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ASX Release
26th October 2016

RHS Presentation at Australia Biotech Invest 2016

Adelaide, 26th October 2016: Reproductive Health Science Limited (ASX: RHS) ("RHS" or "the Company") is pleased to announce that CEO Dr Michelle Fraser will present today at the Australia Biotech Invest 2016 in Melbourne.

A Company update will accompany the 4C.

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About Reproductive Health Science

RHS is a developer of advanced single cell genomic technologies focussed on improving health and research outcomes, with over 10 years of technical experience in the field. EmbryoCellect™ is the Company's lead product designed to increase the chance of a successful IVF cycle by selecting the most viable embryos for transfer by screening for aneuploidy. This is known as Preimplantation Genetic Screening (PGS). RHS has recently released its second product, DOPlify™ for whole genome amplification (WGA) of single or small numbers of cells. DOPlify™ is applicable to the global Next Generation Sequencing (NGS) market

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Reproductive Health Science Ltd

At the forefront of single cell genetic analysis

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Dr Michelle Fraser, CEO and MD
Australia Biotech Invest 2016

Forward Looking Statements

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Any forward looking statements in this presentation have been prepared on the basis of a number of assumptions which may prove incorrect and the current intentions, plans, expectations and beliefs about future events are subject to risk, uncertainties and other factors, many of which are outside Reproductive Health Science Limited's control.

Important factors that could cause actual results to differ materially from any assumptions or expectations expressed or implied in this presentation include known and unknown risks. As actual results may differ materially to any assumptions made in this presentation, you are urged to view any forward looking statements in this presentation with caution.

This presentation should not be relied on as a recommendation or forecast by Reproductive Health Science Limited, and should not be construed as either an offer to sell or a solicitation of an offer to buy or sell shares in any jurisdiction.

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Corporate Overview

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Key assets

Intellectual property	• EmbryoCellect™ microarray granted patent family • DOPlify™ trade secret and supplier exclusivity • DOPlify™ combined single gene enrichment • Provisional Patent pending
Primary value drivers	• Clinical impact in the IVF market • Significant technical advances and deep expertise in single cell genetic analysis • Global product sales and key partnerships

20 October 2016 data

ASX Code	RHS
Shares on Issue	79m
Share Price	8c
Options	6.1m*
Market Capitalisation	$6.3m
Cash at 30 June 2016	$0.6m

* A further 6.8m options expire 31 Dec 2016

Recent Corporate Highlights

- DOPlify™ launched August
- EmbryoCellect™ performance validation data released July
- $1.5m capital raise completed October

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RHS product pipeline

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- DOPlify™ whole genome amplification kit launched August 2016

- Captures RHS' proprietary know-how for the lysis and whole genome amplification of single or small numbers of cells
- A solution for the amplification of limited DNA for a range of downstream applications
- Platform technology that enables analysis by a range of methods including NGS (Next Generation Sequencing) &/or microarray pathways

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The need for Whole Genome Amplification

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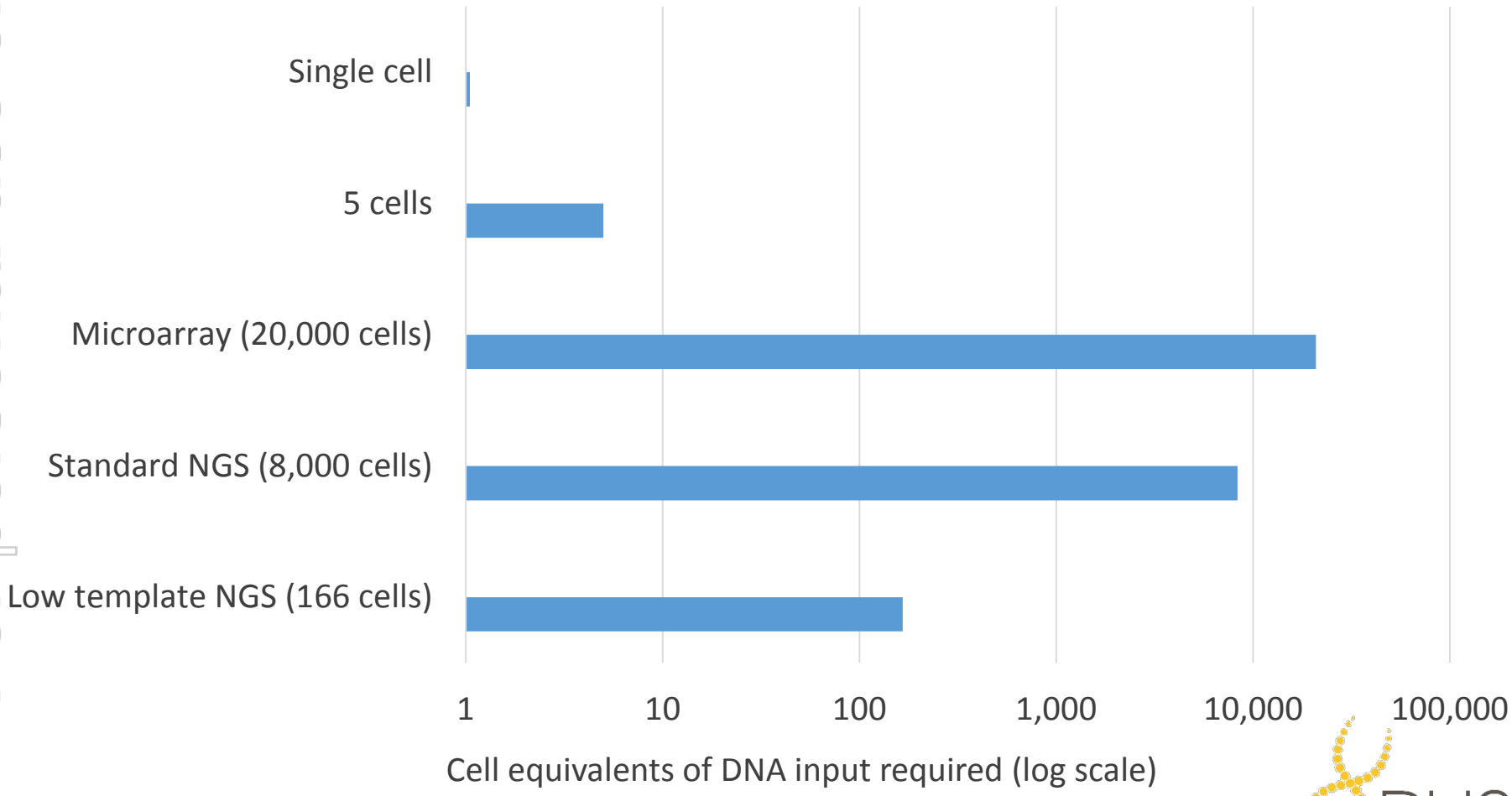

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What is Whole Genome Amplification?

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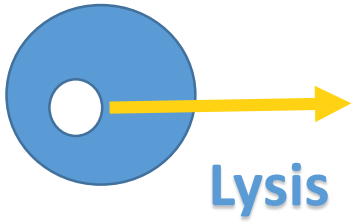
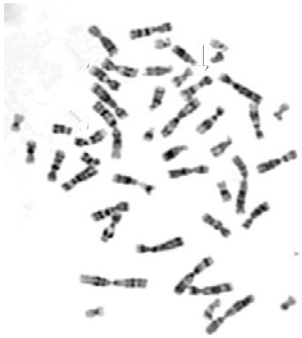
Cell

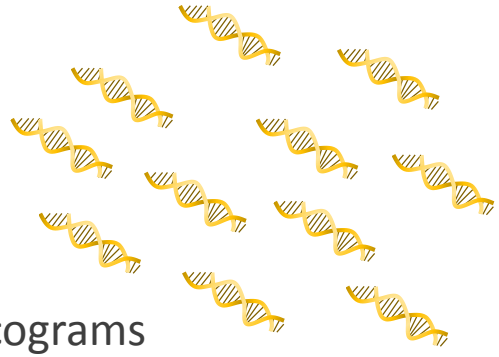


Release of chromosomes from the nucleus



6 picograms of DNA

Access to the DNA template



1,000,000s of picograms of DNA from 1 cell
WGA copies the whole genome

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Competitive advantages of DOPlify™

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- Simple protocol with only 2 sample tube openings
  - Minimises risk of contamination
  - Reduces hands on time
  - Less steps than other WGA kits
  - Clear QC prior to expensive downstream analysis
- Fast protocol that matches the fastest on the market
- Latest generation reagents that are accurate and produce high yields of the DNA template
  - Robust kit shippable on ice packs and with a long shelf life
- Flexible WGA system that uniquely allows the addition of primers to copy specific regions of clinical significance concurrently rather than sequentially
  - Disease causing genetic mutations, HLA markers, str markers (patent filed)
- Superior coverage demonstrated by human mitochondrial genome data

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The opportunity for DOPlify™

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- The single cell analysis market is forecast at US$3.35b by 2021 with a CAGR of 18.2% (http://www.marketsandmarkets.com/Market-Reports/single-cell-analysis-market-171955254.html)
  - Growth predicted to mainly come from consumables, which is currently the largest segment
  - Instruments will also grow but their high cost and long shelf-life will be the limiting factor
- There are only 8 single cell WGA kits on the market and RHS' DOPlify™ uses a unique WGA method
- While RHS was founded in reproductive applications, the significant competitive advantages of DOPlify™ are applicable to other significant markets

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Single cell analysis in cancer

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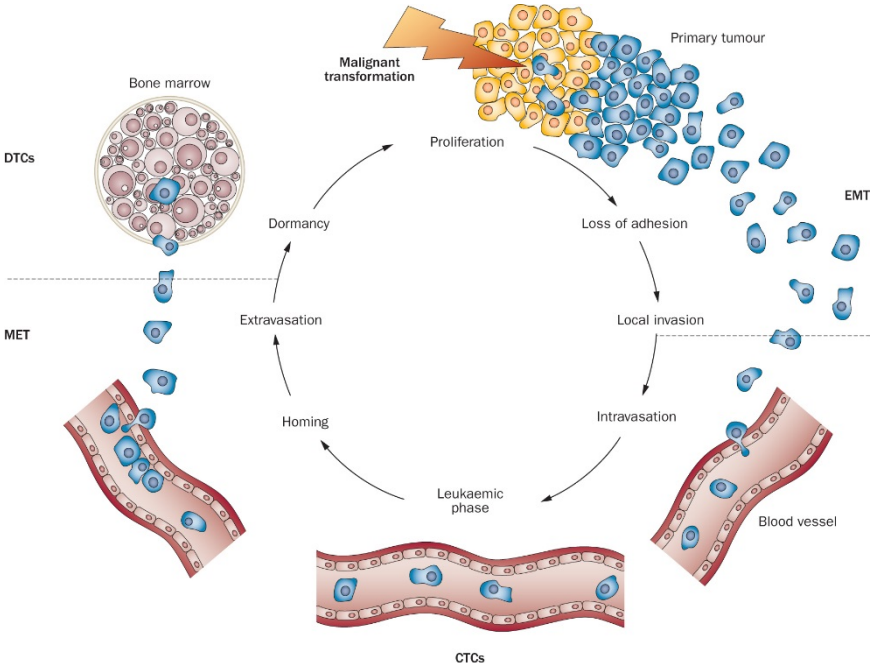

Permission obtained from Thieme © Schilling, D. et al. Mechanisms of tumour cell dissemination and methods for detection of circulating tumour cells in transitional cell carcinoma. Aktuelle Urol. 42, 122–127 (2011).

Schilling, D. *et al.* (2012) Isolated, disseminated and circulating tumour cells in prostate cancer *Nat. Rev. Urol.* doi:10.1038/nrurol.2012.136

Diversity within a tumour

- Assessment of growth characteristics
- Prediction of treatment response
- Metastatic potential

Characterisation of circulating tumour cells

- Identification and prognosis of primary source
- Mutation rate compared to tumour
- Prediction and monitoring of treatment response
- Treatment effectiveness and recurrence

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Research applications

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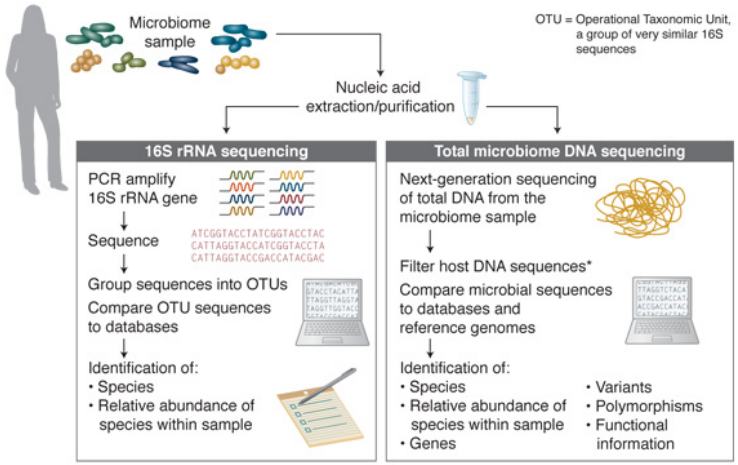
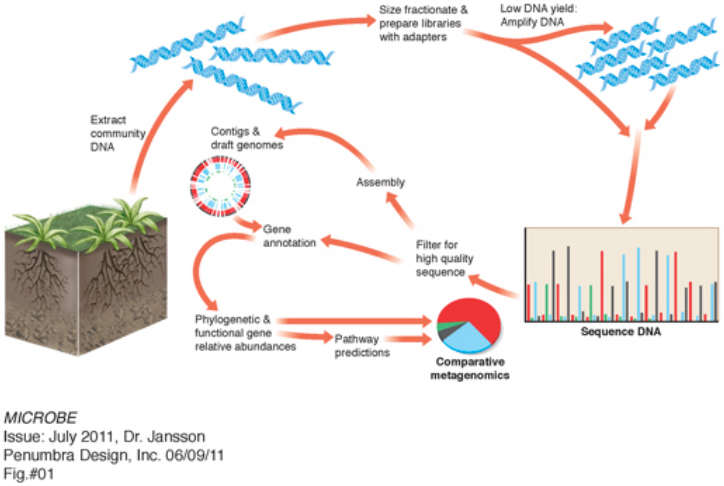
Human microbiome



https://www.neb.com/tools-and-resources/feature-articles/addressing-challenges-in-microbiome-dna-analysis

The microbiome of individuals may differ due to such factors as diet, environmental influences and genetics. The effects of therapeutic treatments, stress and the ability to restore the microbiome rely on the accurate characterisation of its contents

Environmental DNA and conservation



http://earthsciences.typepad.com/blog/2011/07/harnessing-metagenomics-to-study-microbial-ecology-in-soils.html

Using whole genome amplification, all of the DNA in a sample will be amplified, providing a more abundant template for analysis

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RHS product pipeline

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- DOPlify™ can be used for Next Generation Sequencing or microarray interrogation
- Targeted enrichment allows combined PGS and PGD
- EmbryoCellect™ microarray PGS kit launched mid-2015
  - Designed to meet the needs of the IVF industry
  - Developed and part-manufactured by RHS
  - Used to determine whether an embryo biopsy has the correct number of chromosomes

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Pre-implantation Genetic Screening

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Euploid = correct number of chromosomes

Aneuploid = incorrect number of chromosomes

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Aneuploidy and IVF outcome

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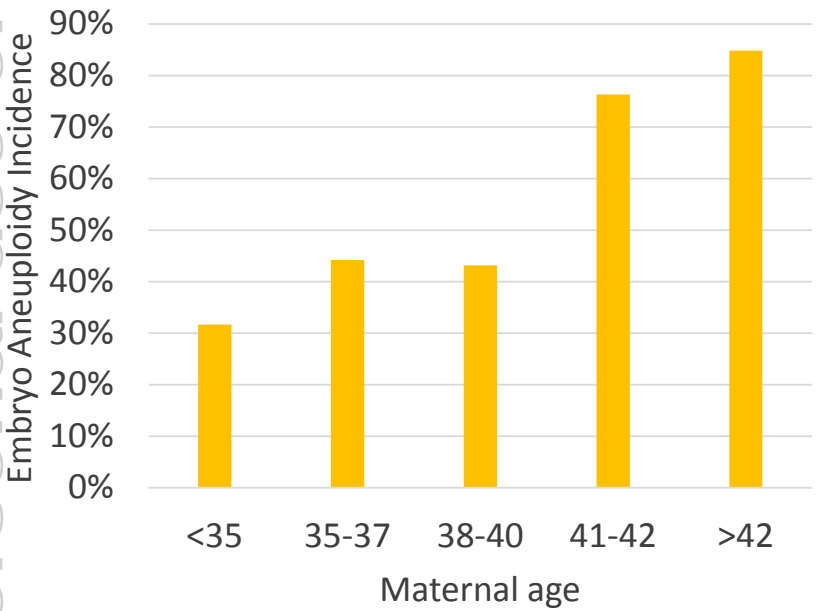
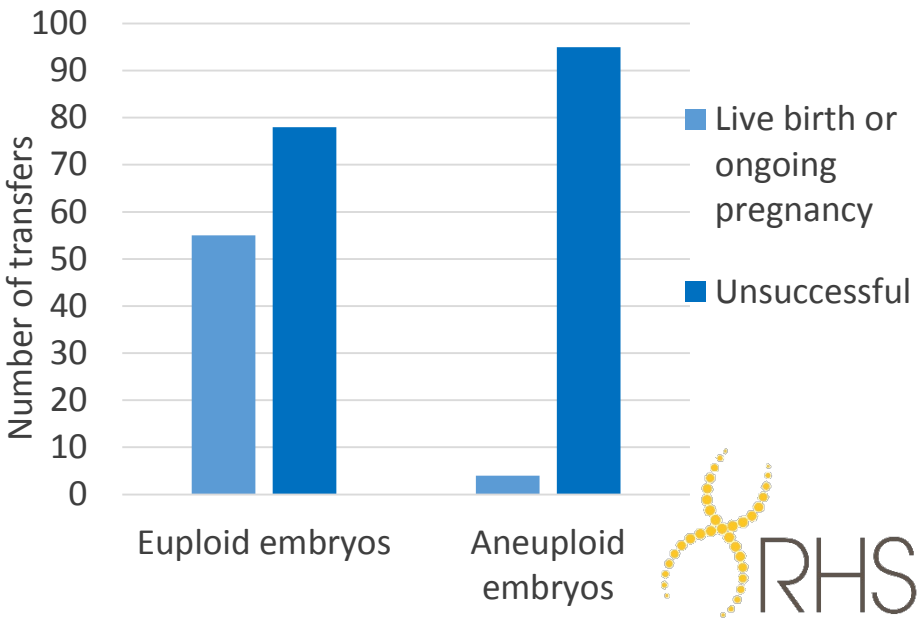


Even younger IVF patients have significant numbers of aneuploid embryos

Harton et al 2013



96% of aneuploid embryos (ie embryos with the incorrect number of chromosomes) failed to implant resulting in an unsuccessful IVF transfer

Scott et al 2012

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The IVF market opportunity

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- There are currently 1.7 million IVF cycles performed per annum globally with a CAGR of 10%
  - There have been an estimated 5 million IVF babies born, which is an average of one per classroom
- Preimplantation Genetic Screening (PGS) is used to identify the IVF embryos with the best chance of success prior to transfer
  - An average of 4 embryos per cycle are screened
  - PGS rates vary by country, Australian uptake is estimated at 20% of IVF cycles, the US is estimated at 30% of cycles and both of these markets are growing rapidly

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Influence of PGS on IVF

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- Decreases time to pregnancy
  - Trend towards advanced maternal age in IVF patients
  - Decreases miscarriages
  - Increases elective single embryo transfers, reducing clinical complications from multiple pregnancies such as preterm birth
- Patient and Medicare savings through not transferring aneuploid embryos
- Clinics decrease revenues from transfer and storage of aneuploid embryos but this is offset by additional revenues from PGS
- There is an expectation that clinics will use best practice

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