

EEES 3900 - **Abstracts**

Represents a crucial section of a research paper.

An abstract has two typical uses:

- 1. Printed at the beginning of a scientific paper, it can be used to determine if the remainder of the paper is worth reading.**
- 2. Often published in the absence of the full text (e.g. databases, conference proceedings).**

Two important premises to keep in mind:

1. More people will read the abstract than the full text.

Might be read by **50-100-times** more people than the full text.

2. Nobody will read the full text without first reading the abstract.

Therefore;

Everything that is important in the paper must be reflected in the abstract.

Write the abstract in order to call attention to new techniques or data.

Be specific (sans methods).

Therefore, take advantage of the short duration of attention that your abstract will attract.

Abstract structure

Represents a miniaturized version of the paper that contains:

1. Introductory statement of the rationale or hypothesis.

One short sentence.

2. Materials and methods.

Be brief

Does not have to be detailed (the details are in the text).

3. Results.

Be specific, because this is what the reader is really looking for.

Include numbers, but no interpretation.

4. Discussion/conclusion.

One (maybe two) short sentences.

What does it all mean?

Example abstract (129 words)

Public Computer Surfaces are Reservoirs for Methicillin-Resistant Staphylococci.
Issmat Kassem, Von Sigler and Malak A. Esseili.
ISME J. 2007 1:265-268.

The role of computer keyboards used by students of a metropolitan university as reservoirs of antibiotic resistant staphylococci was determined. Putative methicillin (oxacillin)-resistant staphylococci isolates were identified from keyboard swabs following a combination of biochemical and genetic analyses. Of 24 keyboards surveyed, 17 were contaminated with staphylococci that grew in the presence of oxacillin (2 mg l^{-1}). Methicillin (oxacillin) resistant *Staphylococcus aureus* (MRSA), *-S. epidermidis* (MRSE) and *-S. hominis* (MRSH) were present on two, five, and two keyboards, respectively, while all three staphylococci co-contaminated one keyboard. Furthermore, these were found to be part of a greater community of oxacillin-resistant bacteria. Combined with the broad user base common to public computers, the presence of antibiotic-resistant staphylococci on keyboard surfaces might impact the transmission and prevalence of pathogens throughout the community.

The same abstract broken down:

Introductory statement/rationale

The role of computer keyboards used by students of a metropolitan university as reservoirs of antibiotic resistant staphylococci was determined.

Methods description

Putative methicillin (oxacillin)-resistant staphylococci isolates were identified from keyboard swabs following a combination of biochemical and genetic analyses.

Results

Of 24 keyboards surveyed, 17 were contaminated with staphylococci that grew in the presence of oxacillin (2 mg l⁻¹). Methicillin (oxacillin) resistant *Staphylococcus aureus* (MRSA), *-S. epidermidis* (MRSE) and *-S. hominis* (MRSH) were present on two, five, and two keyboards, respectively, while all three staphylococci co-contaminated one keyboard. Furthermore, these were found to be part of a greater community of oxacillin-resistant bacteria.

Discussion/conclusion

Combined with the broad user base common to public computers, the presence of antibiotic-resistant staphylococci on keyboard surfaces might impact the transmission and prevalence of pathogens throughout the community.

Some other rules:

Never include statements that direct the reader to the paper.

“will be discussed”

“will be explained”

These statements are worthless to somebody reading the abstract in a secondary publication.

Often, there is a word limit.

250 words for full papers

150 words for notes (**50** word abstracts are not uncommon).

An abstract should never contain footnotes, tables, figures, or citations/references, equations, formulae, or obscure acronyms.

At first mention in the abstract, give the complete scientific names, the full name of chemicals, and description of soils.

After first mention, such names or descriptions from the abstract do not have to be repeated in the text.