



Guiding method and protocol standardisation by structured input interfaces

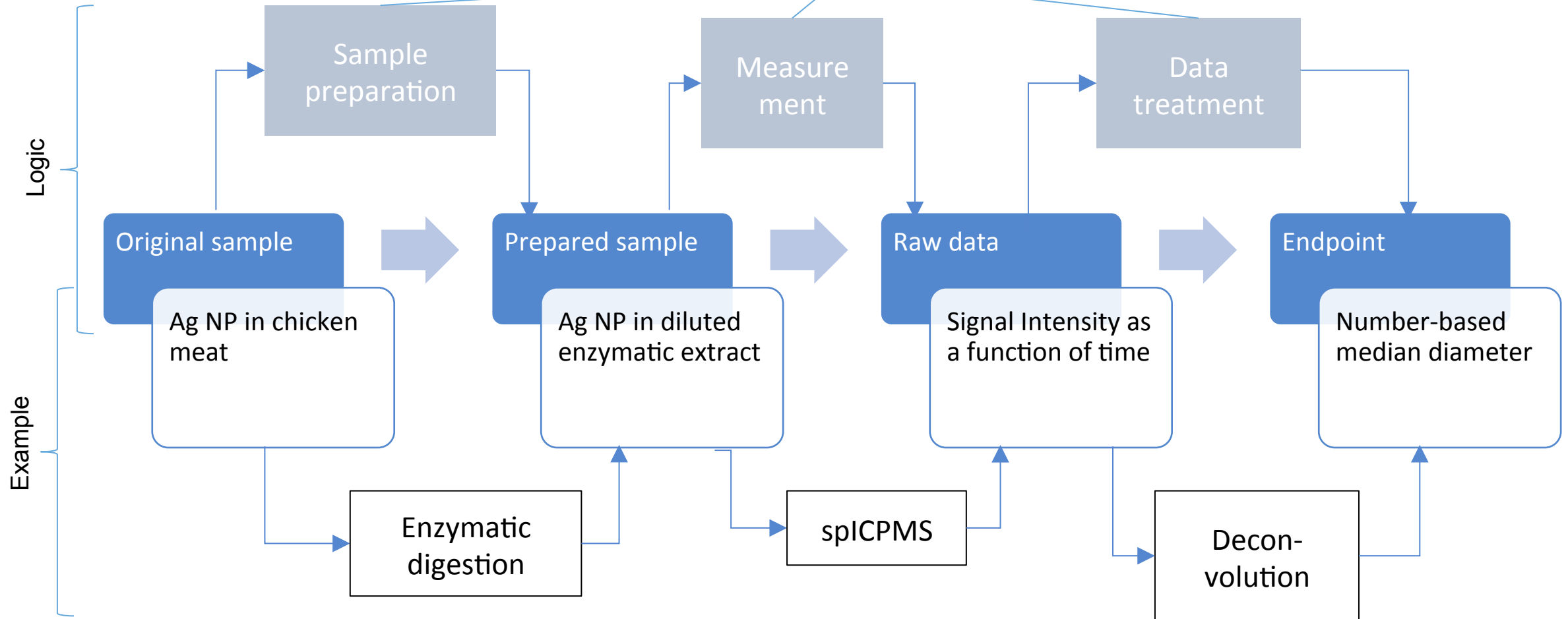
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- Measurement data and protocols (sample pre-treatment, measurement, data treatment) are intertwined, they must be collected together
 - ⇒ Protocol database » emerging standards
 - ⇒ Coupling protocol metadata with ontologies for future interpretation
- Many techniques and variances of these exist
 - ⇒ Required details has to be defined by experts
 - ⇒ Structured (i.e. interactive) input to avoid (meta)data gaps and errors
- Ensure low workload for data providers
 - ⇒ Collection of the right amount of data and metadata



Metadata for 3 different types of protocols are required to ensure future interpretation





Sample info

Matrix composition:

Standard medium:

- Aqueous liquid
- Biological tissues and cells
- Solid matrix
- Solvent

Chosen Standard medium

ium (DMEM)

- Capture details on chemistry of the original sample and the sample after preparation
- Definition and example of standard medium
- Some actions are complex and could be described separately (e.g. dispersion protocol including detailed steps and equipment used)

PROTOCOL ACTIONS

Protocol action: #1

Action:

Amplitude:

Amplitude units:

Duration:

Duration units:

Start phase:

End phase:

Startphase = endphase

Add another Protocol action

Original sample description

Dominant matrix composition of the sample: **Solid matrix**

Standardised media: Not applicable

Sample preparation protocol

	Action name	Amplitude name	Amplitude	Amplitude units	Duration	Duration unit	Startphase	Endphase
1	Dispersion	Compound	100	ml	None	None	Solid matrix	Aqueous liquid
2	Vortexing	Vortexing speed	500	rpm	5	s	Aqueous liquid	Aqueous liquid
3	Sonication	Frequency	1	Joule	5	min	Aqueous liquid	Aqueous liquid