21] The situation is similar in the United States 'The situation is improving, but most grant agencies remain as disciplinary as universities, and, by definition, interdisciplinary projects don't fit their disciplinary guidelines. The agencies often have problems reviewing interdisciplinary work. Reviewers may demand more rigor in their own area and may not recognise the value of the synthetic approach'[22]

University of North Carolina's research committee minutes for 04-05 record: We want to promote and protect CIR because it makes the UNC campus better, and those wo do this kind of research deserve encouragement and recognistion. We recognise that not everybody needs to do CIR. We do hope that the promotion and tenure, and merit review systems will acknowledge the value fo CIR when faculty choose to engage in such scholarship[23]

Universities will not be able to resist for ever creating a culture and procedures that will provide the environment in which collaborative interdisciplinary education and research will thrive. Nowotny, Scott and Gibbons (2002)[24] suggest the classical or liberal model of the university, which was based on the transmission of a received body of knowledge from teacher to student, is disappearing. They predict universities moving from the production solely of Mode 1, or single disciplinary, knowledge, produced as the result of research conducted in the absence of a practical goal. Instead, they envisage universities engaging more in research intended to produce knowledge that will be useful to someone. Labelled Mode 2, it will be undertaken by coalitions of academics working across the disciplines, within the university, or with external partners in industry and commerce.

The ATRIP/UKIPTN survey suggests a possible mismatch between education and research aspirations of IP academics surveyed and WIPO. The majority of IP academics are law academics, working in law faculties. Their research and promotion aspirations are still firmly fixed in Mode 1. WIPO, however, understands the utility of working with IP across the disciplines, and sees benefit in Mode 2 researches.

Conclusions

There are some good examples of collaboration between IP academics in education and research. There are some, but fewer, interesting examples of research and teaching by IP academics working in collaboration with academics from other disciplines.

Non-law faculties, in particular engineering, science and technology, are beginning to refer their students to IP matters, often as a result of technology transfer activity in the university. There is no clear methodology or pedagogy for the delivery of IP to non-lawyers.

Interdisciplinary research collaboration happens serendipitously. When it does, it is enjoyable. But it fits awkwardly with university research and promotion norms.

It is not clear why or how collaborations develop between IP academics and other faculties. Do academic 'enthusiasm' 'passion' and 'good interpersonal relationships' play a significant part? There seems no clear pattern for collaborative teaching to lead to research, or to follow from a collaborative research project.

It is necessary to understand what is meant by 'collaboration' before advocating, or dismissing it. There may be different attitudes to collaboration

between IP specialists, or between IP academics and specialists from other disciplines. If it is agreed that collaboration is a 'good thing' should it be WIPO's responsibility to promote it? And if the answer to that question is 'yes', then the next question is 'how?'

There could be many ways in which to answer 'how?'. Here are five that seem an appropriate starting point:

- **Research** further [capturing responses from IP academics in all disciplines and regions] to establish a clearer picture of collaborative activity, and attitudes to it
- **Build** on what is seen to work to encourage interdisciplinary collaborative activity
- **Fund** support for high profile attitude changing projects
- **Challenge** traditional university attitudes
- **Support curriculum integration** by encouraging integration of IP teaching across the disciplines to sow seeds for interdisciplinary research collaboration

Appendix 1

Surveys & Questionnaires

Questionnaire to Engineering faculties

Intellectual Property Education and Research Collaboration

Your responses to the questions below will be used to inform a paper to be presented to the WIPO International Symposium on Intellectual Property (IP) Education and Research, June 30 – July 1, 2005.Thank you for taking the time to respond. Completed questionnaires should be sent to ttc@bournemouth.ac.uk by May 9th.

IP in Engineering Education		
1	Your name (optional)	
2	Your institution	
3	Your Faculty/School/Department/etc.	
4	In which Faculty / School / Department is the primary location for IP teaching and research?	
5	Does IP feature in the curriculum of your Faculty /r School etc.?	Yes/No
6	Is it a separate unit or is it embedded in a unit?	Separate / Embedded
7	At what level is it taught ? Undergraduate? Postgraduate? Professional?	
8	Who teaches IP? Lawyer? Engineer? Technologist? External speaker? Other?	
9	What resources are used? Teaching material? Games? Case studies? Other?	
10	Is this part of an assessed programme? If yes, how is it assessed?	Yes/No
11	What resources are used? Teaching material? Games? Case Studies?	
12	Are there any Entrepreneurial Activities or other extra-curricular activities? (For example see http://www.start-now.co.uk/)	

Questionnaire to Association of Intellectual Property Teachers & Researchers (ATRIP) and UK Intellectual Property Teachers Network

Your responses to the questions below will be used to inform a paper to be presented to the WIPO international seminar International Symposium on Intellectual Property (IP) Education and Research, June 30 - July 1, 2005. Thank you for taking the time to respond. Completed questionnaires should reach me rsoetend@bournemouth.ac.uk by May 9th

ATRIP & UK IP Teachers Network - IP Education & Research Collaboration	

1	Your name[optional]
2	Your institution
3	Your primary discipline:
4	At your institution, in which faculty is IP teaching and research primarily located [e.g. Law School, Business School]?
5	How many colleagues are involved in IP teaching and research?
5a	Full time
5b	Part time
6	Do you teach IP outside the faculty identified in 4. above?
6a	If YES, in which faculties?
6b	If YES, at which levels [please X as many as apply] Undergraduate Postgraduate Professional
7	Are you involved in inter-institutional teaching collaboration?
7a	If YES, at which levels [please X as many as apply] Undergraduate Postgraduate Professional
7b	If YES, does this involve [please X as many as apply]
	Visiting academics
	Academic exchanges
	Academic team teaching
	Student exchanges
	Other
8	Research Bidding – are you involved in bidding for funding IP research projects?
9	If YES, are you involved in bidding in collaboration with other faculties in your own institution?
9a	If YES, from which faculties?
10	Are you involved in bidding in collaboration with IP academics from other institutions?
10a	If YES, from which institutions?
11	Are you involved in bidding in collaboration with non-IP academics from other institutions?
11a	if YES, which institutions?
12	Describe briefly recent collaborative research bidding activity in which you have been involved:
13	Where you have answered NO to any of the questions above, any further information would be welcome
14	Any additional comments:
	Thank you for taking the time to complete this questionnaire.
	Ruth Soetendorp Professor of Intellectual Property Management

	Centre for Intellectual Property Policy & Management Bournemouth Law School, Bournemouth University, Poole Dorset UK BH12 5BB +44 1202 965212 +44 1202 965261 fax www.cippm.org.uk rsoetend@bournemouth.ac.uk

ATRIP & UKIPTN responses

33 respondents teach outside the law faculty

33 respondents teach outside their own law faculty, often teaching IP law at another institution.

15 respondents teach IP in a non-law faculty.

28 respondents do not teach outside their own faculty.

31 respondents involved in collaborative research

35 European responses – **20** involved in Collaborative research 57% - 8 involved in CIR 40% of collaborative work is CIR

16 N. American response – **8** involved in Collaborative research 50% - 1 involved in CIR 12.5% of collaborative work is CIR

4 S. American responses – **1** involved in Collaborative research/CIR

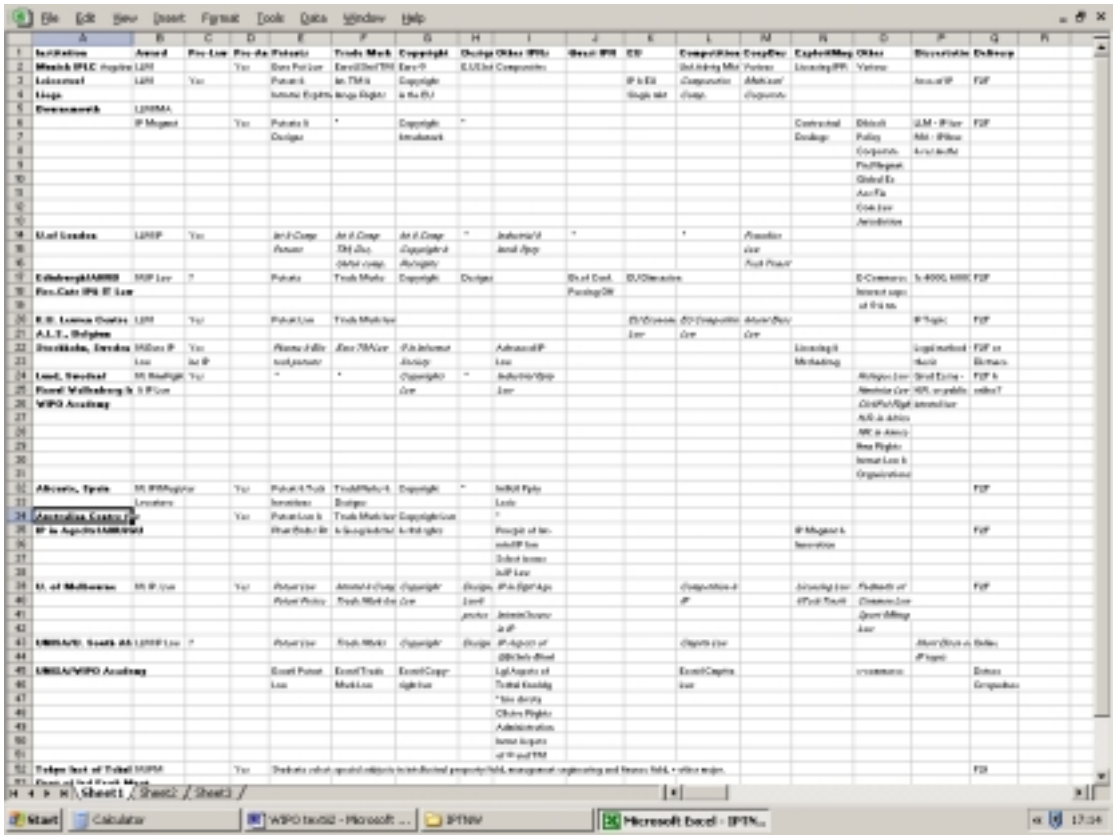
1 Asia response [Japan] - **1** involved in Collaborative research/CIR

3 African response [of which 2 are law firms] -**1** involved in collaborative/

Additional respondent comments

1. I plan to be involved in CIR in the future, subject to current commitments and time constraints [Europe]
2. Some form of IP research network would be useful [Europe]
3. Pressures from the institution's promotions board have the affect of acting as disincentives to engage in interdisciplinary or inter-institutional research since there is a perception that they do not reward collaboration [Europe]
4. Working towards establishing a centre for IP law and policy in Developing Countries [Europe]
5. Bidding for research funding is not very widespread in US law faculties, so far as I know [US]
6. I hope that research bidding is an area I will be able to advance into [Europe]
7. I will be very pleased if I could collaborate with other IP academics from other institutions [Europe]
8. We are currently advertising for an additional IP specialist who I hope would be able to develop IP research [Europe]

Appendix 2 – Survey of Masters programmes offering IP in combination with other disciplines, presented to UK IP Teachers Network meeting, Durham 2003



[1] Sawhney N, The sociological nature of Intellectual Property Rights emerging from open collaborative design in university settings, *Preliminary analaysis of student projects in MIT Design Studio, PhD draft, 2002,* http://web.media.mit.edu/~nitin/thesis/nitin-ipr-study.pdf

All websites recorded in these notes were visited 24/6/05

[2] UK Engineering Council: UK Standard for Professional Engineering Competence Chartered Engineer and Incorporated Engineer Standard, 2004

[3]Soetendorp R, Survey of European masters programmes combining IP law and other topics, *presented to IP Teachers Network 2003*

[4] Dew, P unpublished course materials, *Informatics Department, Leeds University,*

[5], MacLaughlan R et al Engineering Enterprise through IP Education: What Is needed? 2005 ASEE/AaeE 4th Global Colloquium on Engineering Education

[6] See websites of AUTM, Association of University Technology Managers (US) www.**autm**.net/ or AURIL, Association of University Research and Industry Links (UK) www.**auril**.org.uk

[7] National Council for Graduate Entrepreneurship http://www.ncge.org.uk/

[8]Freeman P and Barron E, Student Intellectual Property Questionnaire, *research supported by NCGE at Newcastle University enterprise centre*

[9] Soetendorp R, 'Food for Engineers: Intellectual Property Education for Innovators', *Intellectual Property Forum issue 6 March 2004, pp10-17*

[10] MacLaughlan R, op cit and Soetendorp R, Innovators and IP advisers: preparing for the dialogue, *World Patent Information 23 (2001) 63-66*

[11] Intellectual Property in the Engineering syllabus – a model for integrating key but not core concepts across the disciplines. Soetendorp R, MacLaughlan R, Roach J, Childs B *Research project, supported, uniquely by UK Higher Education Academy LTSN Law and LTSN Engineering, currently in progress between the Law and Engineering schools of Bournemouth University, U.K and University of Technology, Sydney*

[12] Sawhney N, op cit

[13] Soetendorp R, Intellectual Property Education, in the Law School and beyond, Intellectual Property Quarterly, issue 1, 2005, pp 82-110

[14] http://www.sprintcar.org.uk/contact.htm

[15] *From the description of the USF work, there is no indication that IP law students are involved in the interdisciplinary teams* – http://www.entrepreneurship.usf.edu/FountainAcademicVitae.pdf

[16] Olver, R, Forsaking Scholastic Solitude – the pros & cons of collaborative research, Research Hallmark, issue 6, Goldsmiths College, University of London, June 2000

[17] Appendix 1

[18] see appendix 2

[19] Olver r, op cit

[20] Pfirman S, Collins,J, Lowes S, Michaels A, Collaborative Efforts: Promoting Interndisciplinary Scholars, The Chronicle Review, February 2005

[21] Olver R, op cit

[22] see note 19 above

[23] http://www.unc.edu/faculty/faccount/reports/R05RES1.htm

[24] Gibbons M, Scott P, Nowotny H, Re-Thinking Science: Knowledge and the Public in an Age of Uncertainty, Polity 2002