



**PRESS RELEASE  
FOR IMMEDIATE DISTRIBUTION  
Dec 19, 2011**

**ARCH SCIENTISTS INHIBIT BIOFILM FORMATION AND INCREASE  
HARDNESS ON TITANIUM**

Toronto – Canada - Arch Biopartners Inc (“Arch” or the “Company”)(CNSX-ACH and OTC: FOIFF) and its subsidiary Arch Biophysics Ltd today announced that Arch scientists have inhibited biofilm formation on titanium using the Company’s proprietary peptide technology.

The attachment of *Pseudomonas aeruginosa* was reduced by more than 50% on titanium coated with Arch lead compounds ABP-0904 and ABP-0918. These data are similar to previously disclosed results where ABP-0904 and ABP-0918 were effective in inhibiting attachment of several bacteria including *Staphylococcus aureus*, *Streptococcus viridans*, *Pseudomonas aeruginosa*, and *Listeria monocytogenes* to stainless steel.

In addition to the effects on biofilm formation, ABP-0904 and ABP-0918 increased titanium hardness by more than 50% compared to the uncoated metal.

Management believes these results provide opportunities for commercial development in the medical industry where biofilm formation on titanium, stainless steel and other solid surfaces is a significant problem. Medical devices and implants, such as catheters, orthopedic and dental implants, have a tendency to attract microbial biofilm formation. Such biofilms are often formed by antimicrobial-resistant organisms. It is estimated that more than 75% of urinary tract infections, pneumonias and bloodstream infections originating in hospitals are associated with medical devices and cost the healthcare industry billions of dollars to treat annually.

**About Arch Biophysics**

Arch Biophysics Ltd is an Alberta corporation wholly owned by Arch Biopartners. Arch Biophysics’ technology development program at the University of Alberta has created novel synthetic biological molecules that bind to solid surfaces such as steel, titanium and glass. The resulting surfaces have enhanced biological and physical characteristics.

Previous tests involving ABP-0904, ABP-0912 and ABP-0918 on stainless steel resulted in a new material Arch inventors termed ‘bioorganic stainless steel’. Bioorganic stainless steel has a significantly increased electron work function that displays altered properties

relative to the initial starting material. The bioorganic steel generated from this process yields a product that is ~40% harder and has a ~50% lower corrosion rate compared with regular stainless steel. This new material was generated via a previously unreported type of chemical interaction between novel synthetic peptides and stainless steel. Details of these findings are reported in the journal *Biomaterials* in a publication titled “A Peptide–Stainless Steel Reaction That Yields a New Bioorganic–Metal State of Matter” by Davis, Li and Irvin.

### **About Arch Biopartners**

Arch Biopartners is a portfolio based biotechnology company established to develop new products and technology for sale to pharmaceutical and industrial companies.

The Company holds a license to a patent issued by the USPTO in the area of pseudomonas biofilm inhibition and currently has several additional patents pending in the area of materials science and biofilm inhibition.

For more information on the Company, please consult the other public documents filed on SEDAR at [www.sedar.com](http://www.sedar.com).

The Company’s website address is: [www.archbiopartners.com](http://www.archbiopartners.com) .

#### *Forward-Looking Statements*

All statements, other than statements of historical fact, in this news release are forward looking statements that involve various risks and uncertainties, including, without limitation, statements regarding the future plans and objectives of the Company. There can be no assurance that such statements will prove to be accurate. Actual results and future events could differ materially from those anticipated in such statements. These and all subsequent written and oral forward-looking statements are based on the estimates and opinions of management on the dates they are made and are expressly qualified in their entirety by this notice. The Company assumes no obligation to update forward-looking statements should circumstances or management’s estimates or opinions change.

**The CNSX has not reviewed and does not accept responsibility for the adequacy of this release.**

For more information, please contact:

**Richard Muruve**  
CEO, Arch Biopartners Inc.  
(647) 428 7031  
[info@archbiopartners.com](mailto:info@archbiopartners.com)