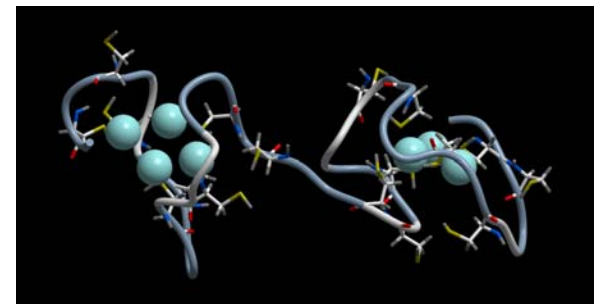




The Solution begins with us.....

MGP Biotechnologies

- Early Stage, Privately Held Biotechnology Company
- Incorporated as a California LLC
- Technology and Intellectual Property is Culmination of 15 Years Research by Dr. Acey on a Unique Protein Known as Metallothionein (MT)
 - Selectively Binds Toxic/Precious Metals
 - Involved in Cell Growth



Unique Properties of MT

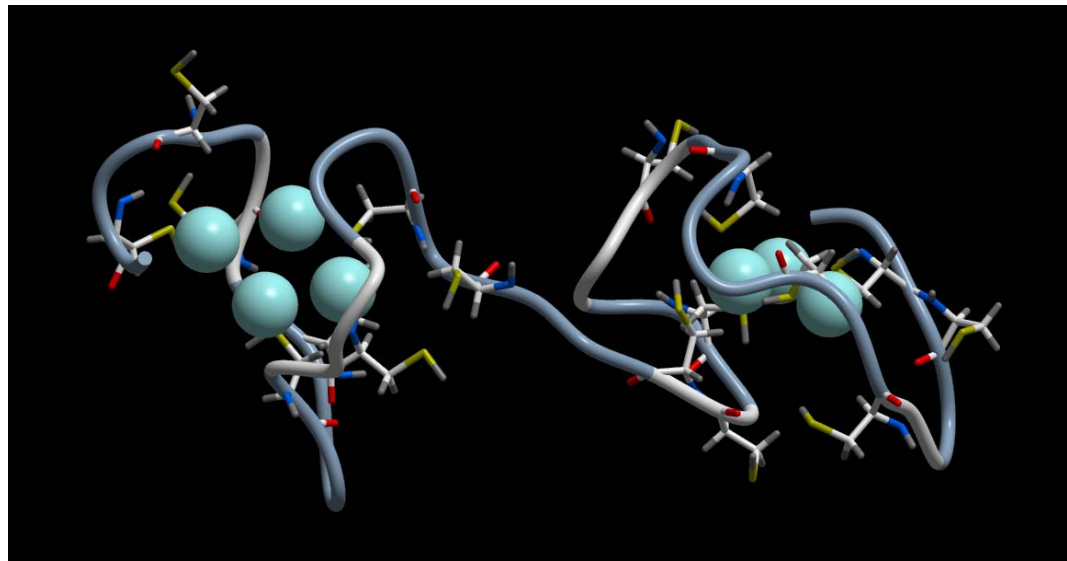
- High Affinity/Specificity for Heavy Metal
 - Binds Toxic/Precious Metals - Mercury, Cadmium, Gold, Silver, Platinum, Uranium, Arsenic, Nickel, Chromium, Aluminum, Gallium etc.
 - Does Not Bind Essential Trace Metals Calcium, Sodium, Potassium, Magnesium.
- Active and Stable Under Extreme Conditions
 - pH - 4 to 10
 - Temperature - Autoclavable
- Metal Recoverable

MGP's Mission

- Develop Products, Technologies, and IP
Based on MT and its Gene
- Applications
 - Water Remediation
 - Environmental Clean-Up
 - Biotechnology
 - Healthcare

MGP's Approach

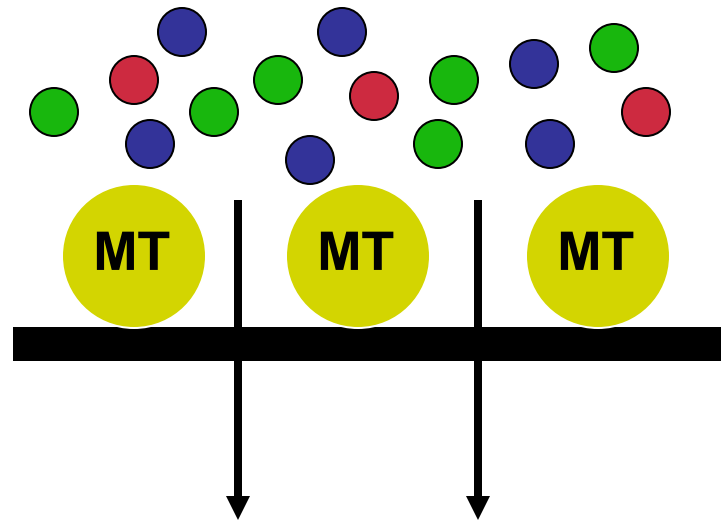
Metallothionein (MT) as a “Heavy Metal Sponge”



MGP's Technology

MT Fixed to Solid Support

Mercury ●
Sodium ●
Calcium ●



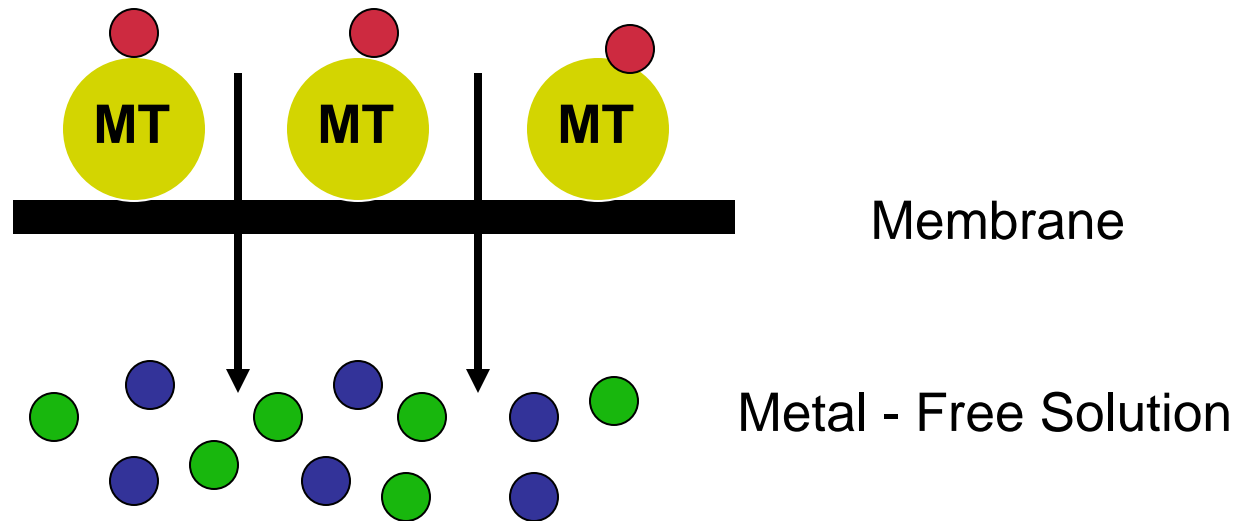
Metal Contaminated
Solution

Membrane

MGP's Technology

Toxic Metal Retained on MT - "Metal Filter"

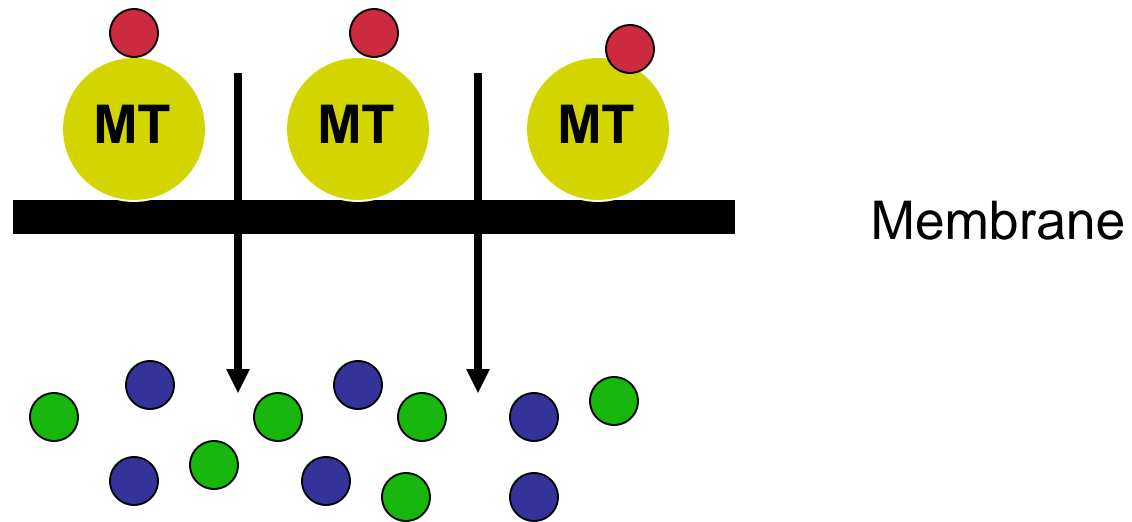
Mercury ●
Sodium ●
Calcium ●



MGP's Technology

Precious Metal Retained on Membrane

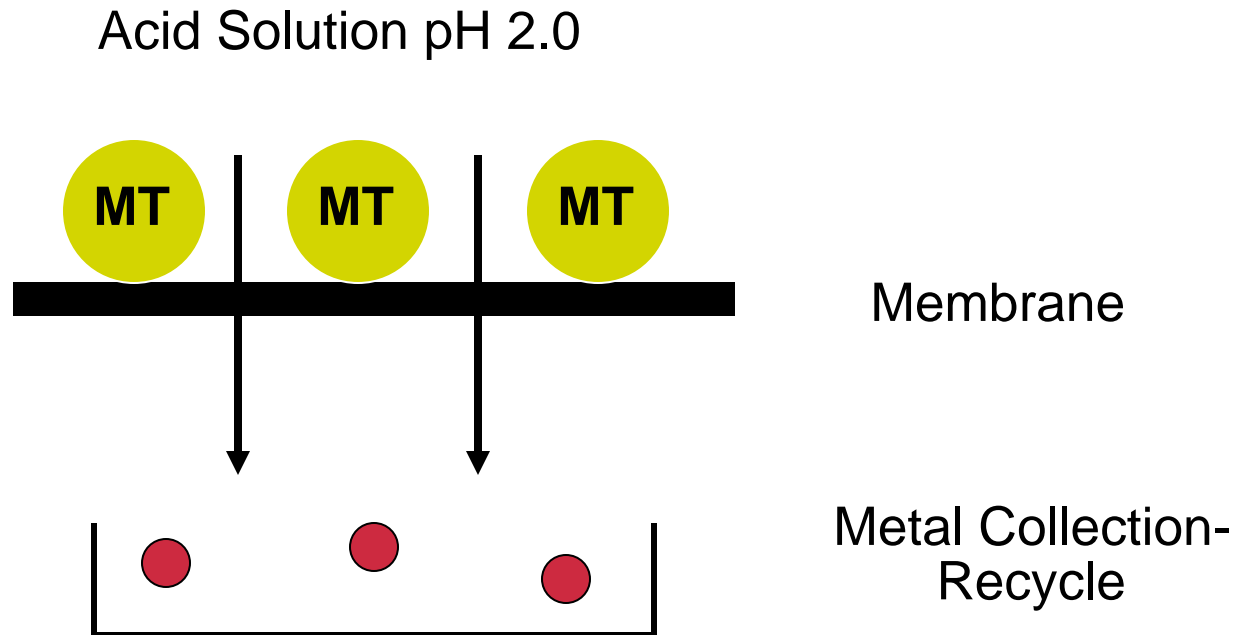
- Gold/Silver ●
- Sodium ●
- Calcium ●



MGP's Technology

Precious Metal Recovered

- Gold/Silver ●
- Sodium ●
- Calcium ●



MT Efficiency

**Amount Needed to Remediate
Typical Waste Stream* (1365 gal)**

Marathon C

51 lbs

MT 0.0077 lbs (3.5 g)

***500 ppm TDS - Mostly Ca, Mg Contaminated with 100 ppb Cd**

Current Status

- Discussion with SPEC Services to Fund Production of Prototype
- Identifying Licensing Partners
- Identifying Customers

Acknowledgements

- Chip Cullman, Patent Attorney, K &L Gates
- Larry Cohn, Corporate Attorney, SYCR
- Jim Till, Interim VP Research & External Support
- Karen Gould, VP
- Sandra Shereman, Sr. Dir. Sponsored Projects and Business Development
- Long Beach Regional Technology Center
 - ❖ Networking
 - ❖ Advise