Role Description

Job title	Data Science Officer
Job Family	Core
Job Sub-Family	Business & Data Intelligence
Entry grade	FGIV
Role summary (ECD)	Contribute to the transformation of the Agency, into a modern, data-driven organisation by running and developing the services responsible to provide efficient services in the delivery of evidence to support benefit-risk decision-making on the development, authorisation and use of medicines.
Standard Role Duties & Responsibilities	The duties of the role are performed under the supervision, including guidance and support, of temporary staff. Understand, analyse and present data requirements in a visual, clear and structured manner, and translate business needs into scenarios, analytical approaches and solutions to impact on business processes and decision-making; Develop and coordinate the implementation of activities through delivery of new processes and digital solutions, in collaboration with EMA's users and stakeholders. Manage and coordinate activities associated to data management and data analysis activities as required. Design AI and ML solutions undertake proof-of-concepts and implement these solutions. Manage ongoing improvements to methods and algorithms that lead to findings, including new information. Coordinate, develop and implement processes and methods ensuring that the information used follows the compliance, access management and control policies of the Agency and meets the qualification and assurance requirements of the business; Create, implement and drive data analyses, dashboards, solutions for data available at the Agency and processes related to data modelling, data processing, data architecture, data integration, data quality, data analysis and data visualisation activities. Coordinate business data management and analytics input (e.g. performing UATs, verify data consistencies and verify metrics output) in projects aiming to deliver new data-driven IT solutions or in the maintenance processes of data-driven IT solutions Inform data collection, integration and retention requirements based on the input collected with the business; Leverage tools and resources to plan, evaluate and execute strategic initiatives Experiment through implementation of new technologies.

Role Specific Duties & Responsibilities	The specific tasks of an individual job holder, linked to this role description, are further detailed and referenced in: activities of the organisational entity within which the job holder carries out those tasks; the set of annual performance and development objectives, which are established together with the reporting officer; the requirement to comply with SOPs, WINs, Confidentiality Undertaking and other documentation relevant to the role and its scope. These will be agreed upon with the reporting officer upon assuming duties.
Managing resources	No management or supervision of resources.
Communication and professional contacts	Required to receive and convey information, orally and/or in writing, of a non-routine nature which needs careful explanation and interpretation e.g. explaining or interpreting policies, systems, processes; dealing with matters of a sensitive nature; formulating responses to more complex enquiries; drafting news items, letters, minutes, reports or presentations. Regular professional contacts with others inside and/or outside the Agency on functional matters. Solicits/gives information, provides advice/guidance and should use initiative. A likely requirement is to influence others' thinking and negotiate with various parties within own job responsibilities. Normally connected to the Agency's core business or a project. In particular, a Data Science Officer will: Liaise with external stakeholders on data submission, analytics and extraction.
Essential requirements Education Experience Skills & knowledge Certificates	***Education*** A level of education which corresponds to completed university studies of at least three years attested by a diploma; In Data Science, Informatics, Computer Science, Engineering, Statistics, Mathematics, Physics, Chemistry, Biochemistry, Economics, Biology, Medicines, or Pharmacy or other fields of science that require advanced use of analytics skills. ***Experience*** Up to **3 years** of full-time relevant professional experience; At least 2 years of working experience in the fields of research, development, manufacture, regulation or authorisation of medicines, preferably veterinary medicines; Hands on data activities. Experience in data management and data analysis. Understanding, cleansing, integrating and analysing massive and live data sets; data modelling and data quality frameworks;

	Using statistical software (for instance R, SAS, etc.) and programming languages used in analytics (for instance SQL, PL-SQL, Python, R, etc.); Using data visualisation tools (for instance Tableau, R Shiny, Oracle BI, Power BI, etc.); Experience in working in a team and in a multicultural environment. Experience with Data visualisation; ***Skills and Knowledge*** Knowledge of data collection and practices with data analysis tools; ***Certificates*** n/a
Nice to have Education Experience Skills & knowledge Certificates	***Education*** Completed PhD or master's degree in one of the university degrees required for eligibility. ***Experience*** In coordination of research projects; In working in a regulatory environment related to the evaluation of medicines or interacting with regulatory agencies; With tools used in big data frameworks (e.g. Hadoop, MapReduce, etc.); In the implementation of NoSQL databases and related solutions; In delivering, implementing and using data analytics solutions which include Artificial Intelligence components; In data analytics frameworks based on cloud technologies, with tools used in analytics and data visualisation such as R, Python. Power BI or Tableau. ***Skills and Knowledge*** n/a ***Certificates*** n/a

FGIV

Category	Competency	Proficiency Level
Role Competencies	Emerging Technology Monitoring	Basic

	Data Modelling and Design	Intermediate
Sub-Family Competencies	Biostatistics	Basic
	Data Management	Intermediate
	Data Analytics	Intermediate
	Applied Knowledge Management	Basic
Grade Competencies	Adaptability and agility	Intermediate
	Coping with pressures and setbacks	Intermediate
	Analysing and problem solving	Intermediate
Core Competencies	Ethics and integrity	Intermediate
	Team collaboration	Intermediate
	Customer centricity	Intermediate
	Results orientation	Intermediate
	Communication	Intermediate
	Cross-cultural sensitivity	Intermediate
	Continuous learning and self-development	Basic