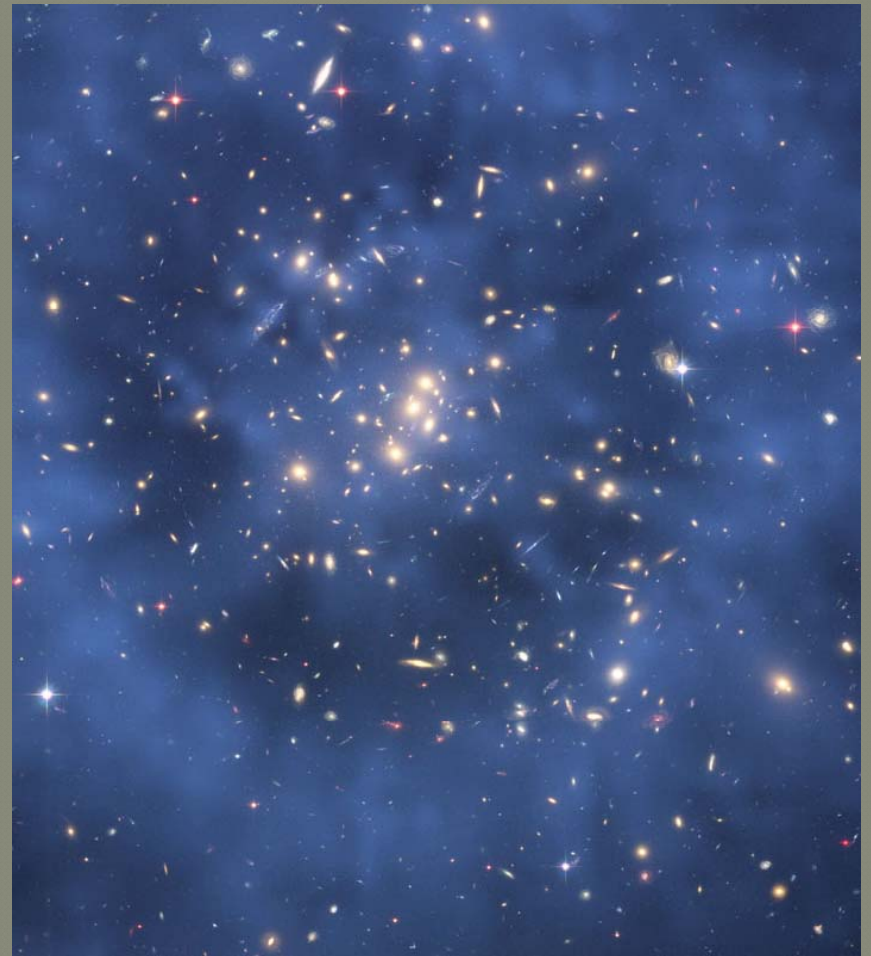


Mike Szarka
GreenCentre Canada
November 2011

INDIRECT MEASURES OF IMPACT:
SHEDDING LIGHT ON
“DARK MATTER”

What is Dark Matter?

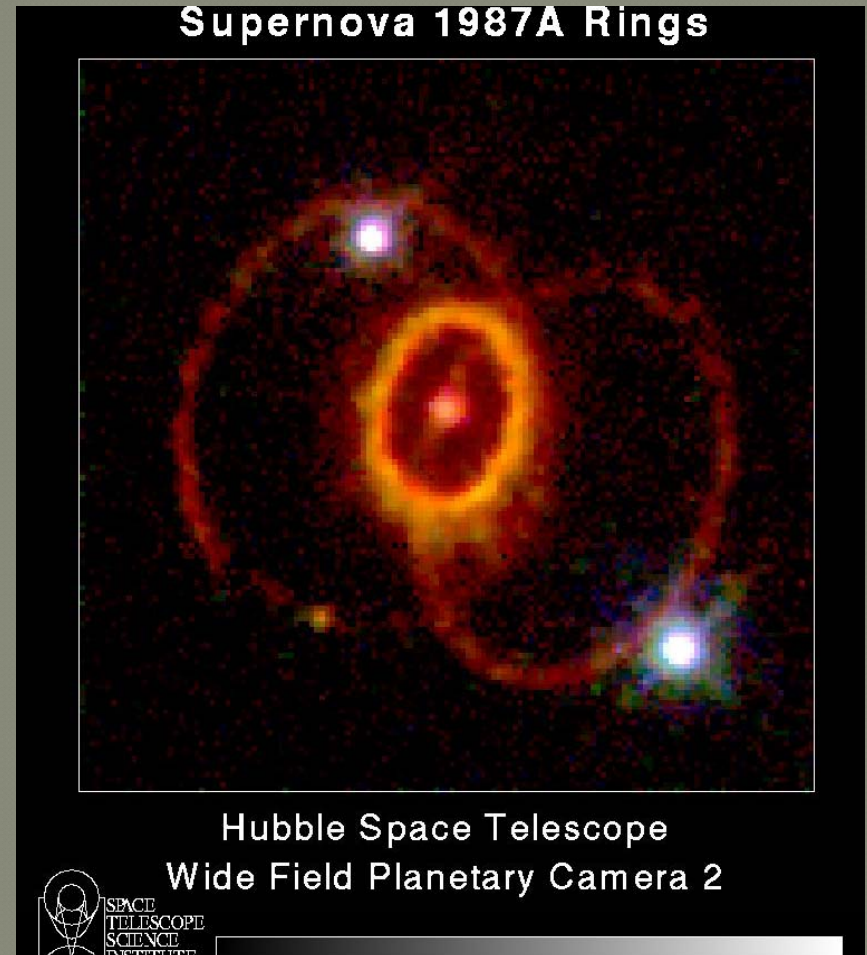
- Dark Matter emits no radiation (light, heat, x-rays) and therefore cannot be seen
- Physicists infer the presence of Dark Matter through its gravitational force
- Can we make indirect measures that point to our impact?



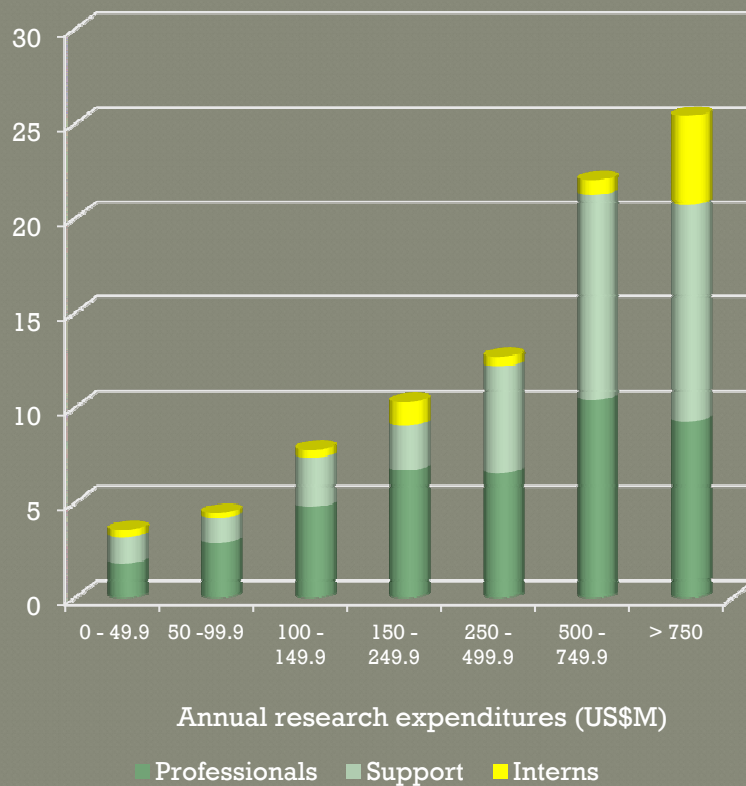
Dark Matter Ring in Galaxy Cluster

The AUTM Transactions Survey

- AUTM developed concept of Transactions Survey to measure non-licensing activities
- Non-licensing activities predominate for many offices
- 88 respondents to survey



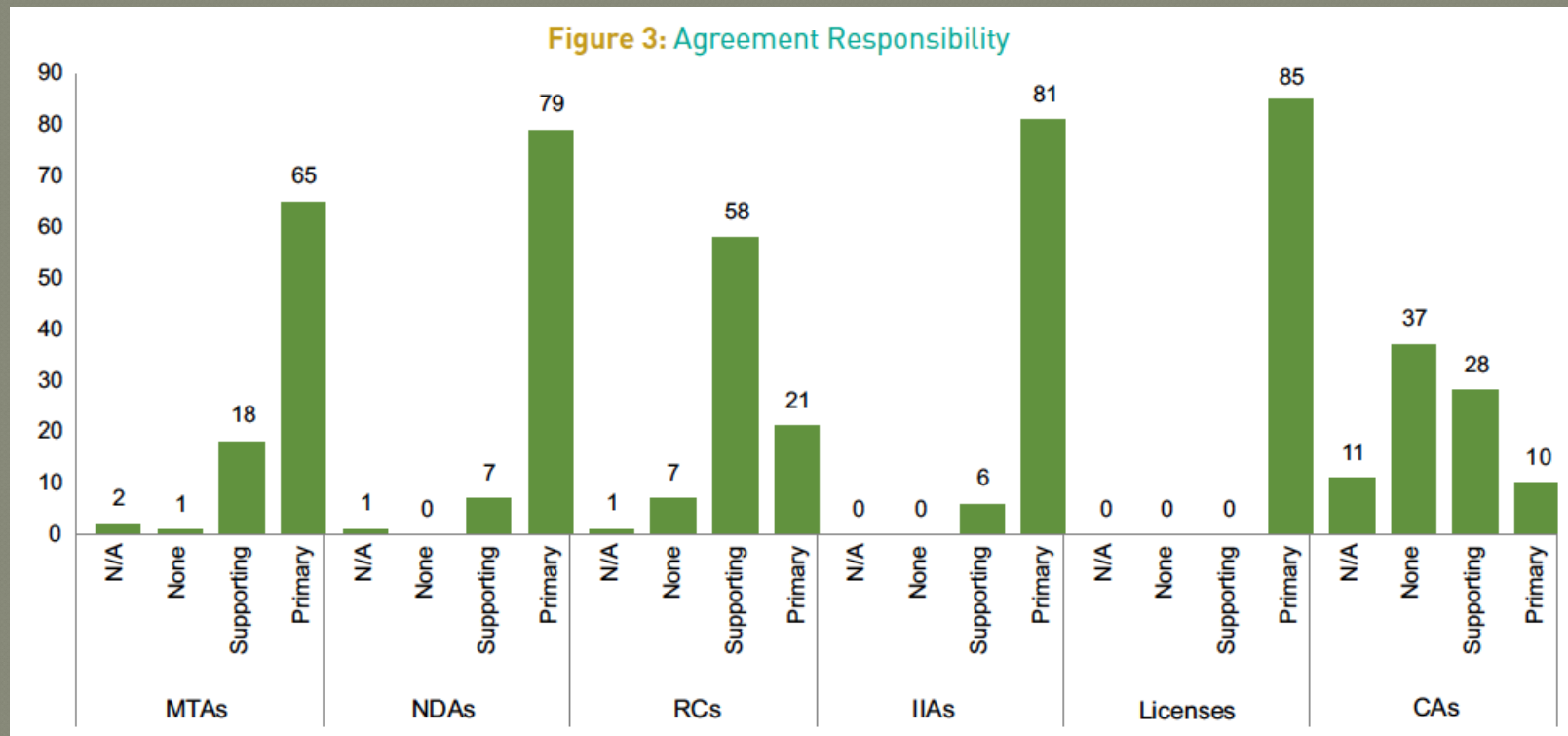
Staffing



- Staffing levels averaged out to about \$25 million research expenditures per TTO member
- Highest ratios for smallest schools

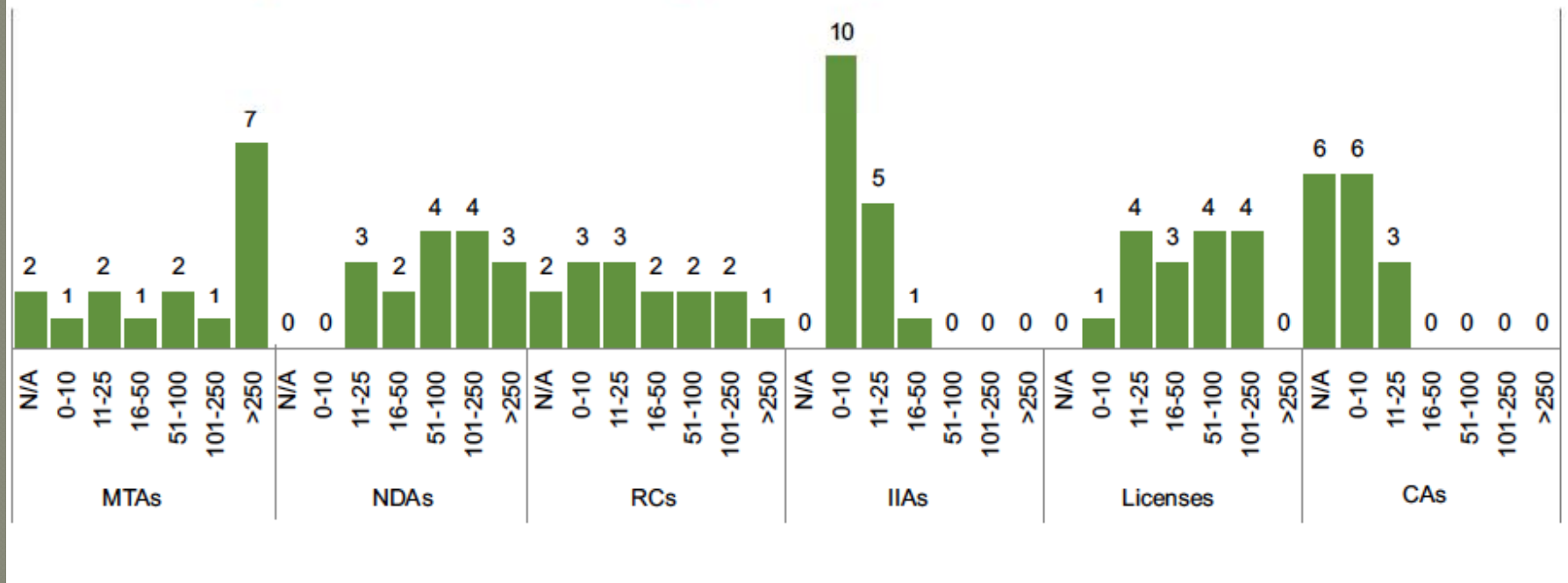
Agreements

Figure 3: Agreement Responsibility



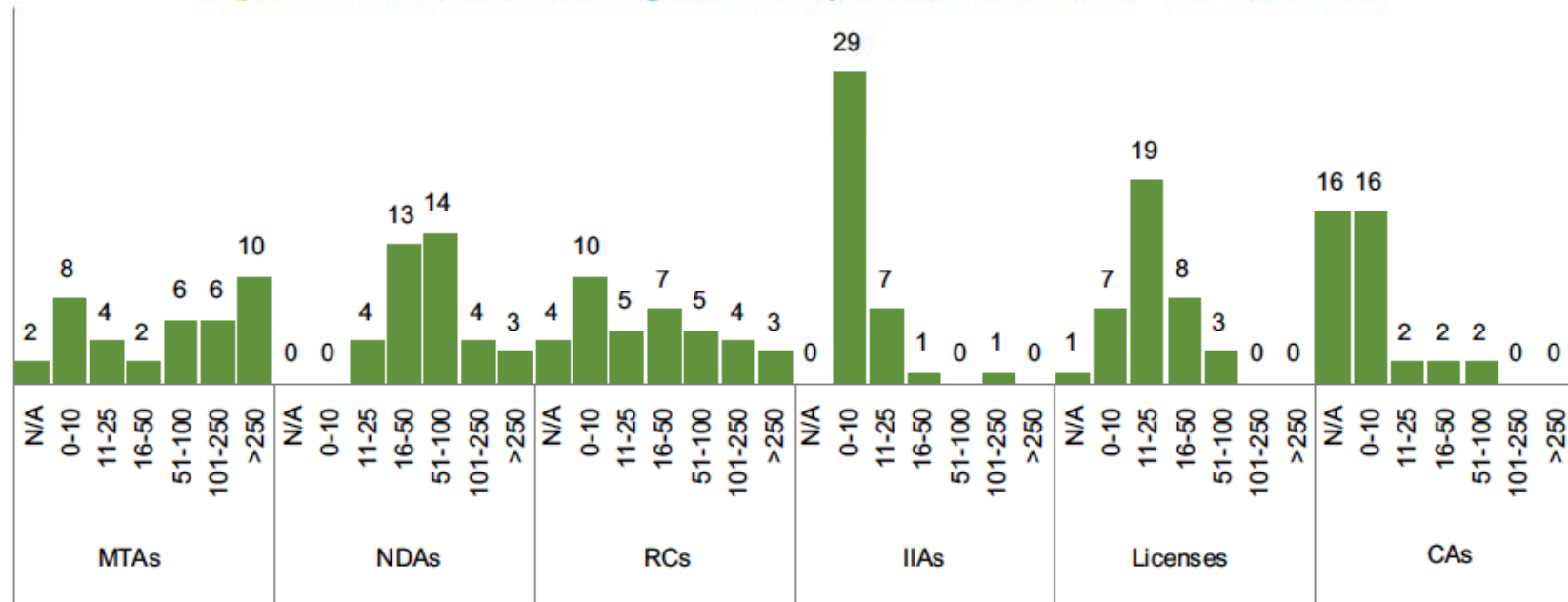
Numbers of Agreements

Figure 10: Annual Number of Agreements by Institutions with 15+ FTEs (N=16)



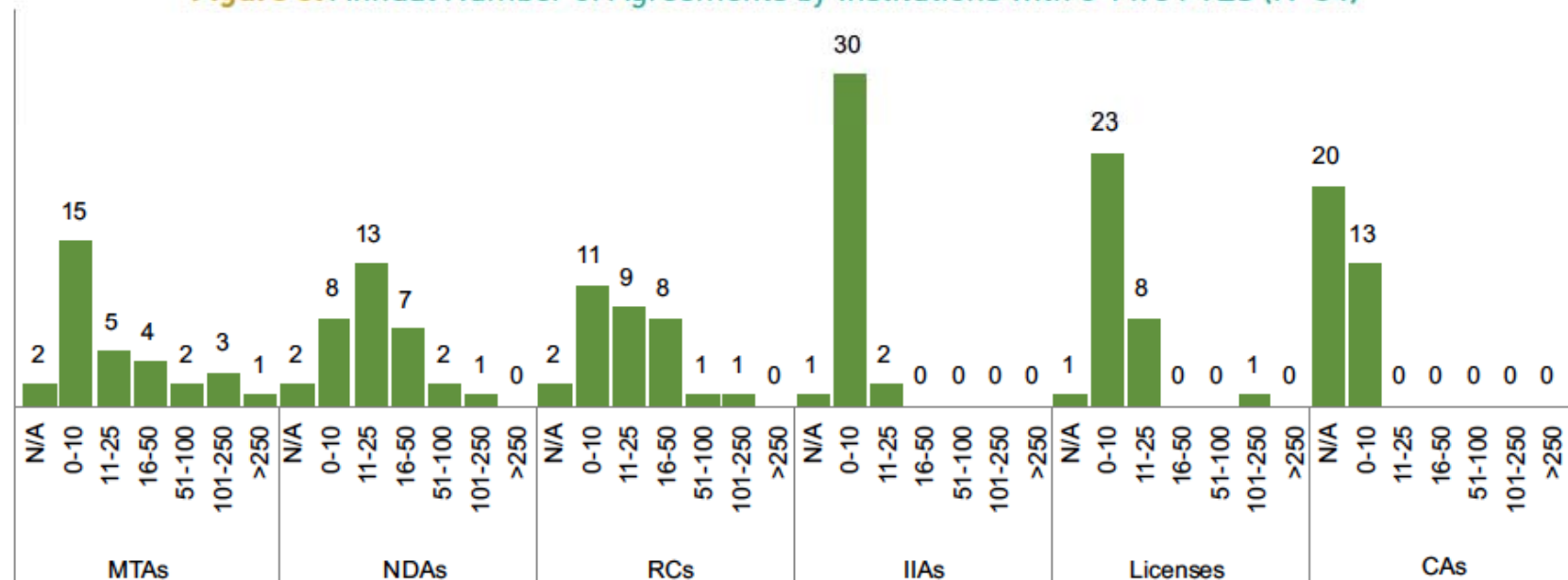
Numbers of Agreements

Figure 9: Annual Number of Agreements by Institutions with Six -15 FTEs (N=38)



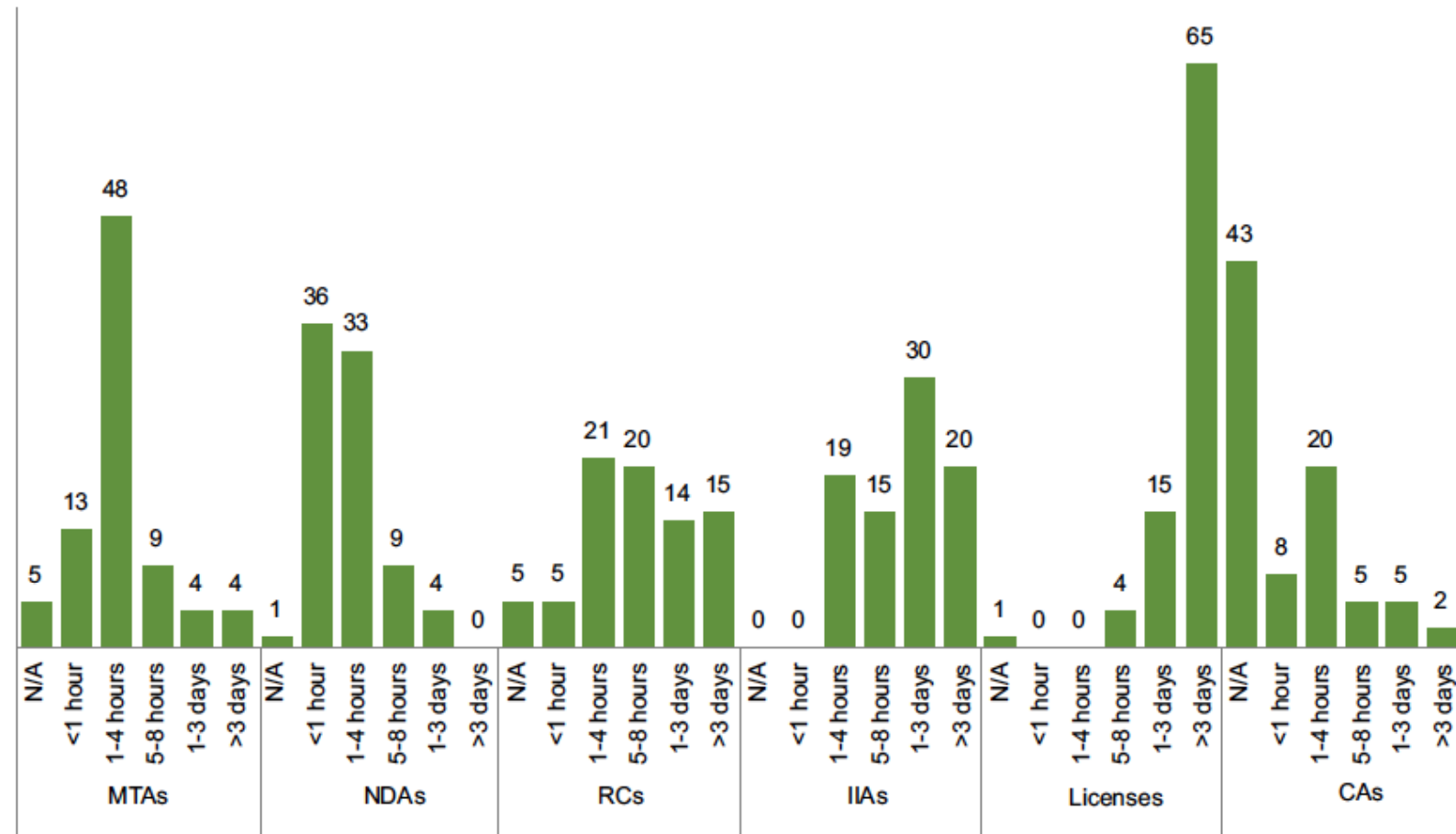
Numbers of Agreements

Figure 8: Annual Number of Agreements by Institutions with 0-Five FTES (N=34)



Resource Depletion

Figure 15: Estimate of Staff Time by Agreement Type

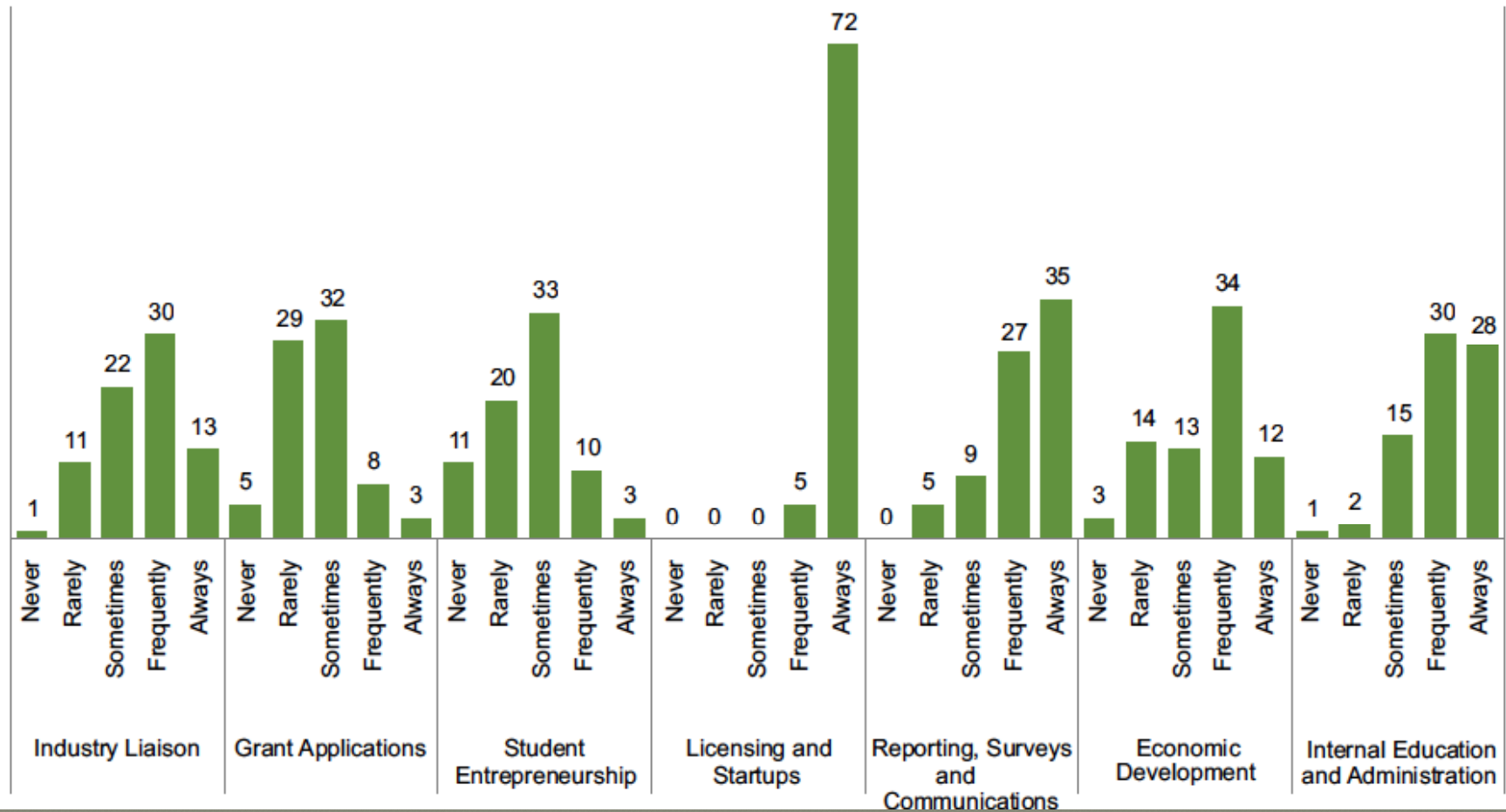


Other Dark Matter Agreements

- Collaboration agreements (non-funded)
- Memoranda of understanding
- Visiting scientist agreements
- Consortium agreements
- Joint IP agreements
- IP assignment agreements
- Invention disclosures
- Technology assignments
- Revenue sharing/distribution agreements
- Option agreements
- Terminations, waivers
- Release to inventor
- Operating agreements for startups
- Joint ventures
- Copyright agreements
- Patent prosecution documents
- Know-how agreements
- Royalty monetization agreements
- Clinical trial agreements
- Proof-of-principle agreements,
- Granting agreements
- In-licenses of related technology
- Amendments
- Investor rights agreements
- Conflict of interest management plans
- Experimental services & testing
- Plant variety trial agreements
- Engagement letters
- Technology transfer exchange programs
- Scholarship agreements
- In-licensing of research tools
- Facility use agreements
- Data use agreements
- Non-commercial licenses
- Participation agreements
- Compliance for federal grants and contracts
- Conflict of interest documents

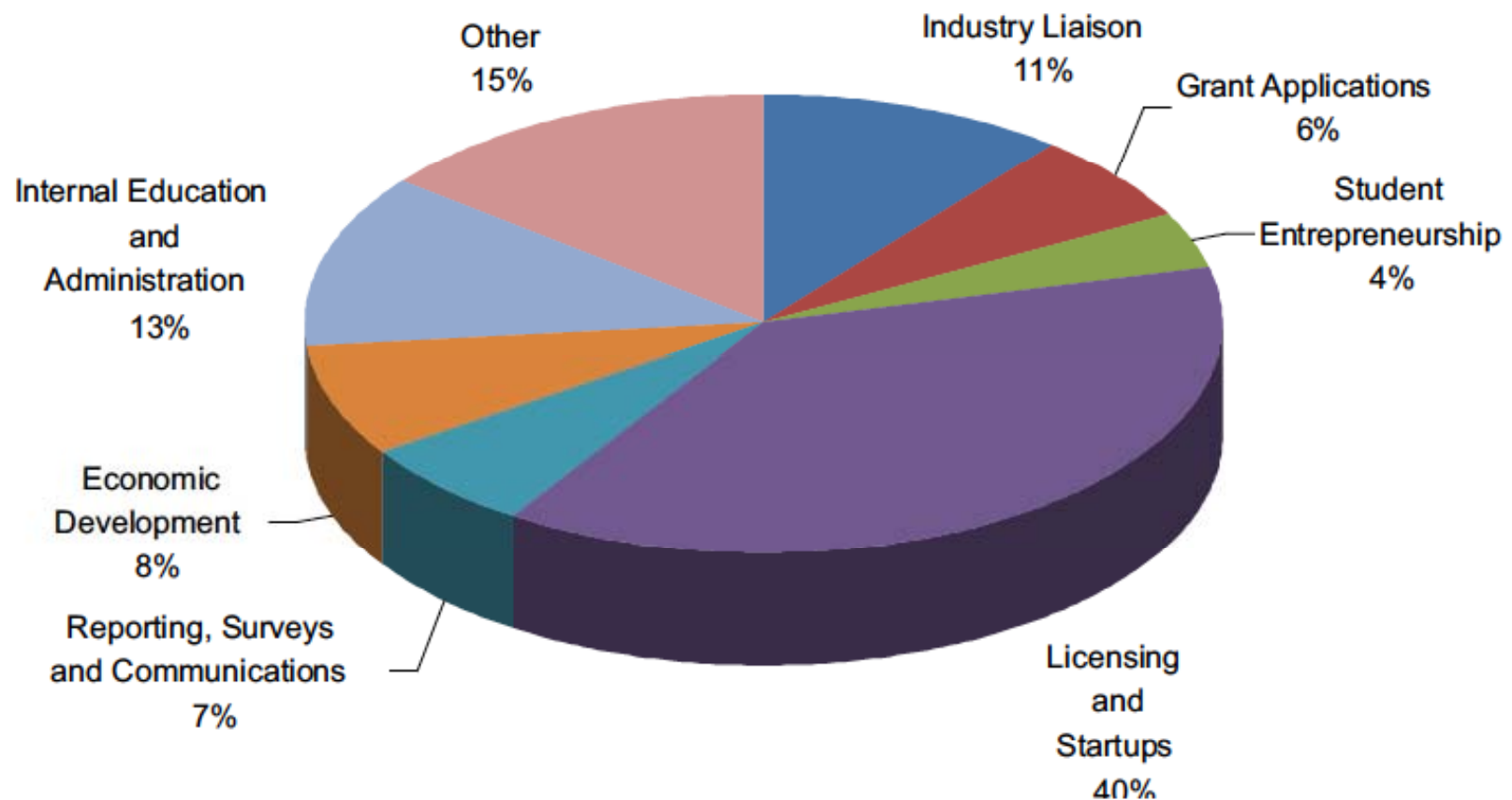
Functions

FIGURE 16: Responsibility for Functions



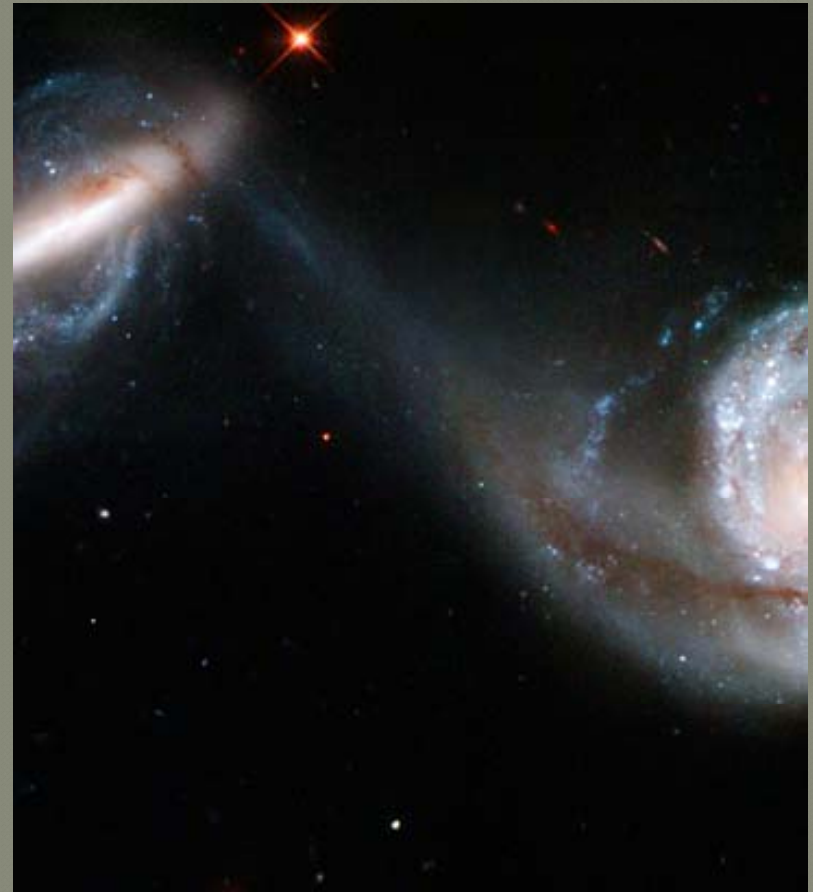
Resource Allocation

Figure 17: Office Functions by Percentage of Staff Time



Summary

- Licensing revenues are the tip of the iceberg
- Are MTAs, NDAs, Research Contracts measures of impact?
- Huge indirect costs associated with collaborations
- “Open for business” mantra means managing risk and opportunity cost



Interacting Galaxies at 75,000 ly