

HOW TO CITE:

Malherbe C, Nel CJH, Schutte CSL. Research contract relationship between a large industry partner and South African universities [supplementary material]. S Afr J Sci. 2022;118(3/4), Art. #11701. <https://doi.org/10.17159/sajs.2022/11701/suppl>

Questionnaire 1

Semi-structured interview questions to universities

For a benchmark study and needs assessment in support of research contract management at universities

Organisational structure

1. Please describe how the research contracts function is structured (i.e. which department/s is/are involved and the roles of each department)? Are there specific reasons why your institution chose to structure the research contracts function as you described? What would you describe as the benefits and the challenges of the current structure/s?
2. What type of contracts do the research contracts office deal with in your institution? Who deals with the other contract types at your institution and why? Are there specific benefits or challenges based on this division of roles?
3. Please describe your current research contract management system/approach.
4. What would you consider as an ideal research contract management model/design for your institution? OR What would you deem as lacking in your current research contract management system/approach and why? What would the reason be for not addressing these shortcomings? (These questions can also be answered at the end, as the questions to follow might influence your answer to these questions.)

Research contract information

5. What type of information do you capture for each contract (i.e. dates, amounts, contract type, Intellectual Property (IP) transaction, etc.)?
6. Would you classify the reason for capturing this information mostly for (a) monitoring-, (b) management- (c) reporting purposes, or (d) combined, or (e) other?
7. What type of software system/s do you use for the overall purposes of research contract management? What are the benefits and challenges that you are currently facing due to the systems that you are using?
8. How often do you re-evaluate capturing this information, or enhancing the system to enable capturing additional information?

Monitoring and management function

9. From a "research contract management role" in your institution, what would you consider the three to five biggest risks for your institution concerning research contract management? Follow-up questions might arise to understand why these risks were identified.
10. In your opinion, do the researchers in your institution understand these risks? Please unpack your answer and explain what the risks are if they do not understand the risks, and how they can be addressed?
11. In your opinion, does the faculty management in your institution understand these risks? Please unpack your answer and explain what the risks are if they do not understand the risks, and how they can be addressed?
12. In your opinion, does your university's top management understand these risks? Please unpack your answer and explain what the risks are if they do not understand the risks, and how they can be addressed?
13. Considering these risks identified in Question 9, do you have a standard approach to address / mitigate these risks? Do you consider the approach taken to address each of these risks as effective / efficient enough? In what ways do these approaches to mitigating or addressing these risks lack in effectiveness/efficiency?

14. Do you keep track of each contract's *contractual requirements* in terms of deliverable dates, fund spending, etc? If yes, how and to what extent? If no, why not? Do you think your institution is exposed to risks which could be better managed if you would give more attention to this?
15. How will you address *operational challenges* on non-compliance, such as if a Material Transfer Agreement (MTA) has certain requirements for using the material, storing or destroying it. Who will monitor if it is correctly done? If there were no monitoring procedures in place, what would the reason be?
16. Do you have a *forex policy or strategy* in terms of how to budget, how to deal with financial losses due to exchange rate fluctuations? Is your institution severely exposed to foreign exchange losses?
17. How do you deal with *legislation or regulatory requirements* in terms of permits, confidentiality, IP protection, data protection, etc.? For example: How will a researcher know when to obtain ethical clearance, or when to apply for an export permit, or how to ensure protection of data in terms of the GDPR? Do you capture this information and keep track of it? After signing of the contract, will compliance aspects be monitored by the institution? By whom? Use Data Transfer Agreements (DTAs) or MTAs as examples to discuss the underlying problem.

Roles and responsibilities

18. In terms of the life cycle of a research contract, unpack the *roles and responsibilities* in terms of compliance and risk management. What roles and responsibilities are centralised and decentralised? What are the checks and controls in place and who is responsible for each? Do you actively monitor compliance to the contract terms? What challenges are you facing in this regard? Unpack this question by using a few types of contracts as examples, i.e. clinical trials, DTAs / MTAs research grants, industry-funded research contracts etc., and by reviewing each phase in terms of requirements linked to pre-contractual, contractual and post-contractual phases. Aspects such as financial, ethics, permits, data, material, other regulatory approvals, should be included.

Reporting and strategic decision-making

19. What type of *regulatory reporting* is required by your government in terms of research contracts (i.e. in the South African context: SA R&D Survey, NIPMO TT&IP Survey, SA HEI Reporting i.t.o. IFRS, IPR Act i.t.o. FC and ICRR). Who is responsible for these reports? What type of systems do you use? What are the challenges faced?
20. How do you make use of the financial information on research contracts to assist in strategic decision-making?
21. Do you distinguish between a full-cost budget and contract price? Do you capture the deviation and report on it? Why, or why not?
22. Are you able to do *accurate forecasting* on budget line items such as indirect cost recovery, bursary income or salary recoupment for your institution based on research contracts? How? What would you like to improve, or what works well?
23. Please describe the *strategic decision-making capabilities* that your organisation holds in terms of research contract management information, and how you would like to improve / expand those capabilities?
24. Are your systems and processes flexible enough to adapt to any funder's requirements for *due diligences* or *compliance requirements*? If yes, in what way? If no, how do you think this functionality could be improved?
25. When you provide information for *university rankings*, is it a cumbersome process within your institution? If yes, please describe the challenges that you faced and how you overcame them. If no, please describe your processes or systems that allowed you to easily provide information for the purpose of rankings.
26. How does your institution consider potential *reputational risks*, such as accepting funds from an organisation that might hold reputational risks for your organisation?

Questionnaire 2

Semi-structured interview questions to industry partners

To obtain a better understanding of the needs and expectations, as well as pitfalls and benefits, of collaborative research partnerships between industry and universities

1. Please describe the nature of your collaborative association with universities. When did it start, what was the motivation for considering research collaboration with universities?
2. Does your company have a specific research strategy, whether in-house or outsourcing or a combination? Please provide your views on the role and benefits that such a strategy could add to a collaborative partnership with universities.
3. What are the determining factors for your company to decide on a long-term collaboration with universities?
4. How important is communication about the collaborative partnership within your company and between the industry and university? Who would you suggest are the key role players to ensure effective communication?
5. Within the context of your company's experience with industry–university collaborative research, please provide your views on:
 - a. Benefits experienced thus far from the collaborative efforts (possible considerations could be involvement in research projects; access to facilities; knowledge and technology creation; intellectual property and innovation; access to expertise and broader network; benefits for the field of research; social capital impact; other incentives; etc.)
 - b. Challenges faced during the research collaboration (possible considerations could be contractual negotiations, legislations, funding constraints, return on investment, etc.)
 - c. Were your expectations met in terms of the research collaboration? If yes, what do you think contributed to managing reasonable expectations? If no, what do you think are the main considerations that contributed to this failure?
6. What would you consider to be partnership characteristics that would support a successful industry–university collaboration?
7. What would you consider to be the critical factors and considerations leading to a successful industry–university collaboration?
8. What would you consider to be the critical factors that can cause an industry–university collaboration to fail?
9. What would your advice be to both industry and universities when considering starting with industry–university research collaborations?
10. Are there any other considerations that you think are important before, during and after a collaboration is established?