

The Necessary Dialogue on Biomonitoring

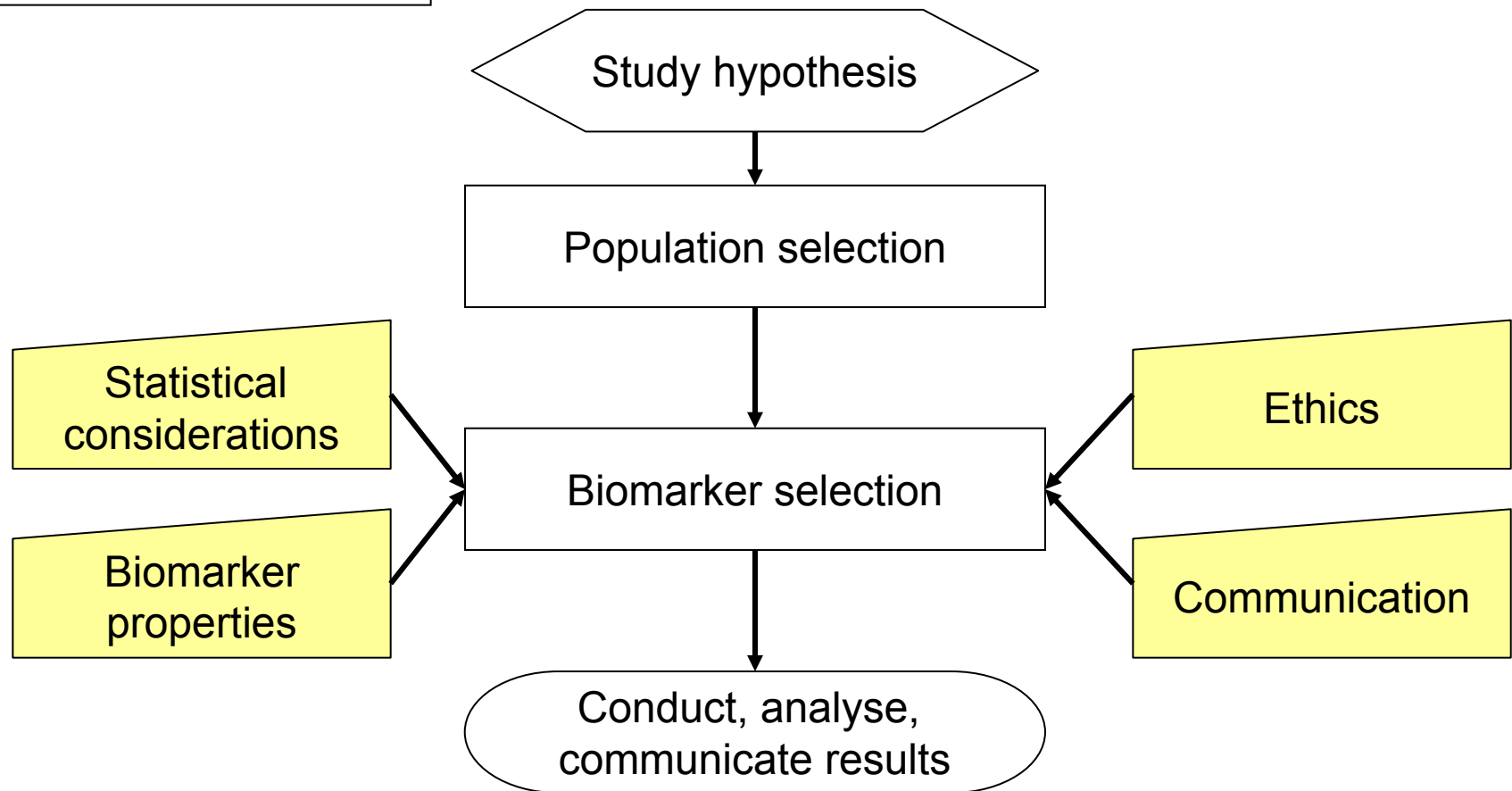
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Outline

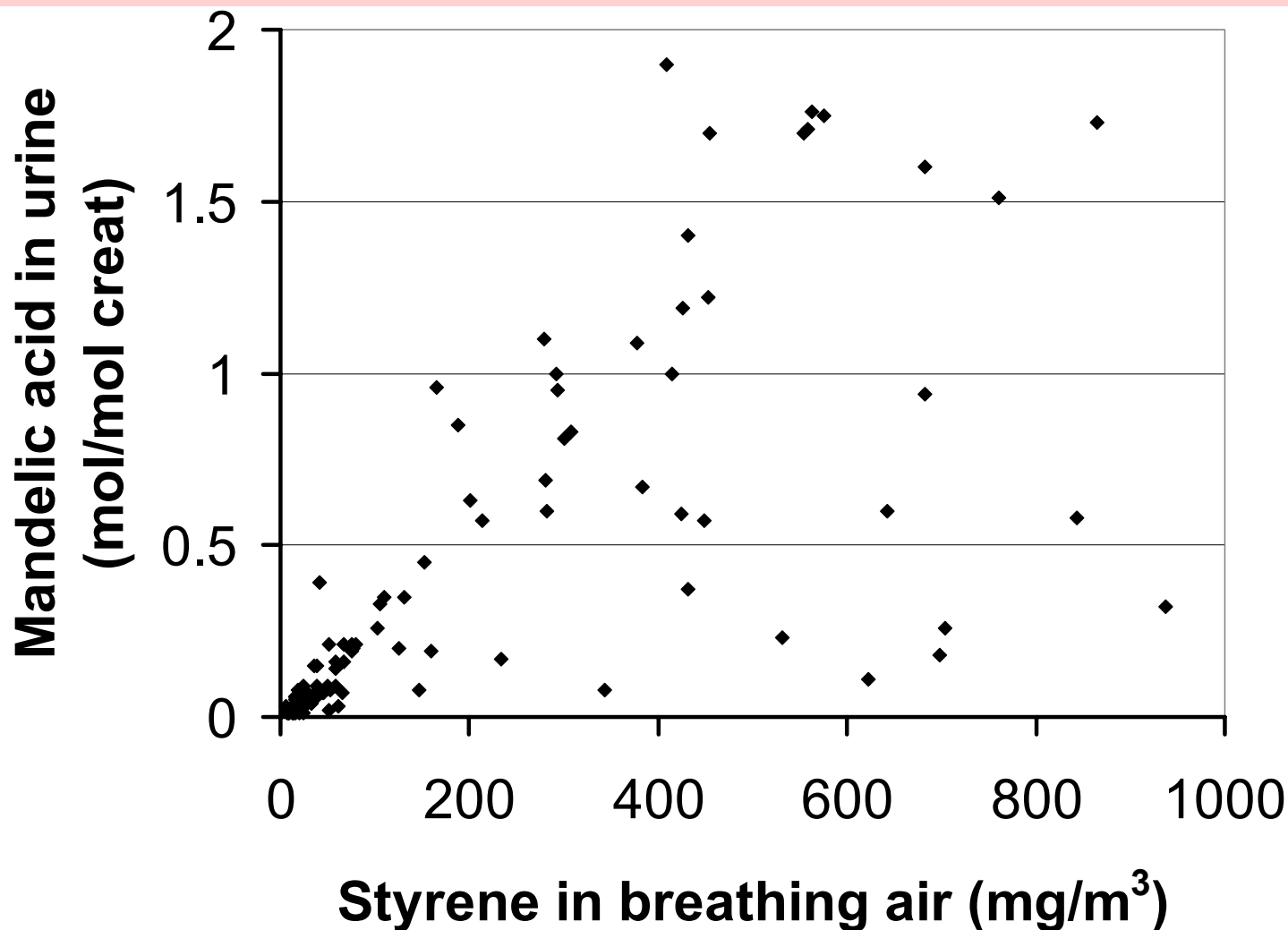
- Biomonitoring Scope
- Biomonitoring Science
- Biomonitoring Demagogy
- Biomonitoring Education
- Biomonitoring Ethics
- Biomonitoring Dialogue

Biomonitoring Scope

[NAS Report, 2006]

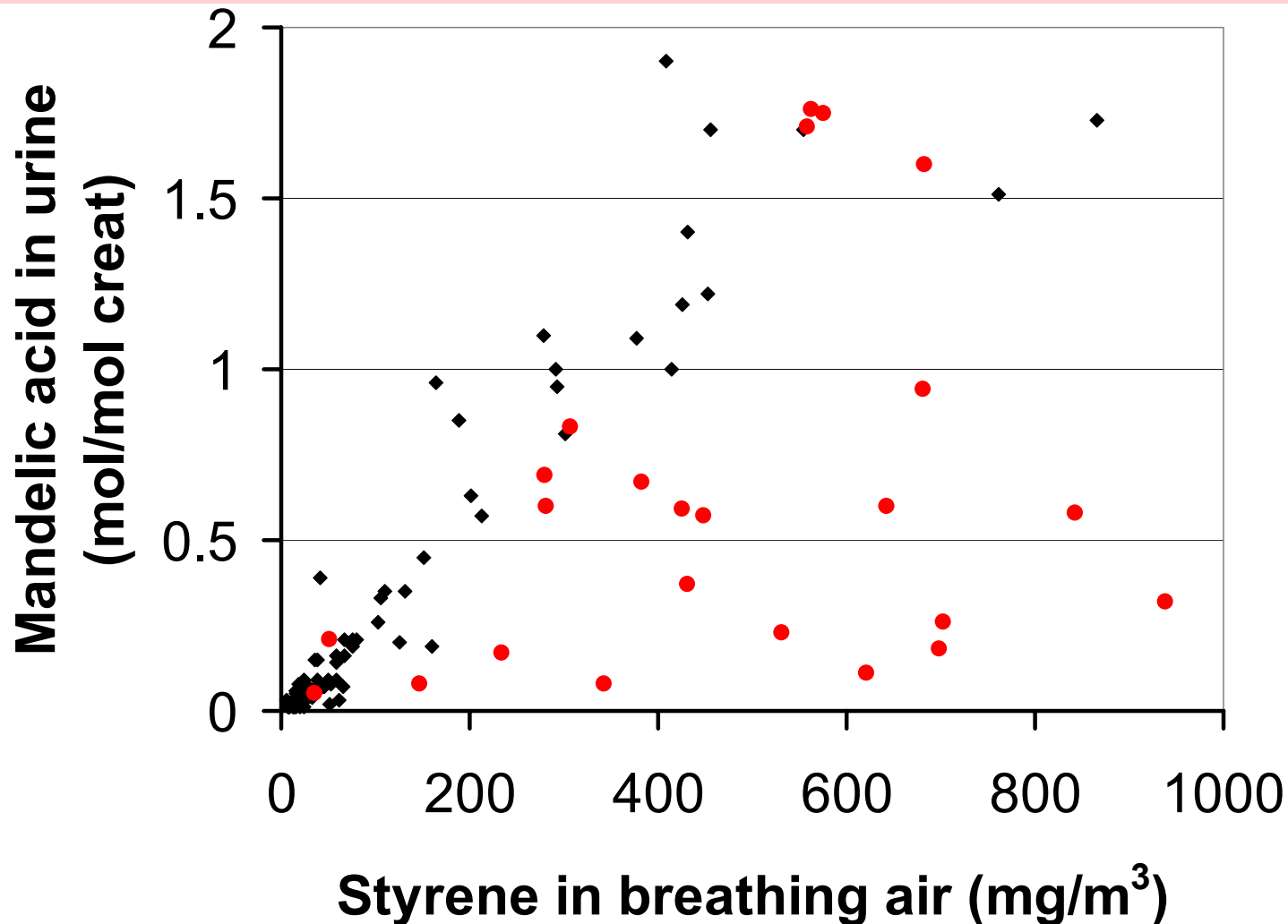


Biomonitoring Science



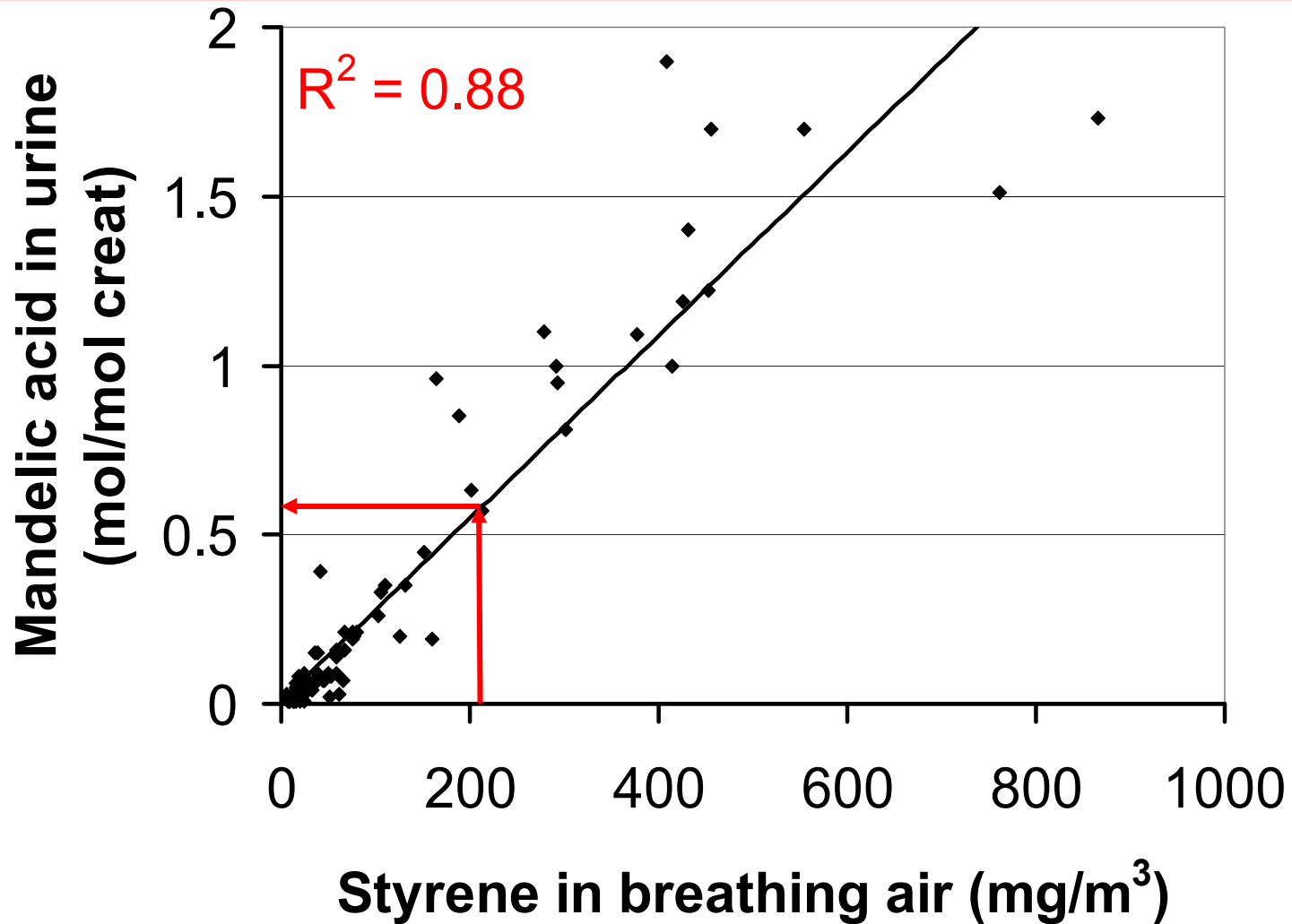
Data from: Campagna D *et al.* SJWEH 21:382-390, 1995

Biomonitoring Science



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Biomonitoring Demagogy

Biomonitoring Results from Joe Blow,
Participant in a Study conducted by an Environmental Group

Chemical group	Number of compounds detected	Median conc.	Conc. range	Median in study volunteers
Heavy metals (<i>sic</i>) ($\mu\text{mol/L}$ whole blood) Be, Cu, Li, Pb, Zn, Se	5 of 6	10	0.04 to 200	2.7

**If none of these “heavy metals” (*sic*) were detected, in his blood,
Joe Blow would be dead sick!**

In the long run, poor use of science serves absolutely no useful purpose

Biomonitoring Education

- Of the biomonitoring community
 - Define properties and uses of biomarkers
- Of the public health community at large
 - Learn how to interpret results and communicate them
- Of policy makers and decision makers
 - Learn to make better use of scientific information
- Of the general public: health literacy
 - Improve ability to seek for “the right” information

Biomonitoring Ethics

Emergent model of the ethical aspects of uses
of biomarkers in occupational health

Caux et al. (submitted)

Three axes in the model

- Narratives of science
- Validation of biomarkers
- Protection of workers

Biomonitoring Dialogue

- Increasing role of science in various areas of public policies, especially regarding health
- Increasing (appropriate) demands from various publics on scientific issues

command

- **Dialogue** among all actors, which implies to learn how to speak and listen to each other