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U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

National Institutes of Health



National Institutes of Health Commercialization Assistance Program (NIH-CAP)

Company Profile

Industry Sector: In Vitro Diagnostics (Blood Tests)

Company Profile: FFA Sciences is using high-throughput protein engineering to develop rapid easy to use and non-invasive diagnostics for human disease.

Target Market(s):

Hyperbilirubinemia (jaundice) - common condition in newborn babies that can lead to neurological damage.

Fatty liver Disease (NAFLD) - One of the fastest growing diseases in the U.S. – can lead to cirrhosis of the liver (requiring transplant) – occurs in children.

Acute Coronary Syndromes (ACS) – the largest cause of death in first world countries – desperate need for a simple blood test.

Stroke: No Accurate Blood Tests & therapies are underutilized as result.

Seeking: Alliance w/ large diagnostics Co. to manufacture & distribute.

Key Value Drivers

Technology: The Company has developed a technology platform to molecular probes for unbound Metabolites (MET_u) in blood samples. The unbound metabolites are the physiologically active fraction and therefore most important. Our results indicate that the pattern of these unbound MET is disease-specific. The MET_u pattern generated by a particular disease provides a highly sensitive and specific diagnosis of the disease. The technology uses only a drop of blood and is complete within seconds.

Competitive Advantage:

Key Attribute	FFA Sciences Test	Arrows Test
Ease of Use	Easy – single step	Difficult – multiple steps
Accuracy	CV < 5%	CV as high as 30%
Speed	1 Minute	15-20 Minutes
Price	\$20	\$70

Management

Alan Kleinfeld, Ph.D. – CEO (Member Torrey Pines Institute, Harvard University)

Inventor of Technology – Over 25 years exp w fluorescent probes

Richard Houghten – Chairman- President Torrey Pines Institute (CA & FL)

Founded 3 Co's – 1 IPO & 1 Acquisition

Kevin Kleinfeld-Vice President (Partner ICM Capital Management-private equity)

Involved in > 30 M&A transactions valued at > \$3 billion

Andrew Huber, Ph.D. - Director Protein Chemistry (Structural Genomics)

8 years exp w/ FFA & over 15 yrs exp with protein chemistry

Baolong Zhu, Ph.D. - Director of Molecular Biology (Dow AgroSciences)

7 years exp w/ FFA & over 20 yrs exp with molecular biology

Thomas Kwan, Ph.D. – Director Biophysics (Stanford U)

7 years exp w/ FFA & expert in polymer chemistry for testing device design

Scientific Advisory Board:

Anthony DeMaria M.D. – Chief of Cardiology UCSD

Jesse Adams – M.D. – Professor of Medicine, Jewish Hospital Louisville

Brian Gibler – M.D. Chief of Emergency Medicine, U. of Cincinnati

Product Pipeline

Indication	2010	2011	2012	2013
Bilirubin				
NAFLD				
Stroke				
ACS				

Trials currently underway: Bilirubin (Q:3 2010), NAFLD (Q:3 2011) – expect 510K
Trials to start in 2010: Stroke & ACS – will require PMA submissions