

# Selected Publications through 2007

## David W. Wood

<b>2007</b>
"Engineered Chimeric Enzymes as Tools for Drug Discovery: Generating Reliable Bacterial Screens for the Detection, Discovery and Assessment of Estrogen Receptor Modulators." <i>Journal of the American Chemical Society</i> , <b>129</b> , 8443-8457, 2007 [with G. Skretas, A. Meligova, C. Villalonga-Barber, D.J. Mitsiou, M.N. Alexis, M. Michal-Screttas, B.R. Steele, and C.G. Screttaas].
<b>2006</b>
"Recombinant Protein Purification by Self-Cleaving Aggregation Tag." <i>Nature Protocols</i> , <b>1</b> , 2257-2262, 2006 [with W.-Y. Wu, C. Mee, F. Califano, and R. Banki].
<b>2005</b>
<i>Homing Endonucleases and Inteins</i> , Nucleic Acids and Molecular Biology, Springer-Verlag, Heidelberg, Germany, <b>16</b> , 2005, [with M. Belfort, V. Derbyshire and B.L. Stoddard Eds.].
"Intein Reporter and Selection Systems", <i>Homing Endonucleases and Inteins</i> M. Belfort, V. Derbyshire, B.L. Stoddard and D.W. Wood Eds., Springer-Verlag, Heidelberg, Germany, <b>16</b> , 2005, [with G. Skretas].
"Industrial Applications of Intein Technology", <i>Homing Endonucleases and Inteins</i> M. Belfort, V. Derbyshire, B.L. Stoddard and D.W. Wood Eds., Springer-Voltag, Heidelberg, Germany, <b>16</b> , 2005, [with S.W. Harcum and G. Belfort].
"Inteins and Affinity Resin Substitutes for Protein Purification and Scale Up." <i>Microb. Cell Fact.</i> , <b>4</b> :32, 10.1186/1475-2859, 2005 [with M.R. Banki].
"Simple Bioseparations Using Self-Cleaving Elastin-Like Polypeptide Tags." <i>Nat. Methods</i> , <b>2</b> , 659-661, 2005 [with M.R. Banki and L.A. Feng].
"Novel and Economical Purification of Recombinant Proteins: Intein-Mediated Protein Purification Using in Vivo Polyhydroxybutyrate (PHB) Matrix Association." <i>Protein Sci.</i> , <b>14</b> , 1387-1395, 2005 [with M.R. Banki and T.U. Gerngross].
"Integrated Recombinant Protein Expression and Purification Platform Based on <i>Ralstonia Eutropha</i> ." <i>Appl. Environ. Microbiol.</i> , <b>71</b> , 5735-5742, 2005 [with G.C. Barnard, J.D. McCool and T.U. Gerngross].
"An Intein-Based Genetic Selection Allows the Construction of a High-Quality Library of Binary Patterned de Novo Protein Sequences." <i>Protein Eng. Des. Sel.</i> , <b>18</b> , 201-207, 2005 [with L.H. Bradley, R.E. Kleiner, A.F. Wang and M.H. Hecht].

"A Bacterial Biosensor of Endocrine Modulators." <i>J. Mol. Biol.</i> , <b>349</b> , 464-474, 2005 [with G. Skretas].
"Rapid Detection of Subtype-Selective Nuclear Hormone Receptor Binding with Bacterial Genetic Selection." <i>Appl. Environ. Microbiol.</i> , <b>71</b> , 8995-8997, 2005 [with G. Skretas].
"Regulation of Protein Activity with Small-Molecule-Controlled Inteins." <i>Protein Sci.</i> , <b>14</b> , 523-532, 2005 [with G. Skretas].
"Protein Purification Using Inteins and Elastin-Like Polypeptides." Provisional Application Filed filed with US Patent Office, March 14, 2005 [with M.R. Banki].
"Protein Purification Using Inteins and Polyhydroxyalkanoates." Provisional Application filed with US Patent Office, January 26, 2005 [with T.U. Gerngross and M.R. Banki].
"Bacterial Ligand-Binding Sensor." PCT Application filed with US Patent Office, March 17, 2005 [with G. Skretas].
<b>2004</b>
"Self-Cleaving Affinity Tags Re-Engineered for High-Throughput Applications." <i>Abstr. Papers Amer. Chem. Soc.</i> , <b>227</b> , U125, 2004 [with J.F. Hsui and L.M. Contreras]
<b>2003</b>
"Simplified Protein Purification Using Engineered Self-Cleaving Affinity Tags." <i>J. Chem. Tech. &amp; Biotech.</i> , <b>78</b> , 103-110, 2003.
<b>2002</b>
"Intein-Mediated Purification of Cytotoxic Endonuclease I-TevI by Insertional Inactivation and pH-Controllable Splicing." <i>Nucleic Acids Res.</i> , <b>30</b> , 4864-4871, 2002 [with W. Wu, G. Belfort, V. Derbyshire, and M. Belfort].
<b>2001</b>
"Conquering the Proteome: Complexity, Cooperation and Commerce." <i>Trends Biotech.</i> , <b>19</b> , 375-376, 2001.
<b>2000</b>
"Optimized Single-Step Affinity Purification with a Self-Cleaving Intein Applied to Human Acidic Fibroblast Growth Factor." <i>Biotech. Prog.</i> , <b>16</b> , 1055-1063, 2000 [with V. Derbyshire, W. Wu, M. Chartrain, M. Belfort, and G. Belfort].
"UV-Assisted Graft Polymerization of N-Vinyl-2-Pyrrolidinone onto Poly(ether sulfone) Ultrafiltration Membranes: Comparison of Dip Versus Immersion Modification Techniques." <i>Chem. Mater.</i> , <b>12</b> , 2123-2133, 2000 [with J. Pieracci, J.V. Crivello, and G. Belfort].