_____

PubMed User Survey

Q1. How do you access PubMed data? (Check all that apply)

☐ E-Utilities (the API)

☐ FTP

☐ PubMed web site at www.pubmed.gov

Q2. Why are you using PubMed data (select all that apply)?

- [ ] Redistributing within literature retrieval systems (e.g., commercially available system)

- [ ] Building bibliographic record management systems

- [ ] Exploring publication, research and/or funding patterns

- [ ] Creating social networks for researchers

- [ ] Building classification systems

- [ ] Building medical knowledge management systems

- [ ] Finding or defining relationships between specific biological entities or phenomena

- [ ] Text or data mining research

- [ ] Other (please specify): _____

Q3. What is the subject category of your research or activity (select all that apply)?

○ Basic Biology (e.g., Genetics, Biochemistry, Molecular Biology, Microbiology, Cell Biology, Embryology, Invertebrate Biology, Anatomy, Physiology…)

○ Clinical Applications (e.g., Health Sciences, Nursing, Veterinary Science)

○ Computational Biology, Bioinformatics, Health informatics, & Biomedical informatics

○ Computer or Information Science

○ Pharmacology & Toxicology

○ Public Health or Health Policy

○ Biotechnology

○ Plant Biology, Ecology & Environmental Biology

○ Other (please specify): _____

Q4. Thinking of your highest priority project using PubMed, what is the goal of your project, overall (e.g., finding drug reactions, improving literature search, finding connections between genotypes and phenotypes)?

_____

_____

_____

_____

_____

Q5. For what type of organization are you doing this work?

○ Biotechnology company

○ Pharmaceutical company

○ Software development company

○ Marketing research company

○ Database publisher or vendor

○ Government

○ Academic institution

○ Not-for-profit

○ Individual

○ Other (please specify) _____

Q6. Please choose which of the following attributes of Medical Subject Headings (MeSH) within individual PubMed records that you use in your work (Please choose up to three):

☐ Subheadings (e.g, /adverse effects, /genetics)

☐ Major topic designation

☐ Study participant descriptors ("check tags" like male, female, human, pregnancy, etc.)

☐ Substances (chemicals like proteins and drugs; including both MeSH preferred terms and supplementary concepts)

☐ Publication Formats (e.g., letter, review, editorial)

☐ Study Characteristics (e.g., clinical trial, case report, twin study)

☐ Support of Research (e.g., Research Support, U.S. Government)

Q7. PubMed currently links citation data to information related to the publication. These links are not always included in the XML of the PubMed record. How valuable to you are/would these links be from PubMed records to the following publication-related information?

	Not at all valuable	Slightly valuable	Moderately valuable	Very valuable	Extremely valuable
Summaries of the research results (e.g., ClinicalTrials.gov record)	○	○	○	○	○
Other supplemental data from the article such as figshare, Dryad (e.g. Secondary Source ID in PubMed record)	○	○	○	○	○
Information about the author (e.g., ORCID or links to author profiles)	○	○	○	○	○
Other (please specify)	○	○	○	○	○

Q8. PubMed records are linked to additional information about the topics discussed in the article, often in other NCBI databases. These links are generally not included in the PubMed

XML but are sometimes available for API users via the eLink service. How valuable would the following topic-related information links be to you?

	Not at all valuable	Slightly valuable	Moderately valuable	Very valuable	Extremely valuable
Terminology (e.g., MeSH) for main concepts discussed in the article	○	○	○	○	○
Related articles in PubMed	○	○	○	○	○
Gene and protein information and/or their associated sequence data	○	○	○	○	○
Chemical and drug information	○	○	○	○	○
Disease and syndrome information	○	○	○	○	○
Genetic variant information	○	○	○	○	○
Pathways data	○	○	○	○	○
Taxonomy information for species mentioned in the article	○	○	○	○	○

Q9. What metadata elements not currently available in PubMed records would you like us to consider for the future as separate searchable fields (e.g., institutional ID, journal categories, cohort size, unique gene identifier, arXiv ID)?

_____

_____

_____

_____

_____

Q10. How can we make the PubMed data more interoperable with other data sets (e.g., improvements related to the Journal Article Tag Suite, terminology or formatting standards)?

_____

_____

_____

_____

_____

Q11. What would make PubMed data easier to access? For example, what would make the E-Utilities API or FTP site easier to use?

_____

_____

_____

_____

_____

Q12. Do you use MeSH files programmatically in processing PubMed data or building a search system (e.g., do you employ the hierarchy for explosion)?

○ Yes

○ No

○ Don't know if we use this

○ Don't know what this is

Q13. How satisfied are you with PubMed data?

○ Very Dissatisfied

○ Dissatisfied

○ Neutral

○ Satisfied

○ Very Satisfied

Q14. On a scale from 0-10, how likely are you to recommend using PubMed data to a friend or colleague?

○ 0

○ 1

○ 2

○ 3

○ 4

○ 5

○ 6

○ 7

○ 8

○ 9

○ 10

Q15. Do you have any other comments about how we could improve PubMed data?

_____

_____

_____

_____

_____