Sharing for Caring
Technology, Samples and Data
Transfer in the context of
Wood Identification

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Images: dreamstime.com; vector.com
**WRI Wood ID Project:**
Intersection of science and law/policy

**Goals:**

1) What and how intellectual property (IP) tools can help facilitate and accelerate the development of wood ID technologies?

2) How can IP tools and strategies preserve public interest benefits of publicly-funded research for wood ID technologies?

**US: FOIA and Bayh-Dole**

- Private usually own
- Academic collaborators’ agreements
- Case-by-case for scientist inventor

**Peru:**

- Private usually own
- Academic collaborators’ agreements
- Case-by-case for scientist inventor

**Brazil:**

- Some state-owned companies
- Proportional ownership
- If foreign partner, production and jobs in country
- Sui generis ABS for GRs

**Madagascar:**

- Draft innovation law
- No Nagoya implementing rules yet
- Up to scientists to know and defend their rights, eg, mandatory local student assistant with foreign partner

**China:**

- Some state-owned companies
- Staff get no ownership but bonus

**EU: Horizon 2020**

- Cross-border collaboration
- Among SMEs
- Background and foreground IP
- Reimbursement if withdraw

**Germany:** follows EU

* Federal states/alike: US, Brazil, China, Australia, Germany, EU.
Public Research Funding and Access:
Historical Arc in US

Balancing Public and Private Interest: US
Legal Model—More private ownership with public access

- Pre-1999 FOIA, govt labs and scientists’ data is public, with 9 exceptions
- 1999, Shelby Amendment due to private sector’s demand to access public research data used to make laws—federal grantees’ data is public; agency discretion to extend to international grantees
- 1980 Bayh-Dole, NGO and SME grantees allowed to own IP from federally-funded projects
- 2018 amendment: any size business can own; public sector co-inventor has more rights that her employer can pursue (re-balancing public-private rights as the system is more open to the for-profit sector

9 FOIA exceptions; National security; Agency internal rules and practices; Statutory exemptions, Trade secrets and commercial/financial information; Inter-and intra-agency communications; Personal privacy; Law enforcement records; Financial institutions’ data; and Geographical and geophysical data.
Wood ID Technology Innovations and IP: Quick Overview

Public Sector pro-IP motivations:
- Career: grants, tenure, promotion
- Quality control
- Fairness
- Foreign assistance to develop local labs and transfer knowledge and technology
- Ability to help their local universities and teach the next generation of scientists for their country

IP:
- GRs/TK and ABS for physical samples
- Machines- patents
- Processes- patents
- Data and databases- copyrights usually
- Trademarks?

IP:
- Patents and trademarks for hardware
- Patents and trademarks for software that only works with the new machine
- Copyrights and trademarks for software

IP:
- Patents
- Copyrights
- Trademarks
- Trade secrets
- Certification marks
Wood ID Innovation: GRs/TK and Other Organic Matters

- **Benefit** = sharing if commercial use
- **Access**: Prior Informed consent (permit) and Material transfer Agreement (contract)
- **State owns**

**Public Funders’ Public Access to Data Sciences Efforts:**
- **Plan S**: private foundations, e.g., Gates
- **Coalition S**: 11 EU govt funders
- **Rockefeller/Mastercard’s Data Science Initiative**

**Legal Framework:**
- Maybe private ownership if not protected or exempted, and if negotiated or pre-granted
- If direct work that provided innovation from this human intervention
- Maybe direct benefit sharing to the scientist or institution: buy or license for use

**Hypo:**
- **Non-GRs**
IP for Wood ID Global
Sharing for Caring:
Intersection of science and law/policy

* Multilateral vs bilateral: standardized predictability vs. Unpredictable case-by-case

Goals:
1) Sampling- physical materials
2) Validation
3) Reference Data and Databases

GTNN Meetings: IP Discussions and Concerns

DC- GTTN Meeting:
• In general, developed and developing countries differ on how important ABS is for collaboration

Africa Region-Cameroon
• ABS = establish local labs
• Involve national govts for longterm funding

Latin America Region- Peru
• Machine specific data is not ready for public sharing or storage
• Some scientists keep their own collections and data: how to get those when they retire
• Indigenous person knows this fungus only grows on this species of tree
• Many local scientists only publish in Spanish in local outlets

Asia Region-China: ?
Current Wood ID Innovation Ecosystem, sustainability and IP

**Support:**
- Secretariat - GTTN; TA, eg, PIIPA

**Public Funders**
- Ministries, eg BMEL
- NGOs, eg WRI

**Innovators**
- Scientists
- Public labs

**Private sector Intermediaries**
- Private labs, eg Agroisolab
- Verification companies, eg, Double Helix
- IT companies, eg, Agritix

**Consumers**
- Wood importers
- Wood manufacturers
- NGOs
- Law enforcement

**Public good, eg, public database/repositories, open source software, free products/tools, free trainings, etc**

**IP Q:** Who owns the IP, gets paid?

**Sustainability Q:** money flow keeps all afloat?
What are the key IP issues and what should the IP policies be?

Issue 1: Sampling And Reference Data/Database

Issue 2: Collaborations sharing samples, knowledge, technology, data, etc.?

Issue 3: Sustainability—longterm partnerships, financial, sharing benefits; longevity; continue to innovate; longterm success

* PIIPA: Expertise, Honest Broker-Neutral, Participatory process, part of the GTTN process for the past 3 years.