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Citation: Güven A, Fioroni M, Güven G (2013) Functionalized Nanocontainers Operated as Controlled Release Systems and Bioactuators. Bos J : 106. doi: 10.4172/2090-4967.1000106

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, a а a , . . , . . . a а а a...a.a. [36]. 🛛 a ⊠. • • • • a - a Ø 4 . . , 🛛 a. . . a. . . a 🖾 . . , a a , a a, aa a a. (a.a a), / . . , O- . . 🛛 🗛 . a (🗛 / a) [38].

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Image: Image:

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Figure 4: The biocatalytic cascade used for the biologic processing of the chemical input signals, resulting in ${\it situ}$

. A , in ۶a а а a a , NAD+ , 🛛 X situ a a a ۶a , a⊠ X а а а а , X л На a 🛛 🖉 а. a a a a a 🖌 Ha 🛛 🖾 а (ALT a LDH), AND X а а а а .a 1, 1 (F 🛛 4), а а а а а OFF (. .,) a а I a а , a 4. а , OFF ON а a ι H-۶a ر ., **, Н 🛛, 🖾** ×, а Ø a . / a , , Ø a a .

С

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X. . A а а а ∠a 4 . . . 🛛 . ⊠a , a 🛛 🛛 a а а a, а X . E а а а а а а а а а . Ø Ø 🛛 a N. Ø. а а а a. . S X а а а a, а а а a 🛛 🖾 a a a X 🛛 a X Pa а a X а а а а ر a • 🛛 a а а a, а а a a . 🛛 а ۶a ر а ۶a , X . O 🖾 a , a X а а а а X а , а а . X 🛛 a а а , a . X а a, a, а a a . а , a ۶a . I X а a,a X а а a , а · H .

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F 🛛 A 1-160 a a, a , a X a a , a а , a а , , a , а . а a . а а . а а а ۶a ۸ • - 🛛 а X а а a . / а . a, a, a🛛 ⊠. -. I , a а Ø а a 🛛 а а а a a X а а W а а Ø × а а X а . . Ø 🛛 a , a ۶a а 4 🛛 a 💷 X а . 8 🛛 . Н , a, , a 11 , 🛛 а a а (a a - a), a a. а

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Acknowledgements

The authors thank to Penn State Hershey Medical Center for fnancial support;

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