Name: Jane Lomax

Current Position: Head of Ontologies

Affiliation: SciBite

Biosketch: please provide a 1 paragraph description of your career experience.
I have been working in biocuration for the last 16 years in a career that has spanned both academia and industry. After my undergraduate degree in Genetics at the University of Liverpool I embarked on a PhD at the University of Cambridge on the population genetics of parasitic nematodes. I then took my first steps into the world of biocuration, starting out as an ontology developer for the Gene Ontology (GO) project at the European Bioinformatics Institute (EBI). I progressed to be the lead of the GO team at EBI, managing the team of ontology developers there. In 2014 I moved to the Wellcome Sanger Institute where I took on a genome curation role in Pathogen Genomics and later at WormBase to do bioinformatics and gene curation. Two years ago I moved into industry, accepting a role at SciBite - a small and rapidly growing company developing semantic technologies. My role at SciBite is as Head of Ontologies; I manage a team of biocurators who develop the scientific vocabularies that underpin our core technologies.

In the space below, please describe your motivations to run for a position on the ISB Executive Committee. Describe your experience with biocuration or your intersection with biocuration, including details on what you will bring to the ISB Executive Committee, and the areas within ISB you would like to see developed.

Since I curated my first (very short) parasite sequences back in 2000 I have been absorbed in the world of biocuration. Since then I have held a wide variety of different biocuration roles in both academia and industry. I have curated disparate data types ranging from bacterial genomes to named entity recognition (NER) vocabularies to ontologies. I love bringing order to where there is chaos and providing good quality data, with rich metadata, from which valuable knowledge and insight can be derived.

There are several ways in which I feel my experience could contribute to the ISB:

- An industry view: ISB focus is largely academic but there are also large numbers of biocurators in industry who the ISB could reach out to. I have access to a large network within this community, as well as managing a growing team of biocurators here at SciBite.

- Wide variety of experience relating to biocuration. This includes ontology building and annotation, curation of whole bacterial genomes, gene model, gene function, NGS data. Also ruled-based curation and named entity recognition vocabulary curation.

- Experience of managing biocuration teams. This has given me insight into the key skills and experience for biocuration roles, and how this is likely to evolve in the future.

The areas where I'd like to see the ISB develop are, first, the rapidly expanding field of machine learning (ML) and AI tools. Such tools applied to biocuration processes have the potential to enhance and improve the throughput of biocuration pipelines, and to remove more of the mundane tasks so that curators can focus on the areas where humans can best apply their knowledge and experience. It is vital, moving forward, that biocurators begin to better understand these technologies and their strengths and weaknesses and I think the ISB could play a role in this education.

I would also like to learn more about how the ISB is involved in promoting open-access publishing and to help with in this. Open access publication is essential for smaller biocuration teams, especially in small and medium-sized companies (SMEs) who may not have access to the resources to pay for proprietary journals.

Finally, I am interested in curator skill development and training. I'm very excited to see the Postgraduate Certificate in Biocuration at the University of Cambridge take flight, and I think it would also be great to see shorter courses directed at biocurators especially in tech skills such as coding, databases and machine learning.

Conflicts of interest and other commitments:
None.