Lipids is a journal of the American Oil Chemists’ Society that publishes high-quality peer-reviewed papers, in the general area of lipid research: including chemistry, biochemistry, clinical nutrition, and metabolism. Lipids also publish papers establishing novel methods addressing research questions in the field of lipid research.

Types of Papers
The following manuscript types are accepted for submission:

1). Rapid Communications are concise and complete accounts of significant findings of a more limited scope, but have a rapid review schedule and a target of 30 days from submission to acceptance for publication. These submissions must have a combined Results and Discussion sections. The total length of a Rapid Communication cannot exceed 1,500 words and the Abstract cannot exceed 150 words. Rapid Communications are considered using the same review standards as those for Articles, however review is expedited and decisions are either Accept, Minor Revision, or Reject. Preliminary data are not acceptable and fragmentation of related results into several reports is not acceptable. After receiving the first decision letter on disposition of the manuscript, authors have 2 weeks to revise and resubmit the revised manuscript.

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4). Methods manuscripts are focused on the development of new methodology in the area of lipid biochemistry and lipid chemistry that are intended for publication in the Methods section and should be identified as such. These manuscripts are permitted to have a combined Results and Discussion section. After receiving the first decision letter on disposition of the manuscript, authors have 3 months to revise and submit the revised manuscript, but additional time is considered on a case-by-case base upon request.

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**Parts of Manuscripts**

**Title:** The title should be a declaration of the major finding and should avoid the use of “effect of” in the title. In this situation, the authors should ask themselves what is the major effect of A on B? Convey this major finding in the title to engender a greater response by your colleagues to the findings presented herein. The title is limited to 150 characters including spaces.

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**Materials and Methods:** This section follows the Introduction and should provide enough information to ensure the reproducibility of the experimental work. Published methods should be referred to by literature citation of the original procedure and of pertinent published modifications to any method, but sufficient detail given to permit readers to understand how the work was done. Use of chemical formulas for simple agents is encouraged. Repetitive descriptions of similar procedures should be avoided. The identity and purity of new compounds must be adequately documented. Spectral data and other physical characteristics of new compounds should be listed concisely. Ratios of components, such as mixtures of solvents, should be given by placing slashes between the component names and colons between the numerals, e.g., chloroform/methanol/water (65:25:4, by vol). This section should end with a section devoted to the statistical methods used to evaluate the data contained herein.

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**Discussion:** This section should be an interpretation of the results and a comparison of these results to what is reported in the literature. Authors are encouraged to discuss the significance of their work relative to other studies found in the literature as well as highlight potential mechanisms accounting for their observations. Similar to the Introduction, a more in-depth discussion regarding the novelty of the work should be presented. Authors should not merely recapitulate the results in the Discussion section.

**Acknowledgements:** This section acknowledges the contributions to the study by individuals who are not authors of the work. These individuals, while contributing to the work,
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Submissions must present scientific results that are novel, that are unpublished, and are not intended for publication elsewhere. They must be written in American English using American spelling throughout. Authors who have difficulty with American English should obtain the assistance of colleagues more proficient in the language, in writing their manuscripts or consider the use of an editorial service to help in the preparation of their manuscripts. The Springer Author Academy provides online tools and courses and recommends Edanz (www.Edanzediting.com) for help with manuscript preparation.

In addition, lipid compositional data must be presented as mole% rather than weight %. Mass of lipids should be reported in moles with the exception being work in which a lipid is included in the diet. In this case, mg of material included in the diet is acceptable, e.g. DHA (500 mg/day). Further, for work demonstrating production of a product for consumption, mg of lipid per unit of material, e.g mg/egg or mg/100 g of meat, is acceptable.

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Abbreviations and acronyms should be defined at first mention and used consistently thereafter. Avoid the overuse of abbreviations and acronyms in lieu of spelling out the word. Acronyms should not be pluralized, e.g. PUFAs should be PUFA.

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Always use footnotes instead of endnotes.

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Recommendations on the nomenclature of steroids can be found in Biochemistry 8, 2227–2242 (1969) and 10, 4994–4995 (1971). A compendium of relevant CBN and CEBJ documents [see also J. Biol. Chem. 261, 11 (1986)] was published in 1978 as Biochemical Nomenclature and Related Documents by CEBJ. Reprints of individual documents and advice on nomenclature use may be obtained gratis from the Director, Office of Biochemical.

Nomenclature, Biology Division, Oak Ridge National Laboratory, P.O. Box Y, Oak Ridge, TN 37831, USA, phone +1-615-574-0808. General guidance on nomenclature also can be found in Scientific Style and Format: The CBE Manual for Authors, Editors, and Publishers, 6th ed., 1994, published by the Council of Biology Editors, Inc., Bethesda, MD 20814, USA.

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**Fatty acids (FA)**

- **PAM** palmitic acid (16:0)
- **STA** stearic acid (18:0)
- **OLA** oleic acid (18:1n-9)
- **LNA** linoleic acid (18:2n-6)
- **ALA** alpha-linolenic acid (18:3n-3)
- **SDA** stearidonic acid (18:4n-3)
- **DGLA** dihomo-gamma-linolenic acid (20:3n-6)
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARA</td>
<td>arachidonic acid (20:4n-6)</td>
</tr>
<tr>
<td>EPA</td>
<td>eicosapentaenoic acid (20:5n-3)</td>
</tr>
<tr>
<td>DPA-n-3</td>
<td>docosapentaenoic acid (22:5n-3)</td>
</tr>
<tr>
<td>DPA-n-6</td>
<td>docosapentaenoic acid (22:5n-6)</td>
</tr>
<tr>
<td>DHA</td>
<td>docosahexaenoic acid (22:6n-3)</td>
</tr>
<tr>
<td>PUFA</td>
<td>polyunsaturated fatty acid(s)</td>
</tr>
<tr>
<td>MUFA</td>
<td>monounsaturated fatty acid(s)</td>
</tr>
<tr>
<td>SFA</td>
<td>saturated fatty acid(s)</td>
</tr>
</tbody>
</table>

**Phospholipids (PL)**
- CerPCho: sphingomyelin
- PtdIns: phosphatidylinositol
- PtdIns-4-P: phosphatidylinositol 4-phosphate
- PtdIns-4,5-P<sub>2</sub>: phosphatidylinositol 4,5-bisphosphate
- PtdSer: phosphatidylserine
- PtdOH: phosphatidic acid
- PtdGro: phosphatidylglycerol
- Ptd<sub>2</sub>Gro: cardiolipin
- ChoGpl: choline glycerophospholipids (contains all 3 subclasses)
- EtnGpl: ethanolamine glycerophospholipids (contains all 3 subclasses)
- PtdCho: 1,2-diacyl-sn-glycero-3-phosphocholine or phosphatidylcholine
- PakCho: 1-O-alkyl-2-acyl-sn-glycero-3-phosphocholine
- PlsCho: 1-O-alkenyl-2-acyl-sn-glycero-3-phosphocholine or choline plasmalogen
- PtdEtn: 1,2-diacyl-sn-glycero-3-phosphoethanolamine or phosphatidylethanolamine
- PakEtn: 1-O-alkyl-2-acyl-sn-glycero-3-phosphoethanolamine
- PlsEtn: 1-O-alkenyl-2-acyl-sn-glycero-3-phosphoethanolamine or ethanolamine plasmalogen

**Sphingolipids**
- Cer: ceramide
- CerPCho: sphingomyelin
- Cer-Gal: galactocerebroside
- CerGlu: glucocerebroside
- CerLac: lactosylcerebroside

**Sterols**
- C: cholesterol
- CE: cholesteryl esters

**Neutral Lipids (NL)**
- TAG: triacylglycerol(s)
- DAG: diacylglycerol(s)
- MAG: monoacylglycerol(s)
- FFA: unesterified fatty acids

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