

### SPARC ESTABLISHES GRAPHENE BIO-MEDICAL SENSOR PROJECT

#### **HIGHLIGHTS**

- Sparc commences bio-medical project to develop non-invasive sensing devices for detection of diseases in both humans and animals via graphene based breath sensors
- ► Establishment of a new bio-medical division to be directed by Mr Ben Yerbury who brings over 20 years experience in the global medical device industry, including a number of Fortune 500 companies
- ▶ Potential global implications for the identification, diagnosis and management of disease
- Cornerstone shareholder and strategic partner Adelaide University to collaborate with
  Sparc to advance the bio-medical project

**Sparc Technologies Limited (ASX:SPN) (Sparc** or the **Company**) is excited to announce the establishment of a new graphene bio-medical division within the Company to be directed by Mr. Ben Yerbury **(Bio Medical Project)**. Sparc will advance the Project together with its cornerstone shareholder, strategic partner and leading Graphene research centre the University of Adelaide **(UA)** in order to seek to establish and develop non-invasive sensing devices for use in human and veterinarian applications in order to detect disease.

The focus of the Project will be on research into graphene-based sensing devices for the detection of a selection of volatile organic compounds (VOCs) present in exhaled breath that are understood to be indicators of disease. It is intended that the graphene based bio-medical sensors will be used via integration with existing diagnostic tools or other portable electronic devices such as smart phones to enable real time and portable disease detection.

Detection of VOCs via the use of graphene sensors is a new frontier in rapid, sensitive, selective and non-invasive analysis and disease diagnoses of human and animal disease. If successful, it could have profound global consequences for the early detection and management of disease, especially transmissible acquired diseases, including those caused by bacteria, fungi and viruses, as well as longer term congenital or neoplastic diseases (i.e. cancer).

Graphene, due to its uniquely large surface area and physicochemical properties, enables VOCs to be detected in minute quantities. Sparc will use these properties with the aim of isolating and identifying a selection of specific compounds which are bio-markers for certain diseases.

The Project will involve research into graphene-based sensing materials for detection of selected VOCs. Subject to the findings of that work the project will include development/fabrication of lab-scale sensing devices and the initial evaluation of their sensing performances of those selected VOCs. A successful project will provide Sparc with important technology for commercialisation in medical markets.

Sparc is particularly pleased to announce the appointment of Mr Ben Yerbury, Technical Consultant – Biomedical Division to direct the Project on behalf of the Company. Mr Yerbury has over 20-years' experience in the global medical device industry with Fortune 500 organisations including ResMed, Baxter Healthcare, Boston Scientific and Zimmer Biomet. His experience spans a broad range of clinical specialties and technologies across the respiratory and cardiovascular fields to orthopaedics and general surgery, to infusion therapy and nephrology.

Mr Yerbury brings a wealth of experience across Australia and New Zealand, Asia Pacific and European markets and their respective reimbursement models and regulatory environments, which will be invaluable to Sparc's commercialisation and development strategies. Mr Yerbury has direct and wide expertise in launching new, disruptive, technologies and business models to accelerate business growth and build competitive advantages in the medical device industry.

The Project will be encompassed within the existing, exclusive Strategic Partnership Agreement with the University of Adelaide.

## **Sparc Executive Chairman, Stephen Hunt, commented:**

"We welcome Ben to the Sparc team and we look forward to his guidance and leadership for this new division where Ben will provide critical expertise for Sparc on this initial bio-medical project that aims to target the detection of life threatening diseases with the use of non-invasive sensing devices.

Ben joins us at a great time and he will work closely with UA, which has already undertaken significant background research in medical bio-sensors for many VOCs.

It is wonderful to see Sparc continuing to attract experienced Senior Executives such as Ben and the new division and this project will be complimentary with the recent appointment of Don Darkin to the role of Strategic Advisor, New Technologies. We look forward to pioneering new technologies and applications for this revolutionary material and will seek to continue to be at the forefront of graphene."

#### -ENDS-

**Authorised for release by:** Stephen Hunt, Executive Chairman.

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# **About Sparc Technologies**

Sparc Technologies Limited (ASX:SPN) is a South Australian based company that is focussing on the development of innovative technology solutions using the unique properties of graphene. Graphene, which can be extracted from graphite, is a 2-dimensional nano material made of carbon atoms arranged in a hexagonal pattern which gives it unique and powerful properties that, with the right technology, can be imparted on products to improve performance. Sparc Technologies has licenced graphene-based technologies from the University of Adelaide, a leading institution in the field of graphene research, and will focus on commercialising graphene-based technologies for large industrial markets for marine and protective coatings, environmental remediation and bio-medical applications. The University of Adelaide is a substantial shareholder in Sparc.

