

Malaysia Research Assessment (MyRA)

Innovating the measurement of research performance



Mohd Shahir Shamsir
Universiti Tun Hussein Onn Malaysia

Speaker's Background

- Deputy Vice Chancellor (Research & Innovation) UTHM
- Joined UTHM Jan 2020
- UTM Director Innovation and Commercialization Centre (ICC)
- MOHE Task Force for MyRA I and II
- MOHE Task Force for HiCoE Research and Innovation & HiCoE Services
- Former UTM Deputy Director for Research University Secretariat, Research Management Centre 2012-2017

Challenge!

- How do Malaysia measure research performance but compels capacity building and continuous improvements using a transparent measurement tool?



MyRA®
MALAYSIA RESEARCH ASSESSMENT



- Digital era sensitive measurement tool launched in 2006
- public universities and tertiary institutions with university status, the branch campuses of foreign universities and university colleges.
- rating of six levels with 'six stars'.
- MyRA is a measure of existing R&D culture.. gauge the research, development and innovation (R&D&I) activities
- Measure what exists..
- Other ratings and rankings
 - RQF to ERA in Australia
 - RAE to REF in UK
 - Global ranking QS, THES, SHJT

Verbatim from MOHE

Kronologi pembentukan konsep UP

Seminar Penubuhan Universiti Penyelidikan telah diadakan pada 25hb Ogos 2003

satu J/K ad hoc telah ditubuhkan oleh KPTM untuk menyediakan kertas konsep penubuhan UP di Malaysia.

Pembentangan pada Pengarah, JPT pada 16 Januari 2004

Pembentangan pada agensi-agensi Kerajaan dan badan berkanun - 26 Januari 2004

Nota Kabinet -Julai 04

Kabinet Lulus- 05

PM mengumumkan -UKM,UM,USM,UPM sebagai
Universiti Penyelidikan - Mac 06

Original MyRA Team





The MyRA® (Malaysia Research Assessment Instrument) evaluation is designed to measure research, development and commercialization activities (R&D&C) at various institutes of higher education (both public and private that are designated as universities, overseas campus branches and university colleges) in Malaysia.

The assessment is based on three main aspects, namely input, process and output. In return, this three covers 8 main criteria:

- Quantity and Quality of the Researcher
- Quantity of Postgraduate Candidates
- Innovation
- Reach and Coverage
- Quantity and Quality of the Research
- Quality of the Postgraduate Candidates
- Professional Services and Gifts
- Support Facilities

The resulting achievement gained by these institutions are categorised according to 6 levels, 6 stars being the highest and 1 star being the lowest. The following is the complete alphabetical list of MyRA® results (for public and private institutions) for the year 2011.

6 STARS	
CODE	NAME OF INSTITUTION
1	UNIVERSITI KEBANGSAAN MALAYSIA
1	UNIVERSITI MALAYA
1	UNIVERSITI PUTRA MALAYSIA
1	UNIVERSITI SAINS MALAYSIA

5 STARS	
CODE	NAME OF INSTITUTION
1	UNIVERSITI ISLAM ANTARABANGSA MALAYSIA
1	UNIVERSITI TEKNOLOGI MALAYSIA
2	UNIVERSITI TEKNOLOGI PETRONAS

4 STARS	
CODE	NAME OF INSTITUTION

3 STARS	
CODE	NAME OF INSTITUTION
2	MULTIMEDIA UNIVERSITY
2	MONASH UNIVERSITY SUNWAY CAMPUS
1	UNIVERSITI MALAYSIA PERLIS
1	UNIVERSITI UTARA MALAYSIA
2	UNIVERSITY OF NOTTINGHAM MALAYSIA CAMPUS

2 STARS	
CODE	NAME OF INSTITUTION
2	TAYLOR'S UNIVERSITY
1	UNIVERSITI MALAYSIA PAHANG
1	UNIVERSITI MALAYSIA SABAH
1	UNIVERSITI MALAYSIA SARAWAK
1	UNIVERSITI MALAYSIA TERENGGANU
1	UNIVERSITI SAINS ISLAM MALAYSIA

2 STARS	
CODE	NAME OF INSTITUTION
1	UNIVERSITI TEKNIKAL MALAYSIA MELAKA
1	UNIVERSITI TEKNOLOGI MARA
2	UNIVERSITI TENAGA NASIONAL MALAYSIA
2	UNIVERSITI TUN ABDUL RAZAK
2	UNIVERSITI TUNKU ABDUL RAHMAN

1 STAR	
CODE	NAME OF INSTITUTION
2	BINARY UNIVERSITY
2	CURTIN UNIVERSITY OF TECHNOLOGY SARAWAK CAMPUS
2	SEGI UNIVERSITY
2	UNIVERSITI KUALA LUMPUR
1	UNIVERSITI MALAYSIA KELANTAN
1	UNIVERSITI PENDIDIKAN SULTAN IDRIS
1	UNIVERSITI PERTAHANAN NASIONAL MALAYSIA
1	UNIVERSITI SULTAN ZAINAL ABIDIN
1	UNIVERSITI TUN HUSSEIN ONN MALAYSIA

CLASSIFICATION CODE	
1	Public Institutions
2	Private Institutions

MyRA® 2011 EVALUATION PANEL
 MyRA® 2011 evaluation was carried out by a panel appointed by the Ministry of the Higher Education, consisting of the following esteemed academicians:

YBhg. Prof. Dr. Muhamad bin Jantan (UKM)
 – Chairman

YBhg. Dato' Prof. Emeritus Dr. Md. Ikram bin Mohd. Said (UKM)
YBhg. Dato' Prof. Emeritus Dr. Muhamad bin Yahaya (UKM)
YBhg. Dato' Prof. Dr. Mohd. Jamil bin Maah (UM)
YBhg. Prof. Dr. Samsudin bin A. Rahim (UKM)



Penilaian MyRA® (Malaysia Research Assessment Instrument) bertujuan mengukur aktiviti penyelidikan, pembangunan dan pengkomersilan (R&D&C) di IPT, (IPTA dan IPTS bertaraf Universiti, Kampus Cawangan Luar Negeri dan Kolej Universiti) di Malaysia.

MyRA® menilai dari tiga aspek utama iaitu input, proses dan output yang meliputi lapan kriteria utama iaitu:

- ✓ KUANTITI DAN KUALITI PENYELIDIK
- ✓ KUANTITI PASCA SISWAZAH
- ✓ INOVASI
- ✓ JARINGAN DAN JANGKAUAN
- ✓ KUANTITI DAN KUALITI PENYELIDIKAN
- ✓ KUALITI PASCA SISWAZAH
- ✓ KHIDMAT PROFESIONAL DAN HADIAH
- ✓ KEMUDAHAN SOKONGAN

Pencapaian R&D&C IPT dikategorikan kepada enam tahap dengan 6 Bintang sebagai tahap tertinggi dan 1 Bintang sebagai yang paling rendah. Berikut merupakan senarai penuh keputusan MyRA® IPTA & IPTS bagi tahun 2011 mengikut susunan abjad:

6 BINTANG ★★★★★★	
1	Universiti Kebangsaan Malaysia
1	Universiti Malaya
1	Universiti Putra Malaysia
1	Universiti Sains Malaysia

5 BINTANG ★★★★★	
1	Universiti Islam Antarabangsa Malaysia
1	Universiti Teknologi Malaysia
2	Universiti Teknologi Petronas

4 BINTANG ★★★★★	

3 BINTANG ★★★★★	
1	Universiti Malaysia Perlis
1	Universiti Utara Malaysia
2	Multimedia University
2	Monash University Sunway Campus

2 BINTANG ★★	
1	Universiti Teknikal Melaka
1	Universiti Teknologi MARA
2	Universiti Tenaga Nasional Malaysia
2	Universiti Tun Abdul Razak
2	Universiti Tunku Abdul Rahman

1 BINTANG ★	
1	Universiti Malaysia Kelantan
1	Universiti Pendidikan Sultan Idris
1	Universiti Pertahanan Nasional Malaysia
1	Universiti Sultan Zainal Abidin
1	Universiti Tun Hussein Onn Malaysia
2	Binary University
2	Curtin University of Technology Sarawak Campus
2	SEGi University
2	University Kuala Lumpur

PANEL PENILAI MyRA® 2011

Penilaian MyRA® 2011 telah dilaksanakan oleh satu panel penilai yang ditantik oleh Kementerian Pengajian Tinggi yang terdiri daripada:

- YBhg. Prof. Dr. Muhamad bin Jantan (USM) – Pengerusi
- YBhg. Dato' Prof. Emeritus Dr. Md. Ikram bin Mohd. Said (UKM)
- YBhg. Dato' Prof. Emeritus Dr. Muhamad bin Yahaya (UKM)
- YBhg. Dato' Prof. Dr. Mohd. Jamil bin Maah (UM)
- YBhg. Prof. Dr. Samsudin bin A. Rahim (UKM)





Malaysia Research Assessment (MyRA®) is an instrument for measuring the research, development, commercialization and innovation (RDC&I) activities in Public and Private Universities, Branch Campuses and University Colleges in Malaysia.

MyRA® rating is to measure the achievement of Higher Learning Institutions (HLIs) in RDC&I through the criteria and benchmarks that were set according to each indicator. It is not intended to provide ranking among the institutions.

MyRA® assessment is based on three key aspects; input, process and output which includes eight main criteria:

- a. Quantity and Quality of Researchers
- b. Quantity and Quality of Research
- c. Quantity of Postgraduates
- d. Quality of Postgraduates
- e. Innovation
- f. Professional Services and Gifts
- g. Networking and Linkages
- h. Support Facility

HLIs achievements in RDC&I are categorized into six levels with 6 Stars as the highest level.

Star Rating	Range For MyRA® Rating (Score)	
★★★★★★	≥100	
★★★★★	≥75	<100
★★★★	≥60	<75
★★★	≥45	<60
★★	≥30	<45
★	≥15	<30
No Star	≥0	<15



Ministry of Higher Education



This is to certify that

UNIVERSITI TENAGA NASIONAL

has been awarded

MyRA®
MALAYSIA RESEARCH ASSESSMENT



(4 STAR)

in

MyRA® Star Rating Year 2014



Dato' Seri Idris bin Jusoh
Minister of Higher Education



Ministry of Higher Education



This is to certify that

MALAYSIA INSTITUTE FOR SUPPLY CHAIN INNOVATION
.....

has been awarded

MyRA[®]

MALAYSIA RESEARCH ASSESSMENT



(2 STAR)

in

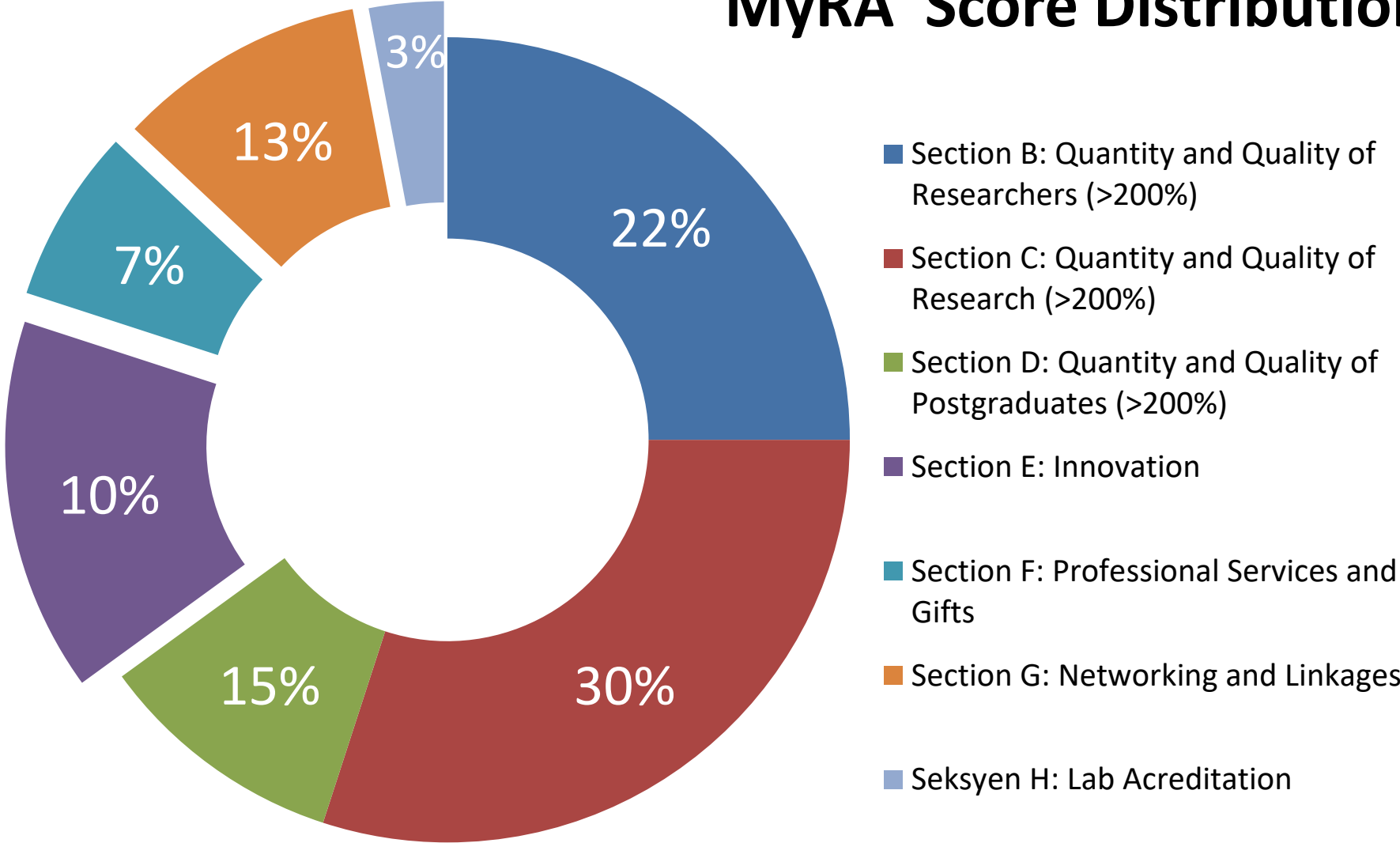
MyRA[®] Star Rating Year 2014



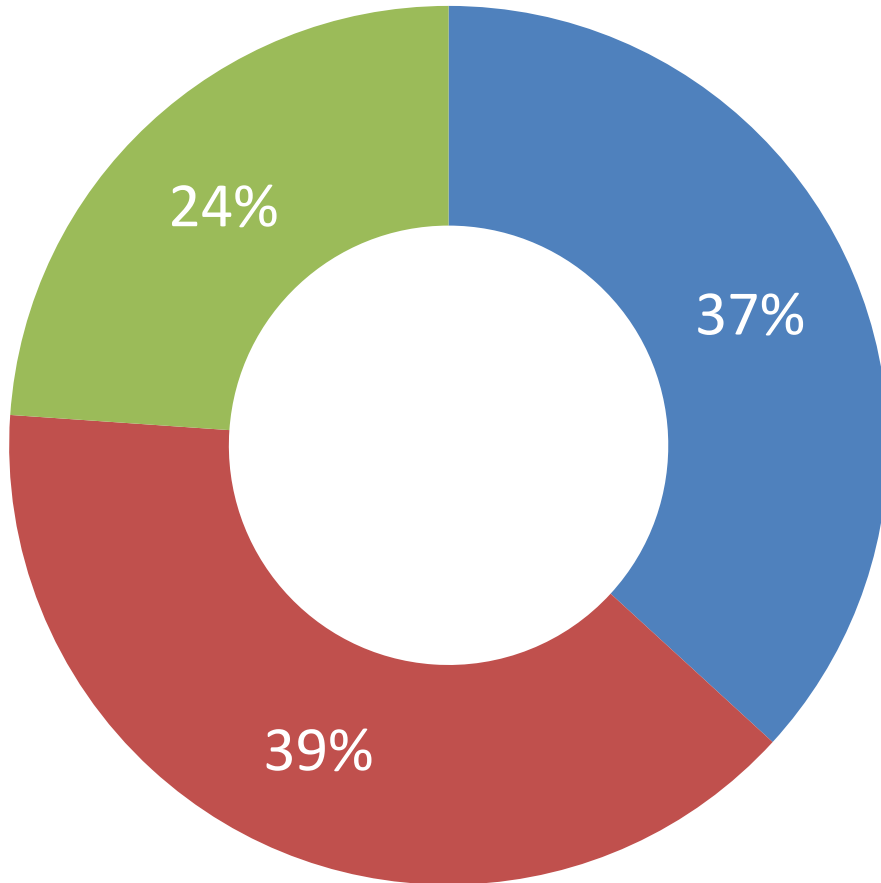
.....
Dato' Seri Idris bin Jusoh
Minister of Higher Education

MYRA SECTIONS

MyRA Score Distribution



MyRA Teamworking Concept

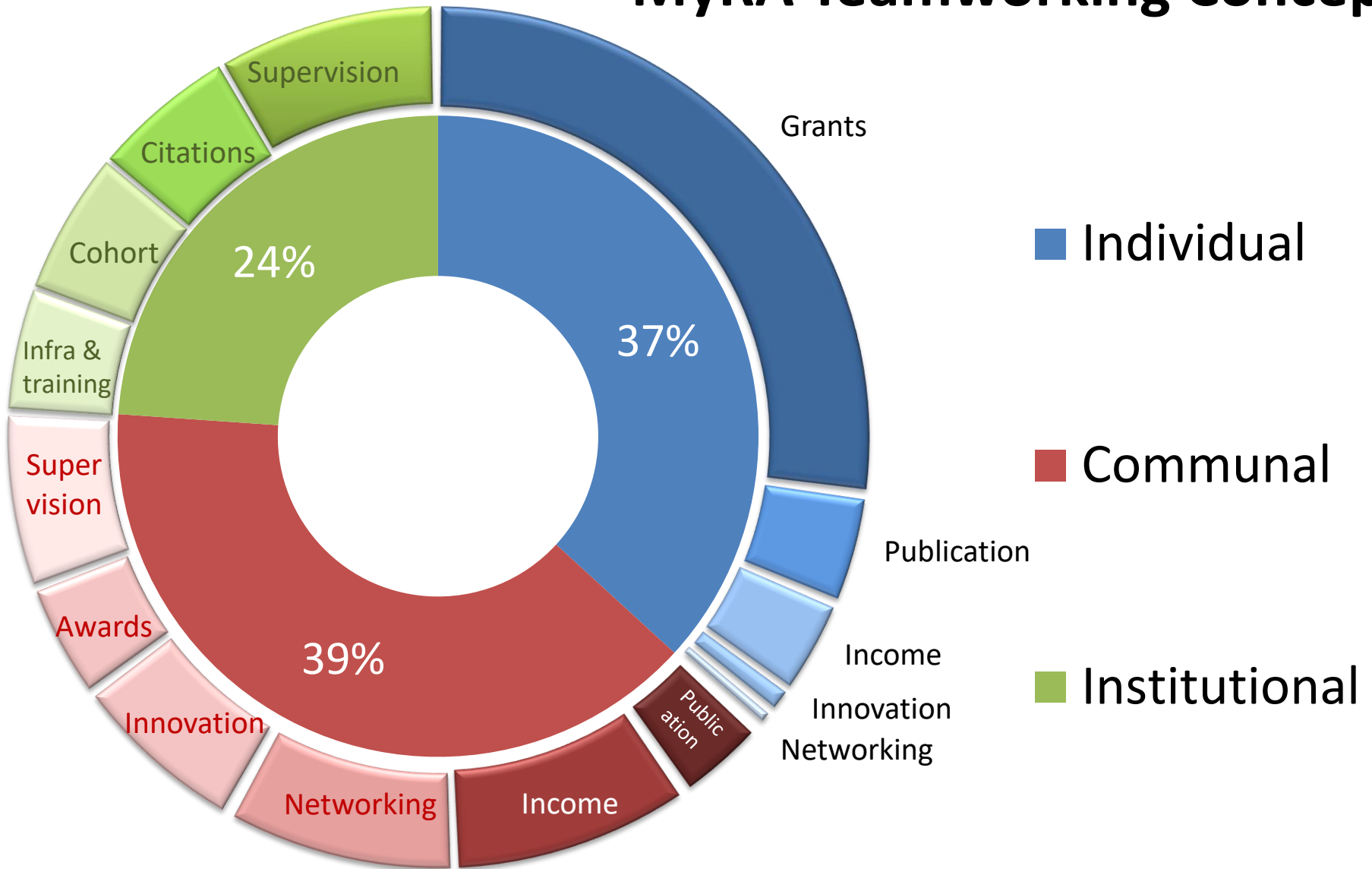


■ Individual

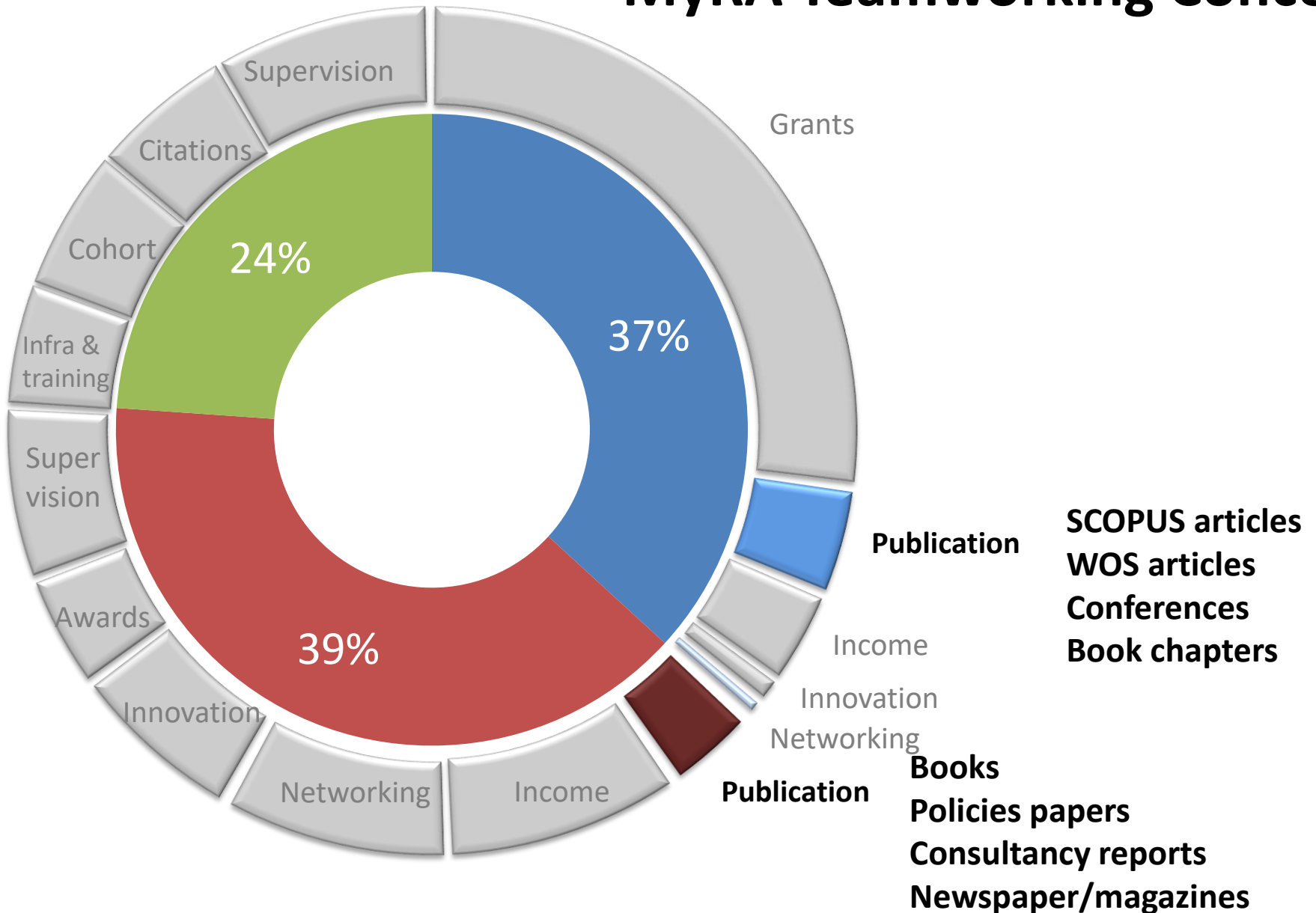
■ Communal

■ Institutional

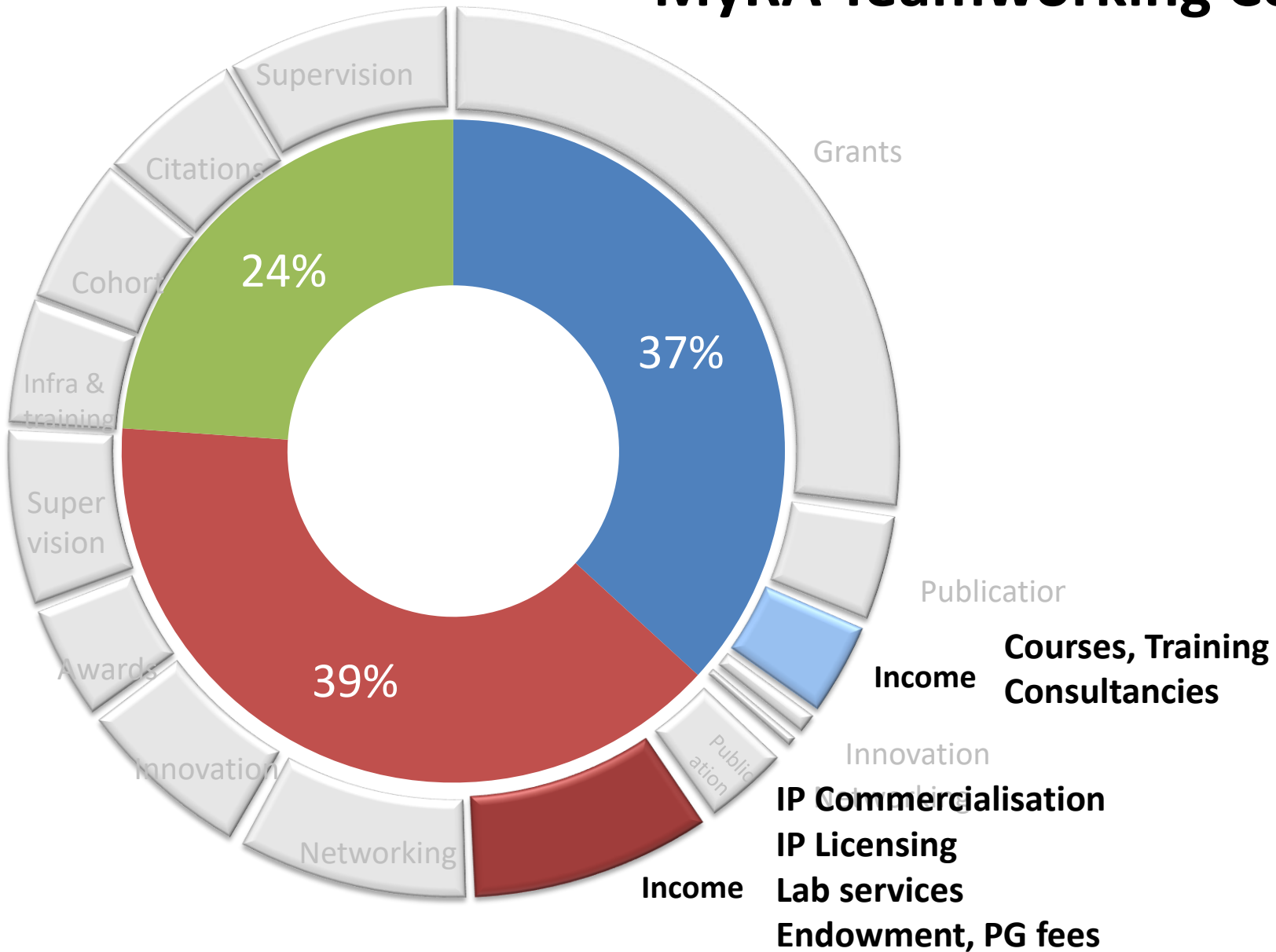
MyRA Teamworking Concept



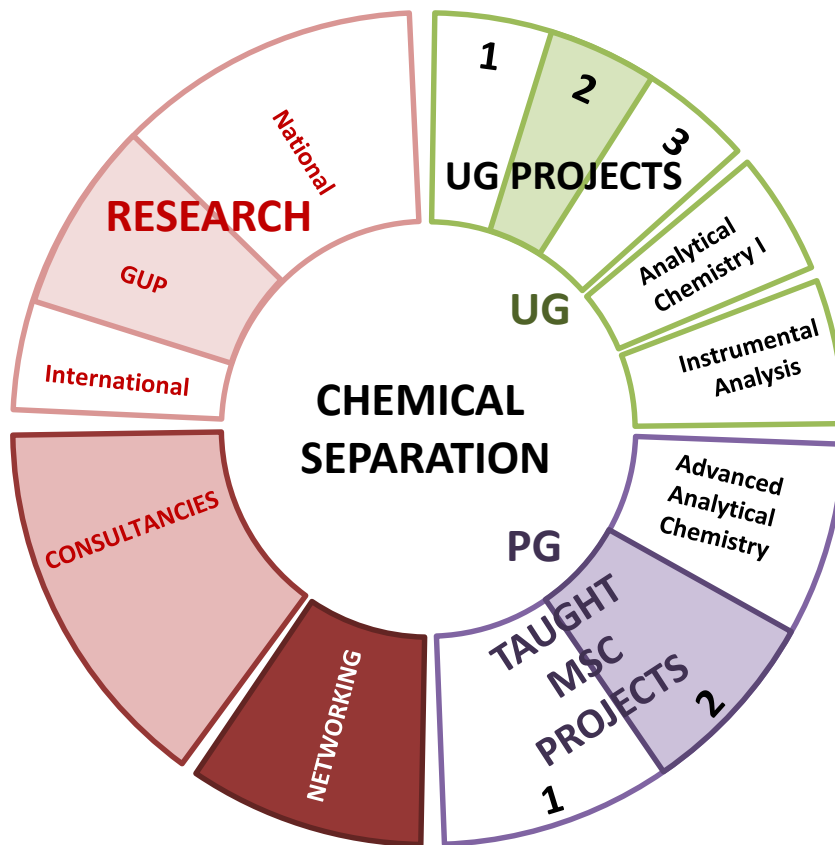
MyRA Teamworking Concept



MyRA Teamworking Concept

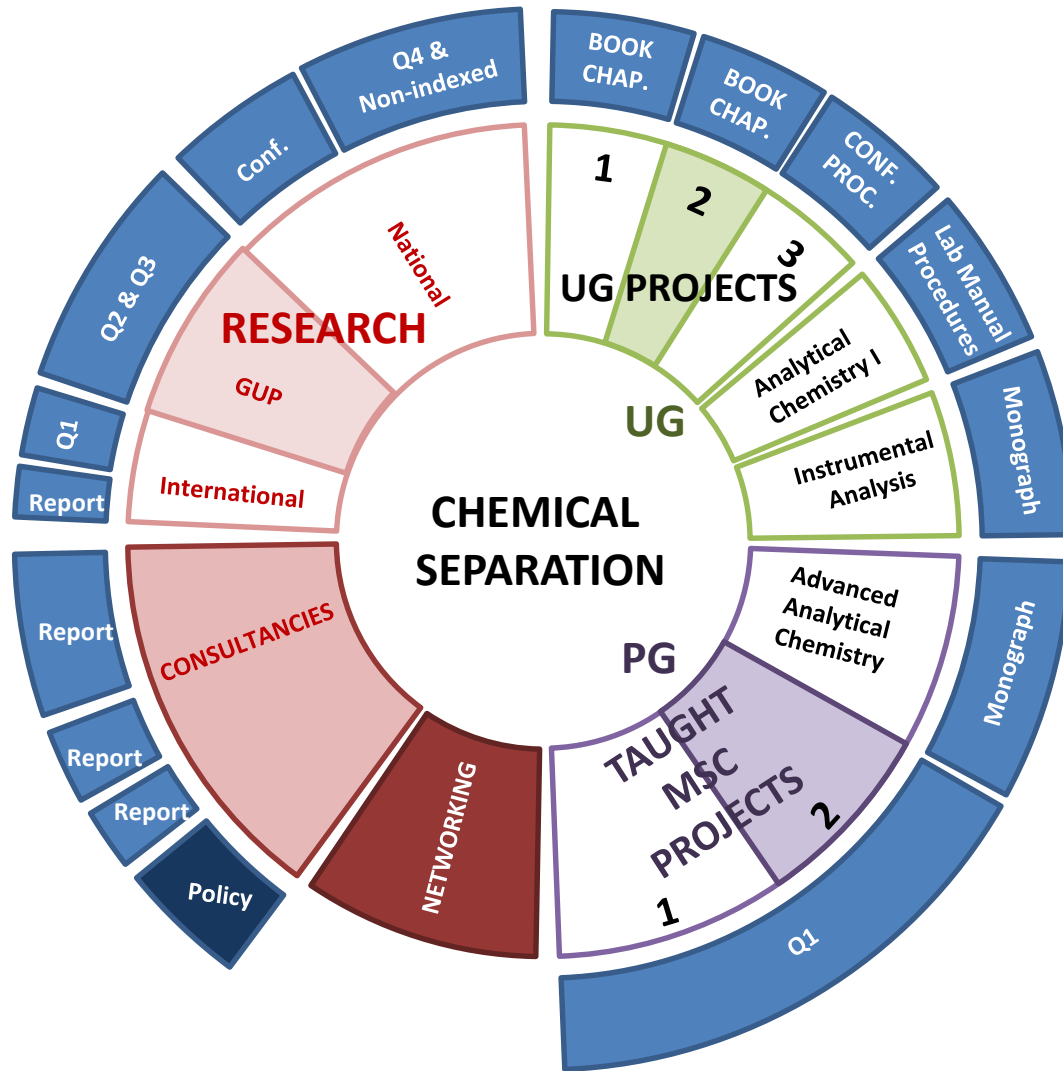


Activities



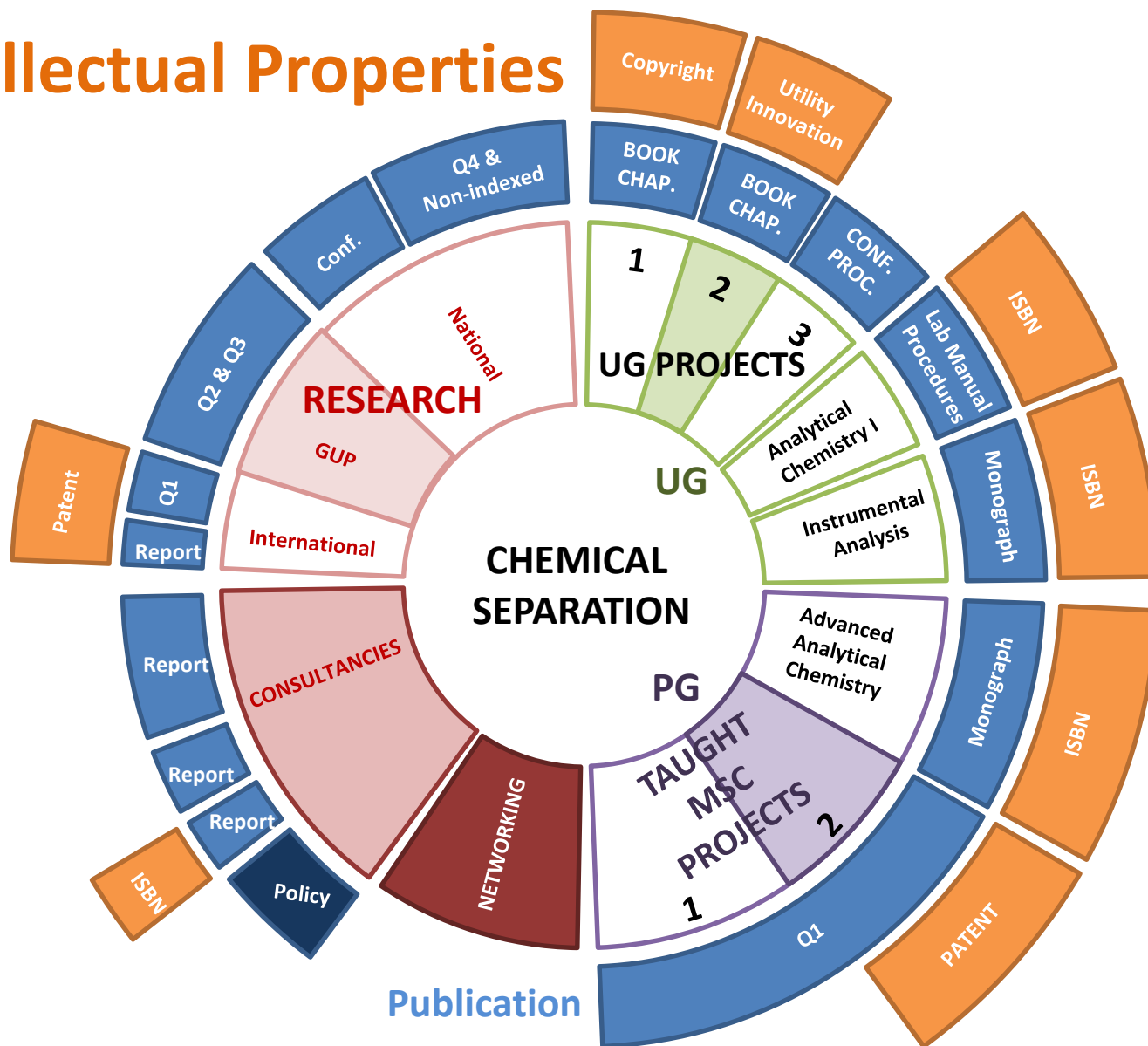
Baseline

Publications

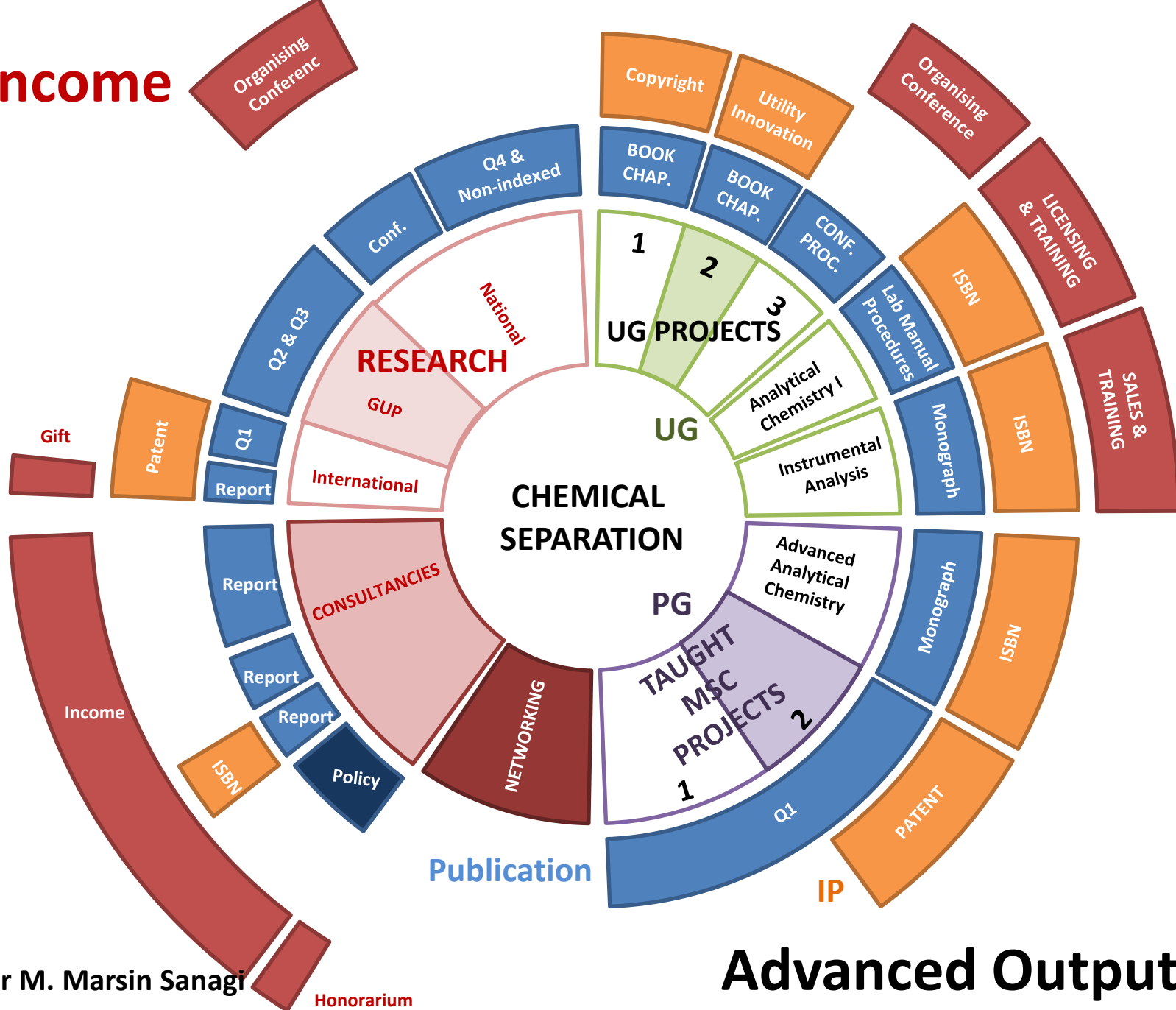


Basic Output

Intellectual Properties



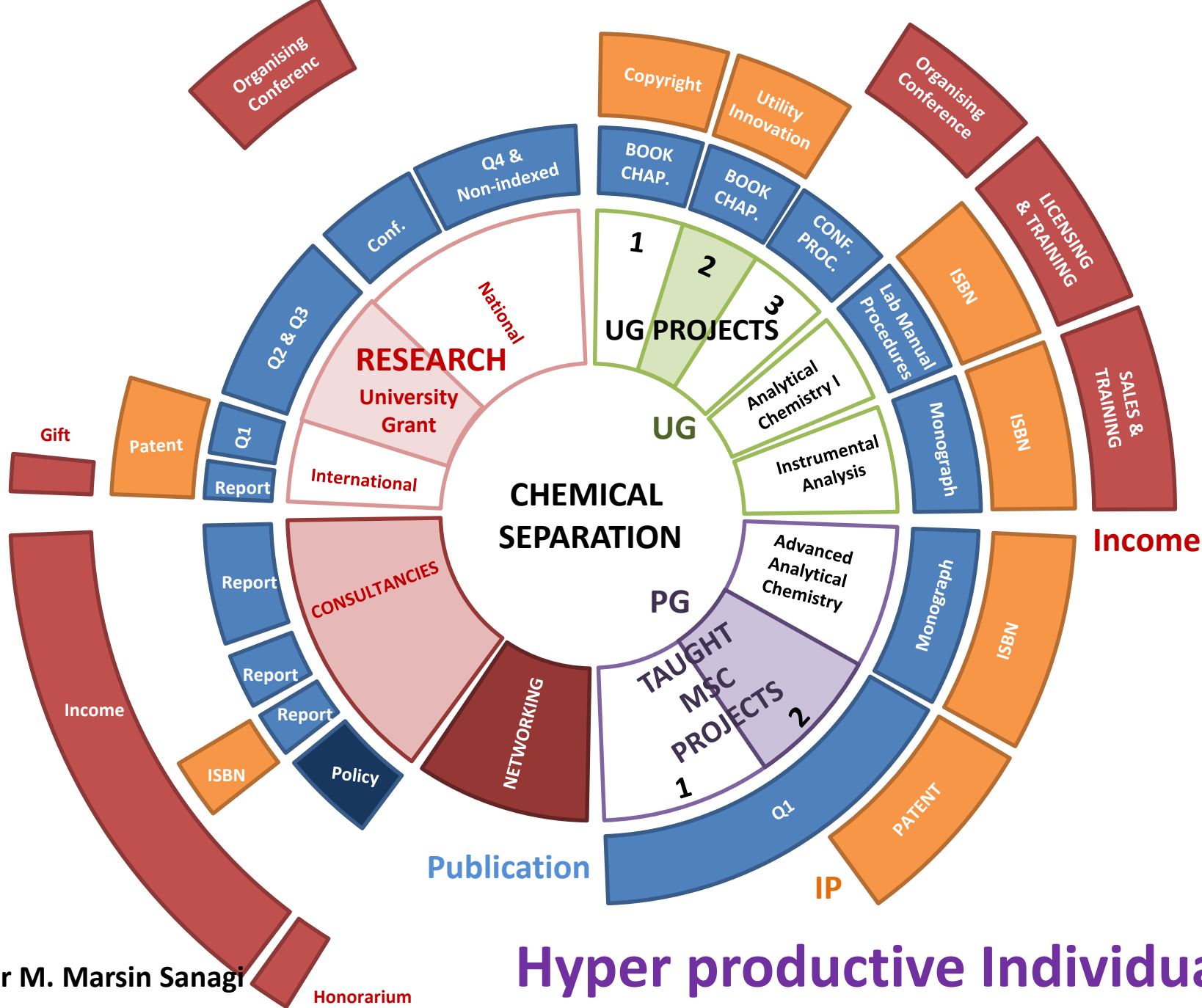
Income



Prof Dr M. Marsin Sanagi

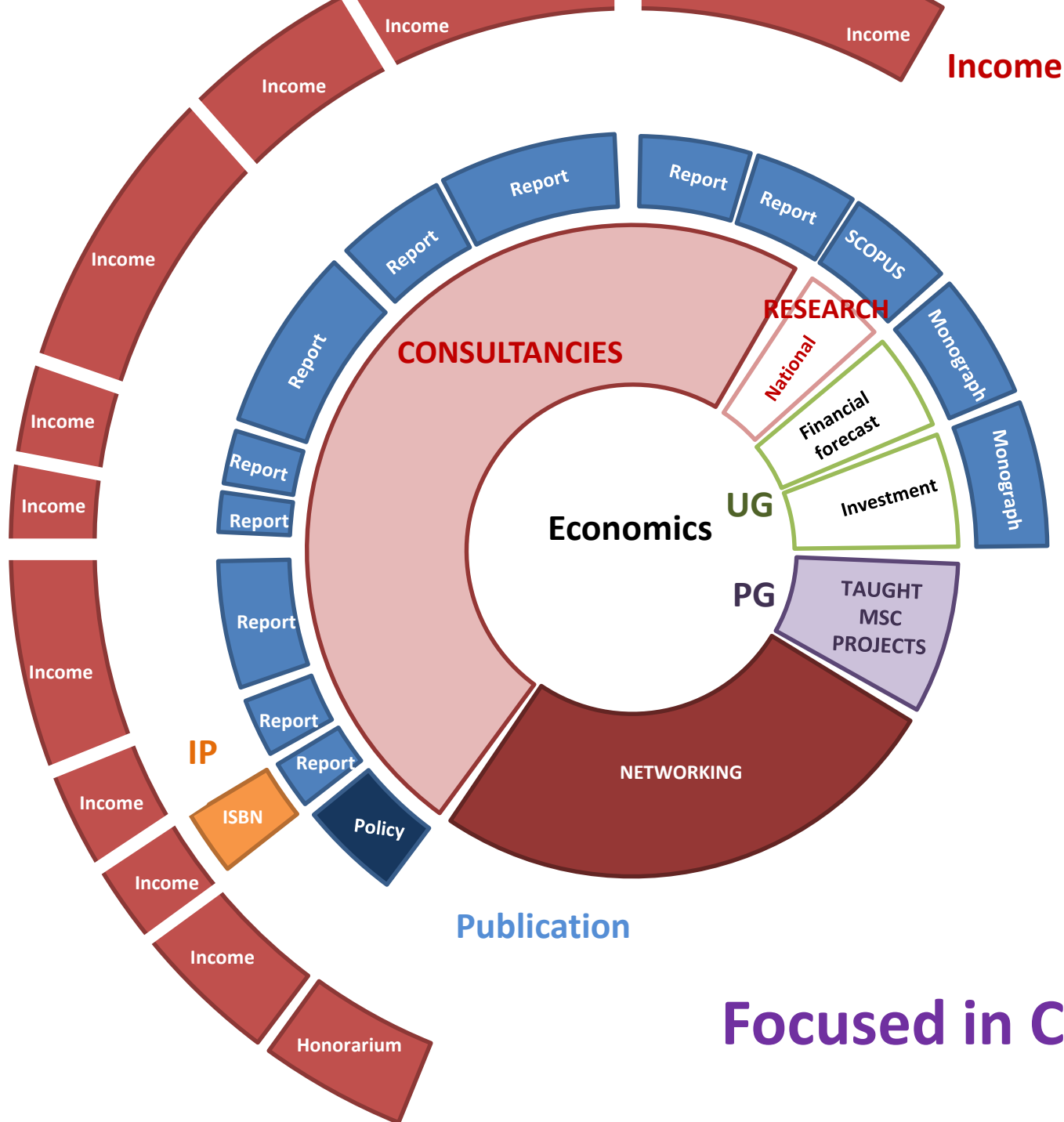
Honorarium

Advanced Output



Hyper productive Individual

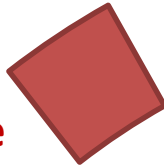
Prof Dr M. Marsin Sanagi



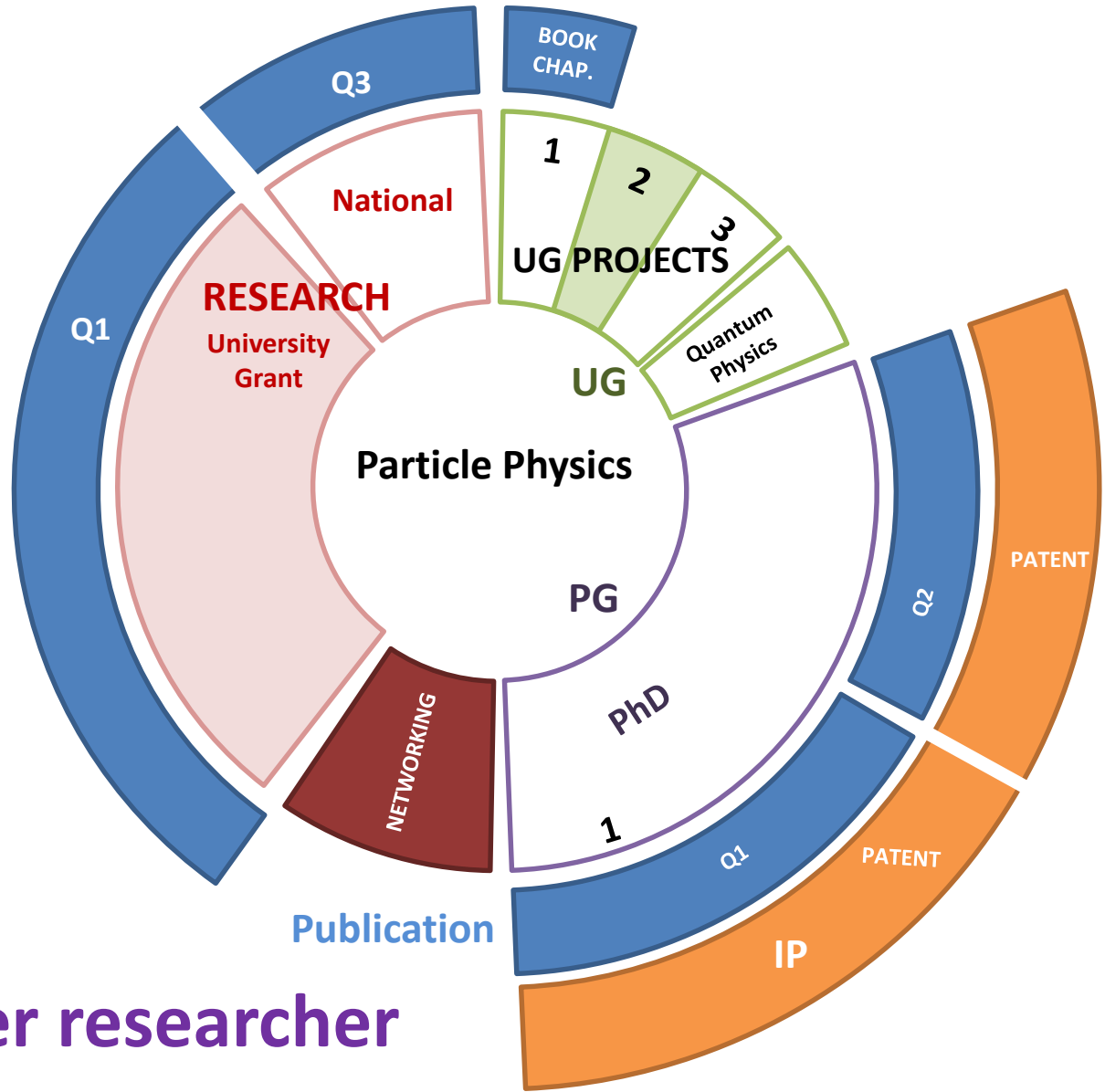
Publication

Focused in Consultancy

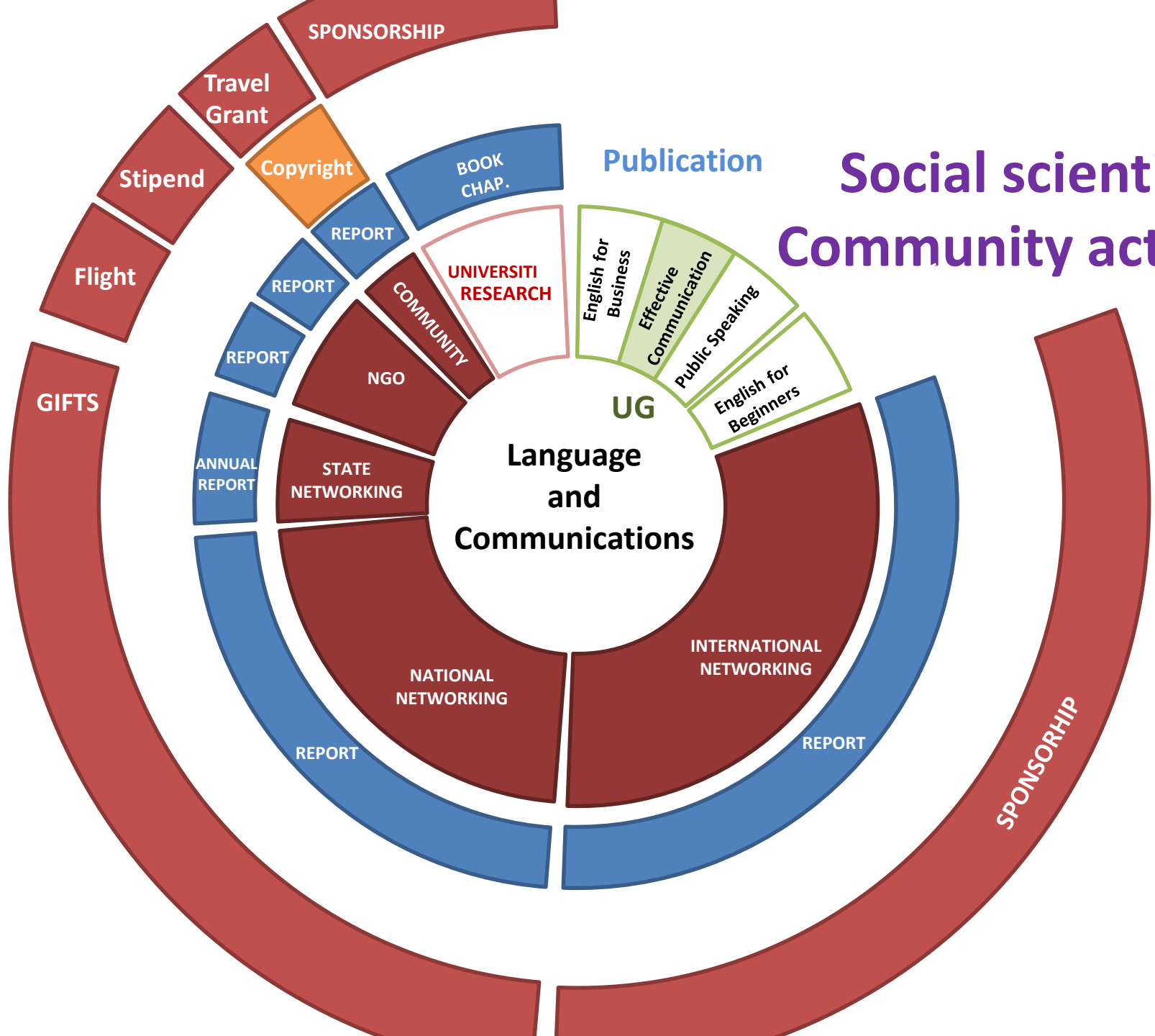
Income



Gift

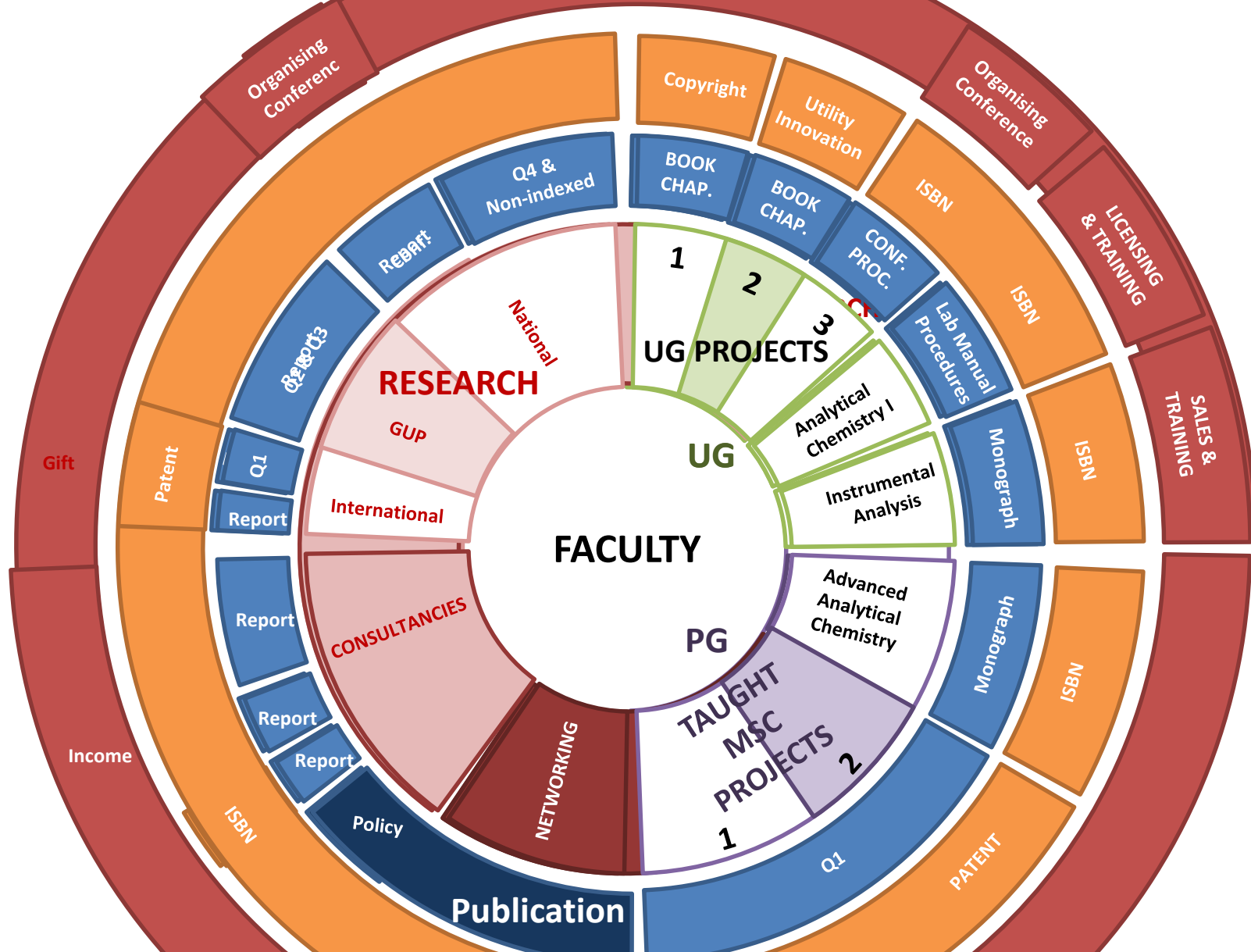


Early career researcher



Social scientist & Community activist

Publication

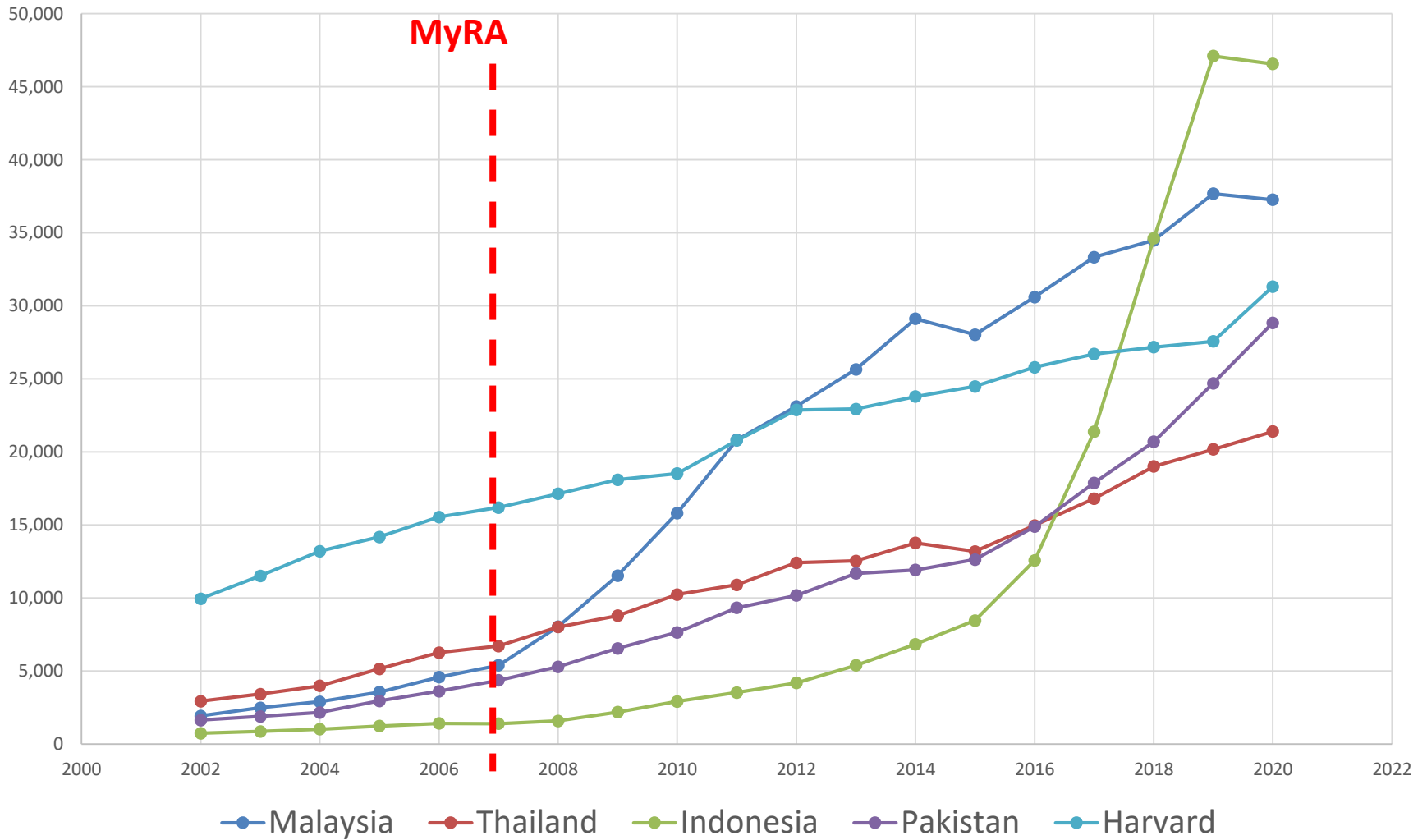


Faculty Whole Research Ecosystem

DID IT WORK?

Publication 1996-2020

SCOPUS PUBLICATIONS



Areas of Strength for Malaysia

TOP 200
 23 Subjects in 2015
27 Subjects in 2016

QS SUBJECT RANKING MAPPING (2016)

Subject	TOP 201-250	Top 251-300	Top 301-350	Top 351-400		
ARTS & HUMANITIES	Modern Languages		UM			
	Agriculture & Forestry		UPM	UMS		
	Biological Science			USM		
	Medicine			UM		
	Pharmacy & Pharmacology		USM	UPM, UKM		
	LIFE SCIENCES & MEDICINE	Computer Science & Information Systems		UM, USM	UPM, UTM	
		Eng- Chemical	USM(46)	UM, UKM, UTM	UPM, UTP	
		Eng- Electrical & Electronic	UM(37)	UTM, USM	UPM, UKM	
		Eng - Civil & Structural			UM, UTM, USM	UKM, UPM
		Eng - Mechanical, Aeronautical & Manufacturing		UM, USM	UPM, UTM, UKM	UTP
ENGINEERING & TECHNOLOGY		Chemistry			UM, USM	
		Environmental Studies		USM	UM	UPM, UTM
		Geography & Area Studies				UM
		Materials Science			USM	UKM, UTM, UPM, UM
		Mathematics				USM
	NATURAL SCIENCES	Accounting & Finance			UM, UPM	UKM, UUM, UiTM
		Business & Management Studies			UM, USM	UPM, UKM
		Communication & Media Studies			UM	UKM, USM
		Development Studies	UM (30)	USM		
		Economics & Econometrics				UM, USM, UPM
SOCIAL SCIENCES & MANAGEMENT		Education		UM, UKM, USM	UPM	UTM, UiTM
		Law				UM
		Social Policy & Administration		UKM		
		Statistic & Operational Research				UM, USM
		Architecture / Built Environment				
	English Language & Literature					

GLOBAL PROMINENCE


Malaysia's Research Landscape – Growth by 594% between 2005-2014



HIGHEST
IN THE
WORLD

Malaysia's Research Landscape
Grows by **594%** between 2005 - 2014

QS WORLD UNIVERSITY RANKINGS : 2016/2017



Institution	2016 Rank	2015 Rank
Universiti Malaya (UM)	133	146
Universiti Putra Malaysia (UPM)	270	331
Universiti Teknologi Malaysia (UTM)	288	303
Universiti Kebangsaan Malaysia (UKM)	302	312
Universiti Sains Malaysia (USM)	330	289
International Islamic University Malaysia (IIUM)	601-650	551-600
Universiti Teknologi Petronas (UTP)	601-650	Not ranked
Universiti Teknologi Mara (UiTM)	701+	701+
Universiti Utara Malaysia (UUM)	701+	701+

**9 Universities
in TOP 700**






**1 New Entry :
UTP**

Source: QS Quacquarelli Symonds 2004-2016 <http://www.TopUniversities.com/>

QS UNIVERSITY RANKINGS
ASIA
2016

Five of our research universities made it into the **top 100 cluster**.

Universiti Malaya & Universiti Putra Malaysia made it into the **top 50 cluster**.

	UNIVERSITY	RANK
TOP 50	 UNIVERSITY OF MALAYA UNIVERSITI MALAYA	27
	 UPM UNIVERSITI PUTRA MALAYSIA SeriLampar	49
TOP 100	 USM UNIVERSITI SAINS MALAYSIA	51
	 UNIVERSITI KEBANGSAAN MALAYSIA National University of Malaysia	55
	 UTM UNIVERSITI TEKNOLOGI MALAYSIA	63

**4400* ACCREDITED
 UNIVERSITIES IN
 ASIA REGION**

**5 UNIVERSITIES
 IN TOP 1% ASIA**

* Source : ww.4icu.org

QS WUR : TOP 50 UNDER 50 (2016-2017)

QS[®] WORLD
UNIVERSITY
RANKINGS
TOP 50 UNDER 50

2016-2017



Top 10 Universities in Asia Under 50 Years Old

- 1 Nanyang Technological University (NTU)
- 2 Hong Kong University of Science and Technology (HKUST)
- 3 KAIST - Korea Advanced Institute of Science and Technology
- 4 City University of Hong Kong
- 5 Pohang University of Science and Technology (POSTECH)
- 6 The Hong Kong Polytechnic University
- 7 University of Tsukuba
- 8 National Taiwan University of Science and Technology
- 9 Universiti Putra Malaysia (UPM)
- 10 Hong Kong Baptist University (HKBU)

GET THE FULL RESULTS: TOPUNIVERSITIES.COM/50UNDER50

#QSWUR



Things you can do in moving

TOWARDS 5 STAR FOR MYRA



MINISTRY OF
EDUCATION
MALAYSIA

Malaysia Education Blueprint 2015-2025

(Higher Education)



MINISTRY OF HIGHER EDUCATION MALAYSIA

STRENGTHENING ACADEMIC CAREER PATHWAYS AND LEADERSHIP DEVELOPMENT

UNIVERSITY TRANSFORMATION PROGRAMME, ORANGE BOOK

Recognising attributes of different talent excellence

With the right support, talent excellence can be nurtured by aligning them to differentiated career pathways

All academic staff are expected to have baseline competencies in teaching, research, services and management, after which they may focus to excel in any of the four responsibilities, guided by the following attributes:



INSPIRING EDUCATOR

- Espouses a clear philosophy and theory of teaching and learning
- Exhibits creativity and innovation in teaching, learning and assessment
- Introduces innovation that impacts learning
- Makes outstanding contribution(s) to leadership of teaching and learning, which are recognised nationally and internationally
- Is engaged in scholarly activities and/or pedagogic research in their subject area and/or innovation



ACCOMPLISHED RESEARCHER

- Demonstrates excellence in research and produces original work which makes significant impact in the field
- Makes significant contribution(s) to the body of knowledge through research of international standing
- Is able to attract major research grants
- Research has impact on community and society at large (i.e., knowledge transfer takes place)



EXPERIENCED PRACTITIONER¹

- Demonstrates excellence in professional practice
- Is an authority in the field of specialisation and contributes to the field of practice at both national and international level
- Makes major contributions and innovations in the development of their respective professions
- Shows evidence of national and international recognition of excellence through consultancy activities
- Where applicable, has obtained certification by relevant bodies



INSTITUTIONAL LEADER

- Demonstrates excellence in institutional leadership
- Leads and empowers institution to serve the community and the nation to achieve national agenda
- Demonstrates good leadership attributes
- Demonstrates leadership in sustaining best practices, and in leading change where necessary
- Is a recognised figure at national and international level
- Demonstrates overall understanding of key aspects of management, as well as rules and regulations
- Is visionary and has a strategic mindset

¹ See Exhibit 6 for a more detailed explanation on what it means to be an experienced practitioner



MINISTRY OF HIGHER EDUCATION MALAYSIA

ENHANCING UNIVERSITY INCOME GENERATION, ENDOWMENT & WAQF

UNIVERSITY TRANSFORMATION PROGRAMME, PURPLE BOOK

Exhibit 5

Seven main potential sources of income for universities

Universities can explore new ways of generating income from the sources shown below:

1

Academic and Research Programs

Education and Training Programmes

- Academic Programmes
- Specialist and CPD courses
- Industry & executive training
- Online learning & MOOCs
- Conferences and seminars
- Twinning programmes

Research and Commercialisation of Ideas

- Research funding & grants
- Industry-sponsored research
- Intellectual property, patents, licenses, royalties
- Company spin-offs & commercialisation of R&D products and IPs
- Consulting & other services
- University start-up companies

7

Fundraising

Public Donations

- Club/group memberships
- Public campaigns
- Crowdfunding

2

Asset Monetisation, Retailing and Services

Rental and Lease of Facilities

- Conferences, seminars & convention centres
- Sports & recreational facilities
- Laboratories

Unlocking of Assets

- Science park development
- Property development
- Land and property leasing

Retailing and Services

- Shops
- Food & Beverages
- University Press
- University services

6

Waqf

Waqf Contributions

- Corporate al-waqif
- Alumni al-waqif
- Public al-waqif
- Waqf Irshad (Government)

3

Financial Management Activities & Investment

Project Financing

- Raising debt/bonds & equity
- Asset sale & leaseback arrangement

Investment

- Investment returns (including on endowment and waqf)
- Financial products (e.g. shares, bonds or fixed income products)

4

Corporate Alliances for Business Ventures

Joint Ventures

- JV partnerships, PPP
- Joint marketing of products/services
- Co-branding

5

Endowment

Philanthropy

- Corporate donors
- Alumni donors
- Public donors

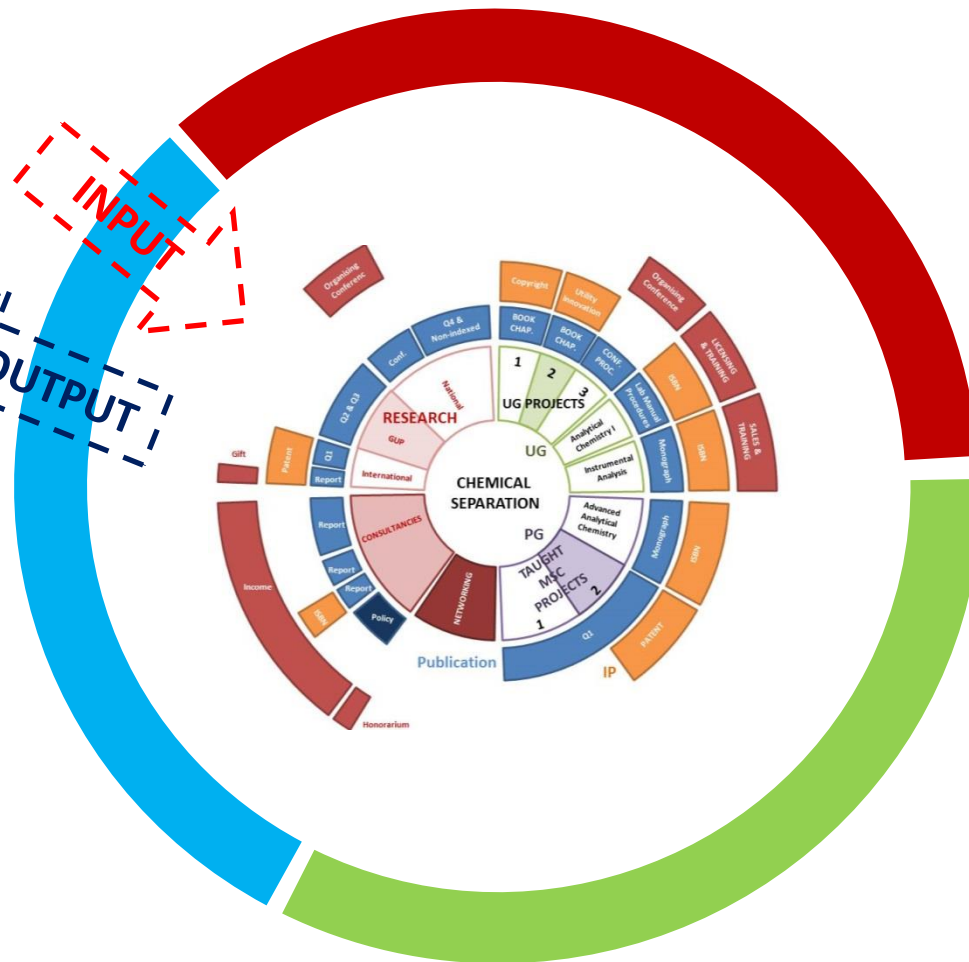
Government

INDIVIDUAL

Training Income
 Research Grant
 Consultancy
 Annual assessment
 Recognition & Awards
 External databases
 Incentives
 Borang Luar Negara
 Individual KPI

COMMUNAL

PTJ Audit
 CoE / Faculty / Team KPI
 Appointments
 Task Force
 Spin-offs
 Commercialisation
 PTJ Income



INSTITUTIONAL

Strategic plan
 Recruitment
 Graduate Studies
 OPEX
 Investment
 Holding Companies

Theoretical Monitoring Ring

