

## Style Sheet

### *Ultrasound in medicine and biology (UMB)*

Journal website: <http://www.umbjournal.org/>

#### SHARED FIRST AUTHORSHIP LINE (if relevant)

An equal contribution statement for shared *first* authorship should appear first in the footnote on the leading page of an article. Note that co-corresponding authors are not supported by UMB. Example:

Josephine Smith and Joe Southard contributed equally to this manuscript.

#### ABBREVIATIONS

- Expand all abbreviations at first mention in the abstract and again at first mention in the text and abbreviate thereafter.
- Use periods between author initials with no spaces in between: “One of us (D.S.T.) performed the tests.”
- Always abbreviate dimensions: 1-D, 2-D, 3-D, 4-D
- Abbreviate the following in text, legends, and tables:

second = s

minute = min

day = d (day 7 but 7 d)

hour = h

year = y

week = wk

month = mo

40- to 60-y-old

#### LISTS

##### Numbered Lists Within Text

Lowercase roman numerals within parentheses: The farm mouse (i) got into the cupboard, (ii) ate the food and (iii) fell asleep on a bag of flour.

##### Standalone List

Arabic numerals, no parens

The farm mouse:

1. Got into the cupboard
2. Ate the food
3. Fell asleep on a bag of flour

## DESIGNATORS

Lowercase: case 1, group 4, day 3, test 5, study 3, week 1, experiment 2

## LATIN PHRASES

*a priori, de novo, in vivo, ex vivo, in utero, in vitro, per se, via, et al., etc., i.e., e.g.*

## -IC WORDS

bacteriologic  
 biologic  
 cytologic  
 epidemiologic  
 etiologic

histologic  
 immunologic  
 microbiologic  
 neurologic  
 ophthalmologic

pathologic  
 physiologic  
 radiologic  
 serologic

## NUMBERS

- Spell out cardinal numbers one through nine and use numerals for numbers 10 and above, except for common fractions (one half, three fourths); numbers used as pronouns (one); at the beginning of sentences, in headings, titles; and numbers spelled out in published quotations.
- Use numerals for all units of measure (5 mL, 3 kg) and units of time (seconds, minutes, hours, days, months, years).
- Spell out ordinal numbers through ninth (first, ninth) but use numerals thereafter (10th, 22nd, 101st). Do not use superscripts for ordinals (e.g., 15th, *not* 15<sup>th</sup>).
- Onefold, fivefold, 3.5-fold, 10-fold
- In *p* values, *p* is lowercase and ital and should always have a zero before the decimal and 2 decimal places after the decimal; *p* = .6 should be changed to *p* = 0.60.
- Only close up <, >, ≥, and ≤ when it's a true lab value such as <20 mL, but in +, ±, and the *p* value (*p* < 0.50) always add the space around the symbol. Never close up an equal sign.
- No commas in 4-digit numbers (e.g., 1000, *not* 1,000).
- Follow International Bureau of Weights and Measures definitions for how to format numbers and units of measure:
  - The value of a quantity is expressed as the product of a number and a unit, and the number multiplying the unit is the numerical value of the quantity expressed in that unit.
  - The numerical value always precedes the unit, and a space is always used to separate the unit from the number. Thus the value of the quantity is the product of the number and the unit, the space being regarded as a multiplication sign (just as a space between units implies multiplication).

- Even when the value of a quantity is used as an adjective, a space is left between the numerical value and the unit symbol (e.g., 200 mg dose, a 10 kΩ resistor). Only when the name of the unit is spelled out would the ordinary rules of grammar apply, so that in English a hyphen would be used to separate the number from the unit (e.g., a 35-millimeter film).

## RANGES

In text, parens, and tables, use en dash: 4–12

23–42 kg

20–32°C

10%–20%

## PUNCTUATION

- No serial comma (The farm mouse ate the apples, bread and chips)
- For lists within lists, use SERIAL semicolon to separate (The farm mouse got into the cupboard; ate the apples, bread and chips; and fell asleep on a bag of flour.)
- Use hyphens for all prefixed and suffixed words (non-, pre-, post-, intra-, inter-, anti-, -like), including double consonant and double vowel words (post-traumatic, post-treatment, micro-organisms, anti-inflammatory, pre-existing).
- When the value of a quantity is used as an adjective, a space is left between the numerical value and the unit symbol (e.g., 200 mg dose, a 10 kΩ resistor). When the name of the unit is spelled out, the ordinary rules of grammar apply, so that in English a hyphen would be used to separate the number from the unit (e.g., a 35-millimeter film).

## SYMBOLS

13.6%, 6.8% and 11.6% decreases, respectively,

$p = 0.05$   $p$  is *italics lower case* (retains zero before the decimal)

$r = 0.05$   $r$  is *italics lower case* (retains zero before the decimal)

## PRODUCT INFORMATION

- All brand-name drugs and products require the manufacturer's name and location *at first mention only* in the abstract and the text. e.g. (Company Name, City, State, Country), thereafter (Company Name): (Sigma-Aldrich, St. Louis, MO, USA); thereafter (Sigma-Aldrich).
- For international sources, include only city and country (except include province names for Canada and Australia).
- Do not use ™ or ® symbols.

## EQUATIONS

Spell out "equation" at the beginning of a sentence: "Equation (3) is calculated . . ." Abbreviate equation if it is not at the beginning of a sentence: "as shown in eqn (2)" or "(eqn [2])" or "eqns (2) and (3)".

Equations are centered, number in parentheses to the right of equation

$$e = \sqrt{\frac{Ek}{2R\rho}}, \quad (1)$$

## FIGURES

### Figure Callouts in Text

Spell out “Figure” in the text: Figure 3, Figures 3 and 4; use “Fig.” in parentheses; (Fig. 1; Figs. 2 and 3); multiple parts to a figure: Figure 3a, (Fig. 3a), Figure 3 (a, b), (Fig. 6a–c), (Fig. 9b, 9d)

### Figure Legends

Initial cap, roman, period after Fig and number. If abbreviations are used in the figure, they should be spelled out in the legend. Example:

Fig. 2. (a) Experimental dispersion curves obtained in arterial phantoms with different shear modulus (*blue square*) compared with numerical solutions (*solid blue line*); (b) *in vivo* in the common carotid arterial wall of a healthy volunteer (*red square curve*) compared with numerical simulation (*solid red line curve*). BCC = basal cell carcinoma; NT = non-tumoral.

## TABLES

### Table Callouts in Text

Table 1, Table 2, (Table 3), (Tables 2 and 3).

### Table Elements

- Table number (arabic) and title centered, initial cap, no period
- Table heads initial cap
- All columns should have a heading.
- Units of measure should be clearly indicated.
- Footnotes to the table should be indicated by symbols in the following order: \*, †, ‡, §, ||, ¶, #
- Any abbreviations used in the table should be spelled out in the table footnote.

## REFERENCES

### Reference Citations in Text

- In text: author name plus year: Jorgensen et al. (2009) studied . . .; Smith and Jones (2010a, 2010b, 2011) reported that. . .; . . . reported by Maxwell (2010, 2011).
- Within parentheses: (Smith 1997); (Smith and Wesson 1998); (Smith et al. 1999); (Huang et al. 2007; Miyasaka et al. 2005).
- Multiple citations should be separated by semicolons and listed in chronological order (Brown 1999; Regent et al. 2010; Torry and Thomas 2010a, 2010b).
- If the author and year are identical for more than one reference, a lowercase letter should be inserted after the year (Smith and Roberts 2012a, 2012b; Thomas et al. 2010a, 2010b).

- Multiple years of same author: (Smith et al. 1999, 2000, 2001) or “Smith et al. (1999, 2000, 2001) reported on . . .”

## Reference List

- REFERENCES heading , CAP + bold, centered (1 head)
- Authors listed in alphabetical order
- List all authors, no matter how many.
- Citations to the same first author(s) should be listed with the oldest date first.
- Capitalize the first letter of the word following a colon.
- Do not include issue numbers unless it is a special issue.
- Beginning and ending pages should be provided (unabbreviated style).
- Use an en dash for the page range.
- Access dates must be provided for website entries.

### **Journal style:**

*Same author, more than one reference in the same year:*

Bercoff J, Pernot M, Tanter M, Fink M. Monitoring thermally-induced lesions with supersonic shear imaging. *Ultrason Imaging* 2004a;26:71–84.

Bercoff J, Tanter M, Fink M. Supersonic shear imaging: A new technique for soft tissue elasticity mapping. *IEEE Trans Ultrason Ferroelectr Freq Control* 2004b;51:396–409.

(References will be cited as 2004a and 2004b in text as well.)

Fleming AD, McDicken WN, Sutherland GR, Hoskins PR. Assessment of colour Doppler tissue imaging using test-phantoms. *Ultrasound Med Biol* 1994;20:937–941.

### **Entire Issue of a Journal (special issue)**

Glaser R, Bond L, eds. Testing: Concepts and research [Special Issue]. *Am Psychol* 1981;36(2):635–847.

### **Journal Supplement**

Koczkas S, Holmberg G, Wedin L. A pilot study of the effect of aspirin. *Acta Psych Scand* 1981;63(Suppl. 290):328–330.

### **Book**

Williams AR. *Ultrasound: Biological effects and potential hazards*. New York: Academic Press, 1983.

### **Edited Book**

Letheridge S, Cannon CR, eds. *Bilingual education: Teaching English as a second language*. Rochester, NY: Praeger, 1980.

### **Chapter in a Book**

Fung YC. Biomechanics. In: Smith JS, ed. *Mechanical properties of living tissues*, 4th edition. New York: Springer, 1993.

Haney MJ, O'Brien WD. Temperature dependency of ultrasonic propagation properties in biological materials. In: Greenleaf JF, ed. *Tissue characterization with ultrasound*. Boca Raton, FL: CRC Press,

1986:15–55.

***Proceedings Published as a Book***

Chaddock TE, Fleming AD, McDicken WN, Sutherland OR, Hoskings PR. Gastric emptying of a nutritionally balanced liquid diet. In: Dantel EE, ed. *Proceedings of the Fourth International Symposium on Gastrointestinal Motility*. Vancouver, BC, Canada: Mitchell Press, 1974:83–92.

***Website***

Fung YC. Biomechanics. Available at: <http://www.biomechanics.org>. Accessed June 18, 2010.

**WORD LIST**

Occasionally there's a need to standardize the style for a certain term. This word list provides a place to do that for anything not already covered elsewhere in the guide.

**0-9**

**α-ω**

**A**

acknowledgment  
AM (small caps)

**B**

backscatter  
blood–brain barrier (use en dash)  
blood flow

**C**

Co. (abbrev. for company)  
<sup>60</sup>cobalt  
color flow  
crosscut  
cross-link  
crossover  
cross product  
cross-react, cross-reaction, cross-reactivity  
cross-reference  
cross talk

**D**

database (one word)  
data set (two words)  
day 2, day 24  
dilation  
dL  
Doppler  
dose-response curve

**E**

*e.g.*,  
endpoint  
*et al.* (italics in running head only)  
et al. (roman in text)  
*ex vivo*

**F**

Fisher's test

**G**

*g* (italic) or centrifuge speed (spun at 300 *g*)  
*g* (roman) for gram

**H****I**

*i.e.*,

Inc.

intramuscular (i.m.)

intravenous (i.v.)

*in situ*

*in vitro*

*in vivo*

**J****K**

kcal

kHz

**L**

L (liter)

**M**

mL

$\mu$ L

mm Hg

**N****O**

online

overall

**P**

*per se* (italic)

Plexiglass

PM (small caps)

*post hoc*

**Q****R****S**

Student's *t*-test

**T**

toward, not towards

**U****V**

versus (in text); vs. (in parens and legends)

*via* (italic)

**W**

wavelength

workup

**X**

x-axis

$\chi^2$  (Greek "chi," not chi-square)

X-ray

**Y**

y-axis

**Z**