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## GeCo 5.0 – An HCI perspective

### Relevant publications/submissions

- **Crovari, P.**, Catania, F., Spitale, M., Garzotto, F. (2020 July) Ecological Momentary Assessment Tools: Lessons Learned from an HCI Perspective. In *Proceedings of HCI International 2020*
- Spitale, M., Catania, F., **Crovari, P.**, & Garzotto, F. (2020, January). Multicriteria Decision Analysis and Conversational Agents for Children with Autism. In *Proceedings of the 53rd Hawaii International Conference on System Sciences*.

## Other publications/submissions

- **Crovari, P.**, Catania, F., Garzotto, F. (2020 April) Crime Story as a Tool for Scientific and Technological Outreach. In *CHI'20 extended abstracts on Human factors in computing systems (CHI2020)*
- Catania, F., De Luca, G., Bombaci, N., Colombo, E., **Crovari, P.**, Beccaluva, E. & Garzotto, F. (2020, March). Musical and Conversational Artificial Intelligence. In *Proceedings of the 25th International Conference on Intelligent User Interfaces: Companion*.
- Catania, F., **Crovari, P.**, Spitale, M., & Garzotto, F. (2019, December). Automatic Speech Recognition: Do Emotions Matter?. In *2019 IEEE International Conference on Conversational Data & Knowledge Engineering (CDKE)* (pp. 9-16). IEEE.
- **Crovari, P.**, Gianotti, M., Riccardi, F., & Garzotto, F. (2019, September). Designing a smart toy: guidelines from the experience with smart dolphin "SAM". In *Proceedings of the 13th Biannual Conference of the Italian SIGCHI Chapter: Designing the next interaction* (pp. 1-10).
- Amato, F., Bianchi, S., Comai, S., **Crovari, P.**, Pasquarelli, M. G. G., Imtiaz, A., ... & Yuyar, E. (2018, November). CLONE: a Promising System for the Remote Monitoring of Alzheimer's Patients: An Experimentation with a Wearable Device in a Village for Alzheimer's Care. In *Proceedings of the 4th EAI International Conference on Smart Objects and Technologies for Social Good* (pp. 255-260).

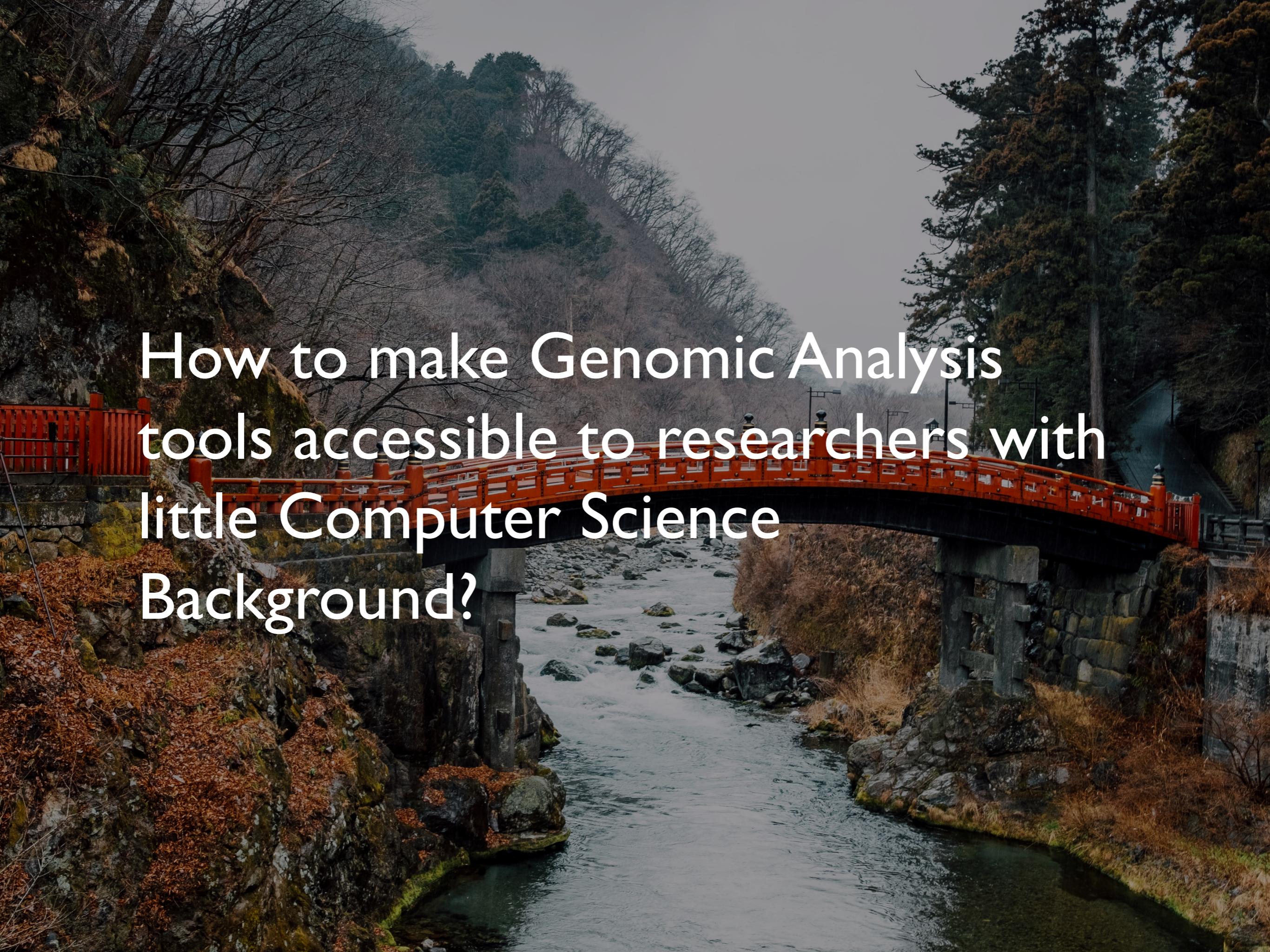
# My Research Question



Computer Scientists  
Development of powerful tools to  
make bioinformatic research.

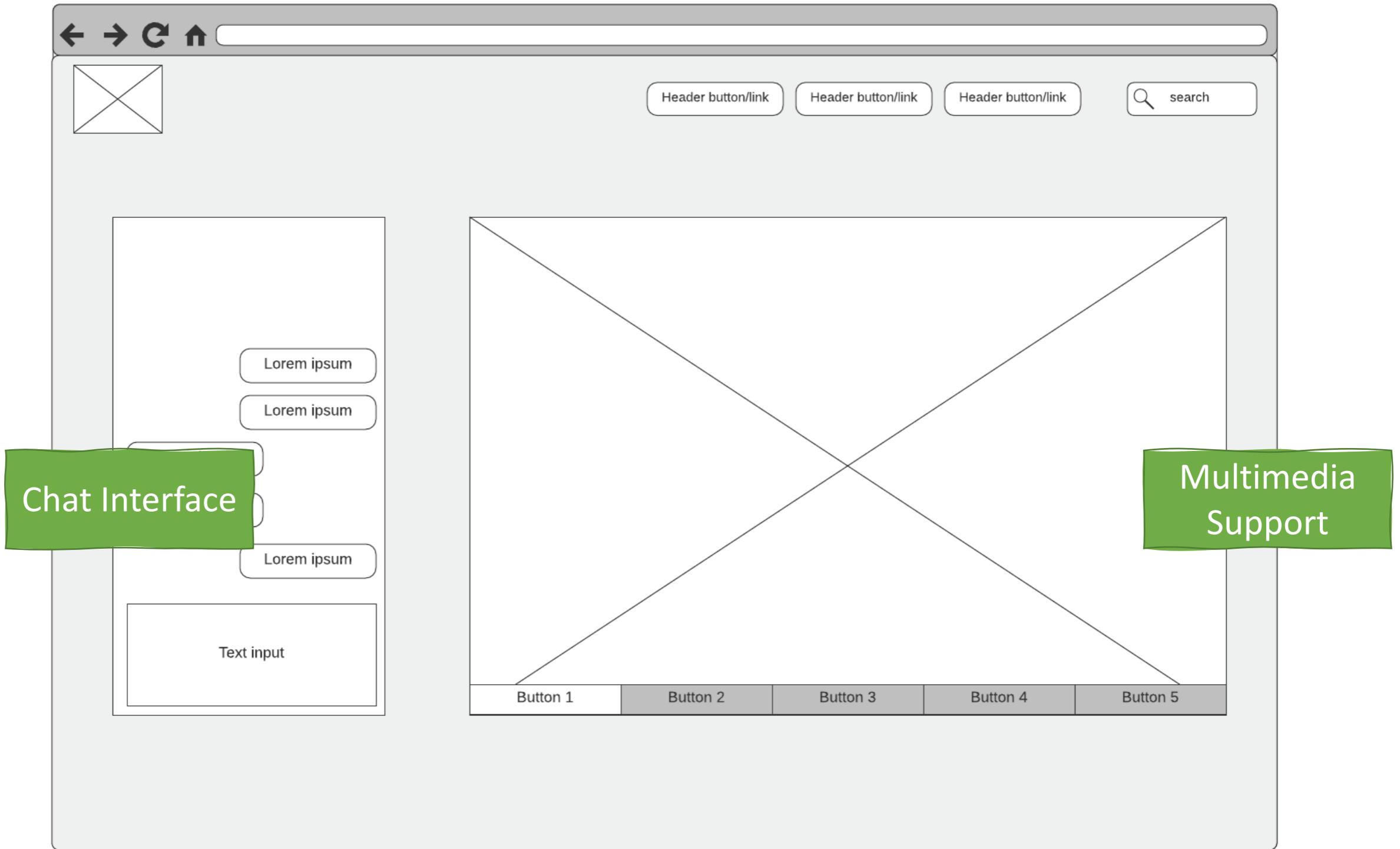


Biologists and Clinicians  
High domain expertise but little  
computer science background

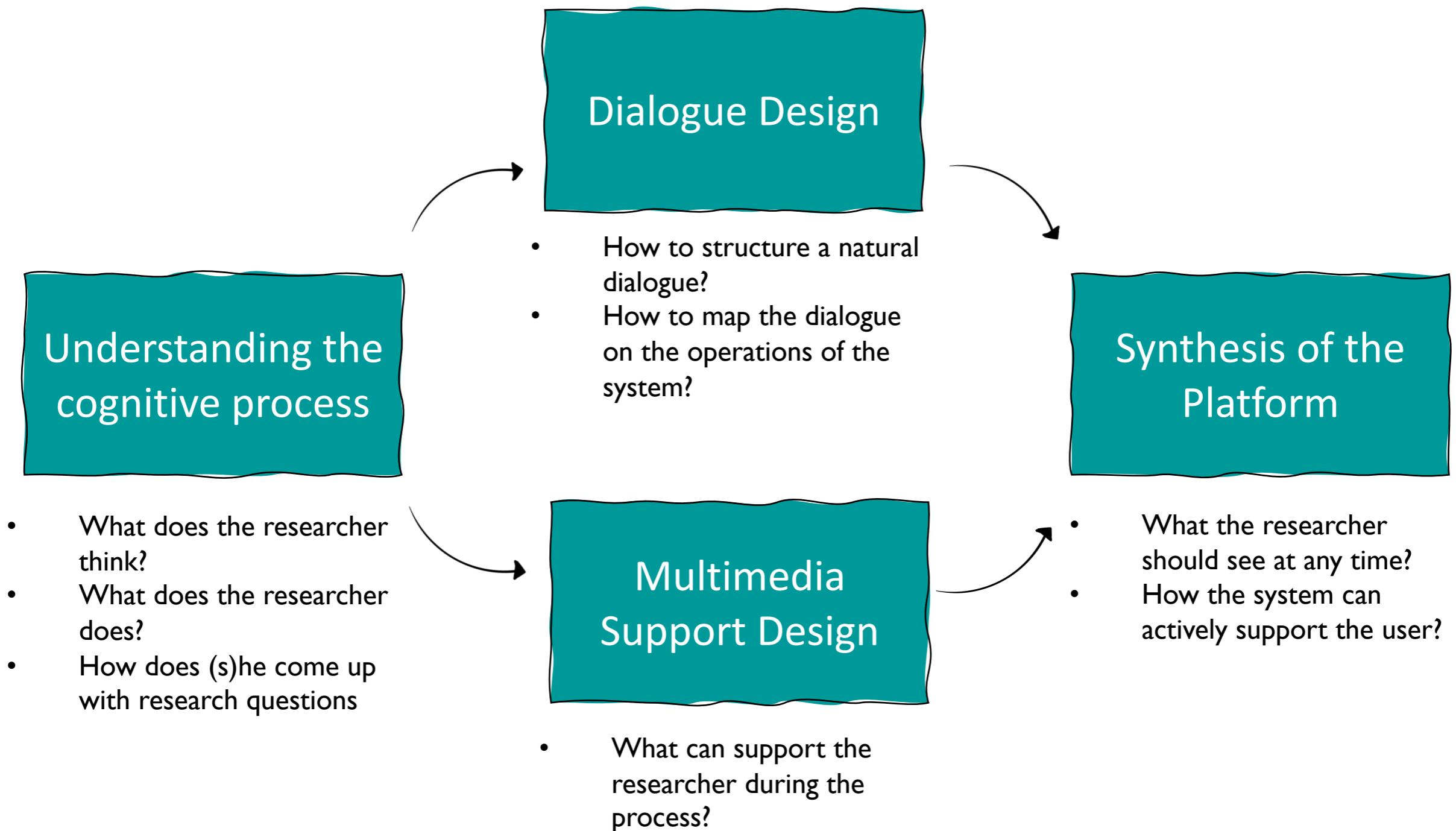
A photograph of a traditional Japanese red torii bridge arching over a rocky river. The bridge is surrounded by dense green and brown trees, suggesting a forest or mountainous region. The water below is dark and reflects the surrounding environment.

How to make Genomic Analysis  
tools accessible to researchers with  
little Computer Science  
Background?

# Interface Prototype



# Action Plan



# Challenges

- Coding the essence of Bioinformatics research in a defined set of «operational blocks»
- Creating an intuitive, effective dialogue-based user interface that works on top an a precise, defined language
- Combining a top-down design approach, with a data-drive, bottom-up one.
- Finding the best trade-off among system flexibility an ease-of-use