## Contents

### MINIREVIEW

<table>
<thead>
<tr>
<th>MINIREVIEW</th>
<th>Page</th>
</tr>
</thead>
</table>
| **Gut Microbiome Integration in Drug Discovery and Development of Small Molecules**  
Patrick Jimonet, Céline Druart, Stéphanie Blanquet-Diot, Lilia Boucinha, Stéphanie Kourula, Françoise Le Vacon, Sylvie Maubant, Sylvie Rabot, Tom Van de Wiele, Frank Schuren, Vincent Thomas, Bernard Walther, and Michael Zimmermann, on behalf of Medicen Microbiome Drug Metabolism Working Group | 274 |

### ARTICLES

<table>
<thead>
<tr>
<th>ARTICLES</th>
<th>Page</th>
</tr>
</thead>
</table>
| **Cytosolic 5'-Nucleotidase III and Nucleoside Triphosphate Diphosphohydrolase 1 Dephosphorylate the Pharmacologically Active Metabolites of Gemcitabine and Emtricitabine**  
Nav Raj Phulara, Chiaki Tsuge Ishida, Peter J. Espenshade, and Herana Kamal Seneviratne | 288 |
| **Use of a Double-Transfected System to Predict hOCT2/hMATE1-Mediated Renal Drug–Drug Interactions**  
Leticia Salvador Vieira and Joanne Wang | 296 |
| **Novel Tree Shrew Cytochrome P450 2Ds (CYP2D8a and CYP2D8b) Are Functional Drug-Metabolizing Enzymes that Metabolize Bufuralol and Dextromethorphan**  
Genki Ushirozako, Norie Murayama, Kyoko Tsukiyama-Kohara, Hiroshi Yamazaki, and Yasuhiro Uno | 305 |
| **Interaction and Transport of Benzalkonium Chlorides by the Organic Cation and Multidrug and Toxin Extrusion Transporters**  
Leticia Salvador Vieira, Ryan P. Seguin, Libin Xu, and Joanne Wang | 312 |

### ERRATUM

<table>
<thead>
<tr>
<th>ERRATUM</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correction to “Dissecting Parameters Contributing to the Underprediction of Aldehyde Oxidase-Mediated Metabolic Clearance of Drugs”</td>
<td>322</td>
</tr>
</tbody>
</table>

---

Supplemental material is available at dmd.aspetjournals.org.

*About the cover:* “Microbiome integration in drug discovery and development.” See the article by Jimonet et al. (dx.doi.org/10.1124/dmd.123.001605).