COMPANY PROFILE

NOVOCRAFT
TECHNOLOGIES SDN BHD

NOVOCRAFT TECHNOLOGIES SDN BHD

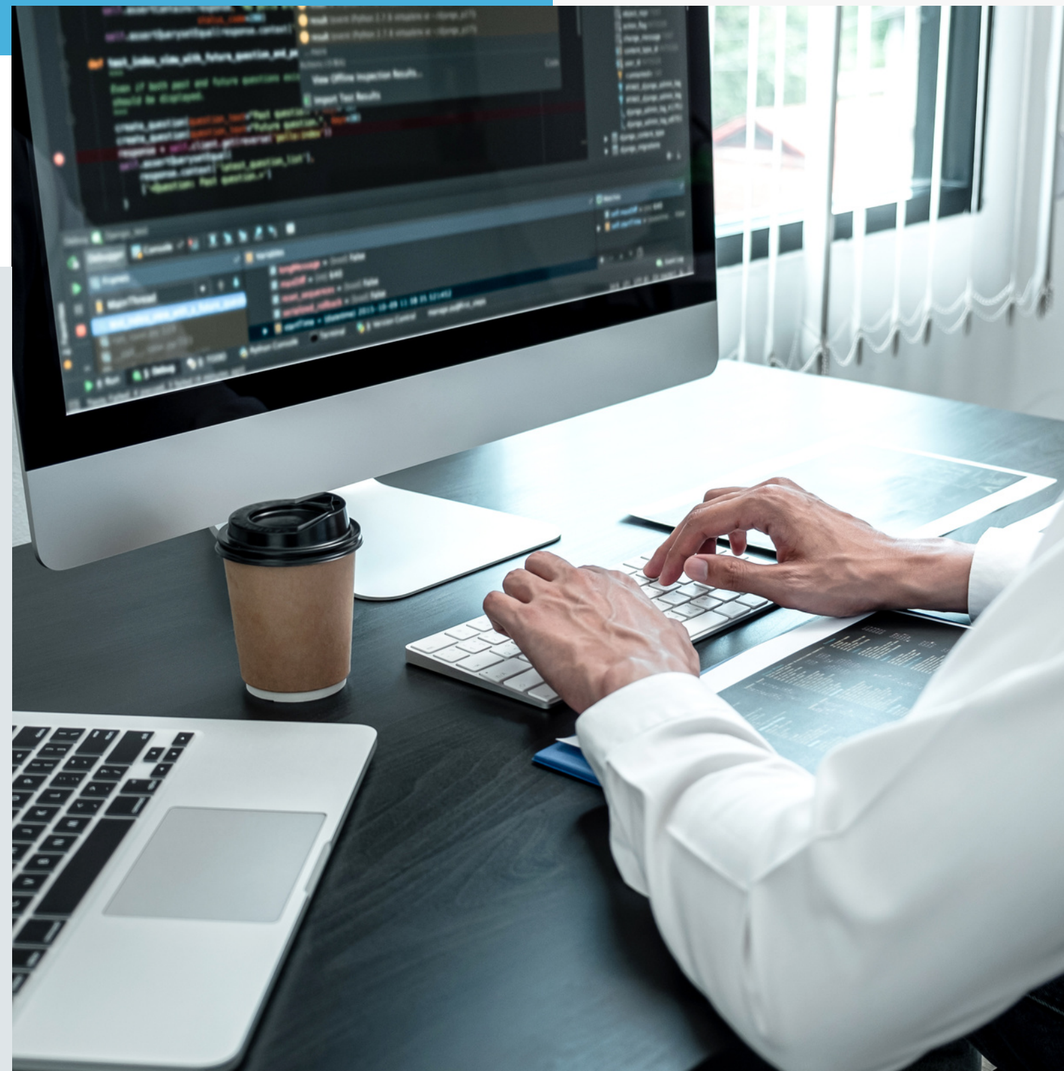
INNOVATIVE SOLUTIONS FOR NEXT-GENERATION SEQUENCING ANALYSIS

BIOTECHCORP
BIONEXUS
STATUS COMPANY

www.novocraft.com

ABOUT US

- Incorporated in 2008 Petaling Jaya, Selangor, Malaysia
- Bionexus Status in 2009
- Bioinformatics Software Developer and Solutions Provider
  - Intelligent software development
  - Next Generation Sequence analysis platforms
  - Automates complex data and processing tools in genomic analysis pipelines
  - Optimise software and analysis pipelines for high-performance computing
- A team of bioinformaticians, software engineers and statistician



OUR MISSION & VISION

Our mission is to continue developing and implementing **cutting-edge analysis tools** for **genomics** research and production. We strive to **empower** researchers and professionals to make breakthrough discoveries and **improves human health** and **well-being**.

Our vision is to **develop** the **premier bioinformatics brand** that meets the global demand for advanced analysis tools in genomics research and production.

BIRTH OF OUR PRODUCTS

START-UP GRANT FROM
BIOTECH CORP. MALAYSIA

2008

novoAlign

NGS GENOME ALIGNER

- More than 200+ Licensees globally including **ROCHE, SANOFI, NHS, NIH, Harvard, Cambridge**
- Used to study **Zika Virus** (2017, USA) and **Ebola** (2014, DRC)
- July 2020: **NIH/National Cancer Institute, USA** adopts novoAlign for COVNET.**Large-scale Genome-wide Association Study and Whole Genome Sequencing of COVID-19 Severity**

2018

novoWORX

NGS SEQUENCING DATA MANAGEMENT AND ANALYTICS PLATFORM

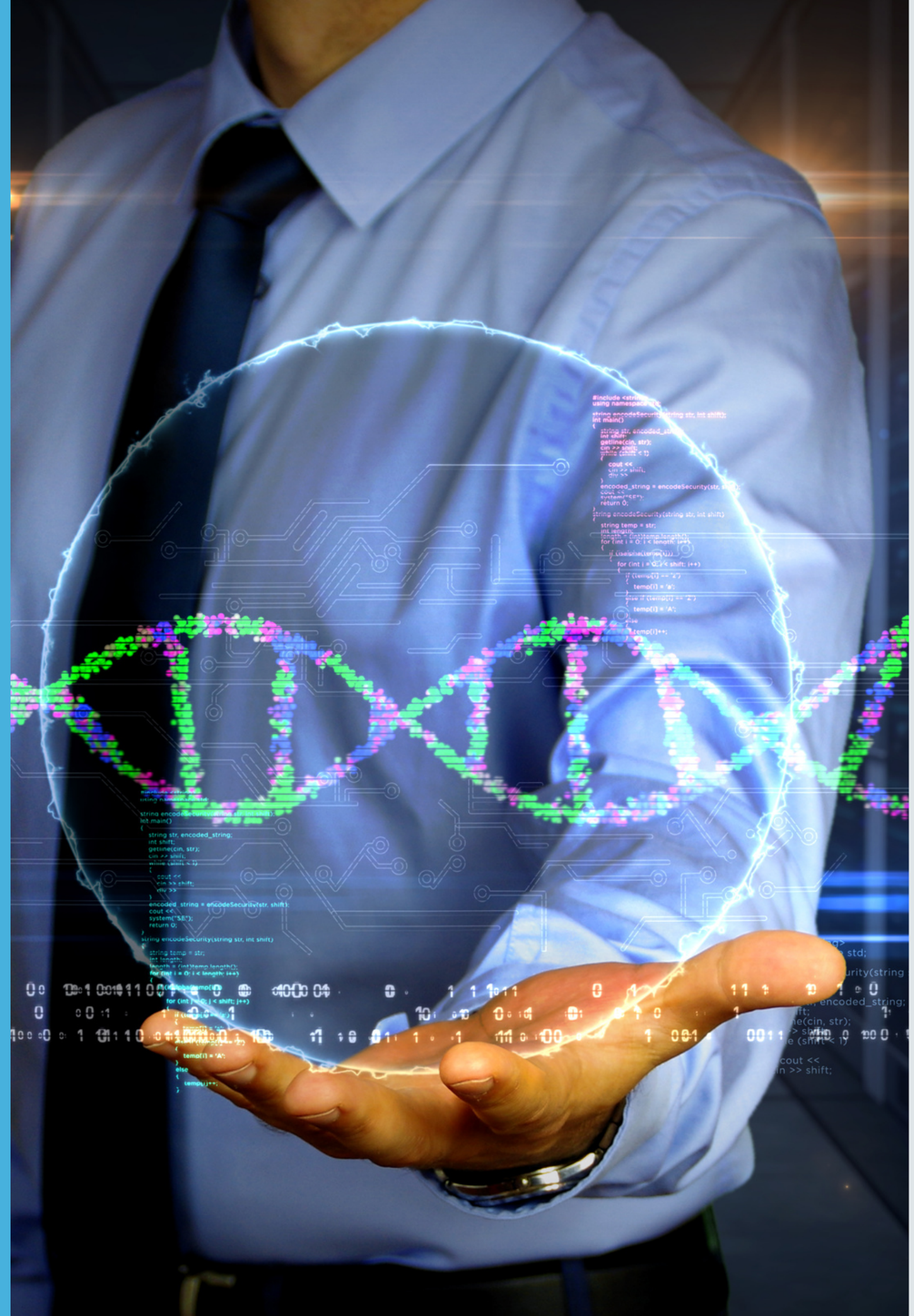
- User-friendly, easy to set up and powerful workbench for analysis
- **Chulabhorn Hospital, Bangkok, Thailand - Cancer analysis**
- **UiTM Puncak Alam - Gut Metagenomics**
- Currently **installed in Malaysia Genome Vaccine Institute (MGVI) for SARS-CoV-2 Analysis**
- Analysis of **SARS-CoV-2 samples** from **Malaysian** population using **novoWorx** in collaboration with **MGVI** and **UMS**

2020

NOVOCLINIC

TOTAL INTEGRATED PRECISION MEDICINE SOLUTION

- **An Integrated Platform -** Clinical Genetic Analysis and Reporting for Precision Medicine
- First Customer **: Mygenome, Malaysia**
- **Early stage FUNDS are being sought.**



OUR PRODUCTS & SERVICES

SOFTWARE SOLUTIONS

- novoAlign
- novoSort
- novoLR

ANALYSIS PLATFORMS

- novoWorx
- novoClinic

SERVICES & CONSULTANCY

- Data Analysis Services
- Consultancy & Training

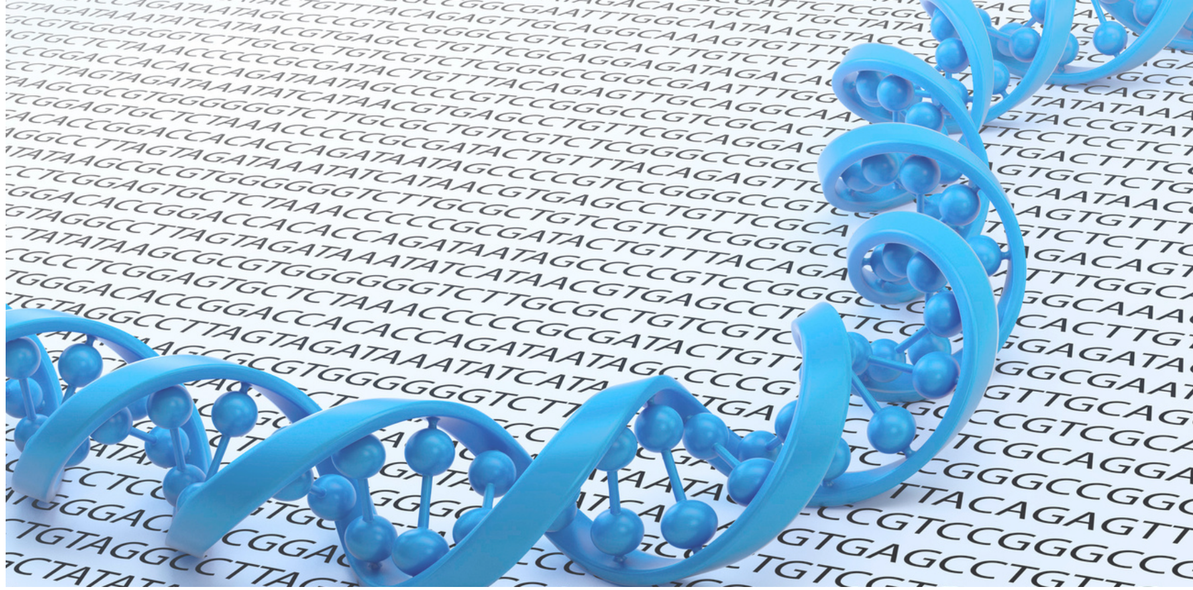
RECENT ACHIEVEMENT

PrecisionFDA Challenge - Top Performer for Best Recall OncoPanel A

https://precision.fda.gov/challenges/22/results

	Best Recall GOLD	Best Precision GOLD	Best Overall (F1 Score) GOLD
Panel A	Novocraft	Yao-Chung Chen	Genetalks
Panel B	Genetalks	Yao-Chung Chen	Konstantinos Kyriakidis
Panel X	Chung-Tsai Su	DRAGEN team at Illumina	DRAGEN team at Illumina

SOFTWARE SOLUTIONS



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novoAlign

NGS GENOME ALIGNER

Market leading NGS sequence alignment software designed to map short reads onto reference genome.

novoSort

NGS MULTI-THREAD SORT/MERGER FOR BAM FILES

Fast and efficient multithreaded sort and merge tools for BAM files

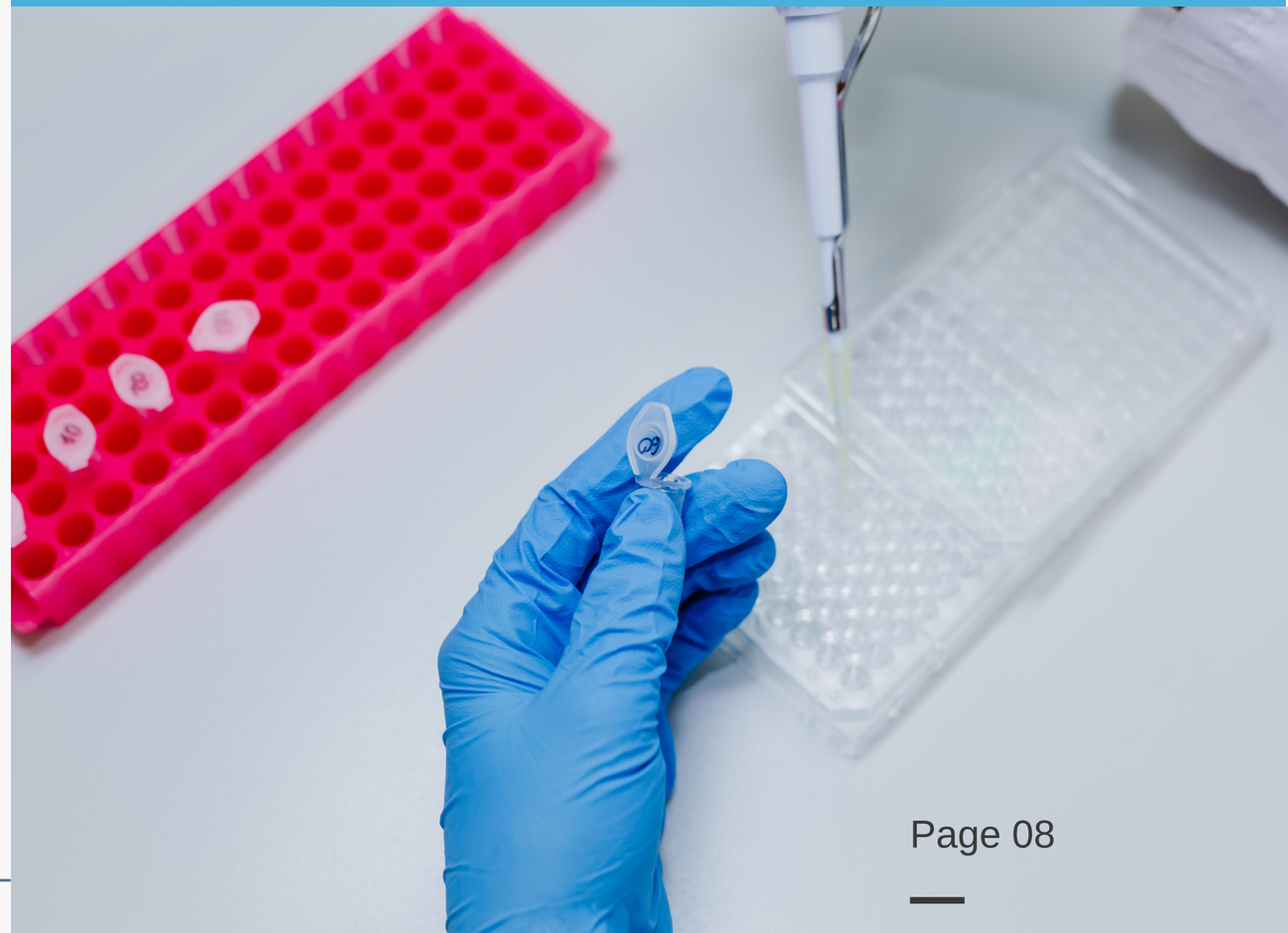
novoLR PACKAGE

COMPLETE TOOLSET FOR HYBRID GENOME ASSEMBLY

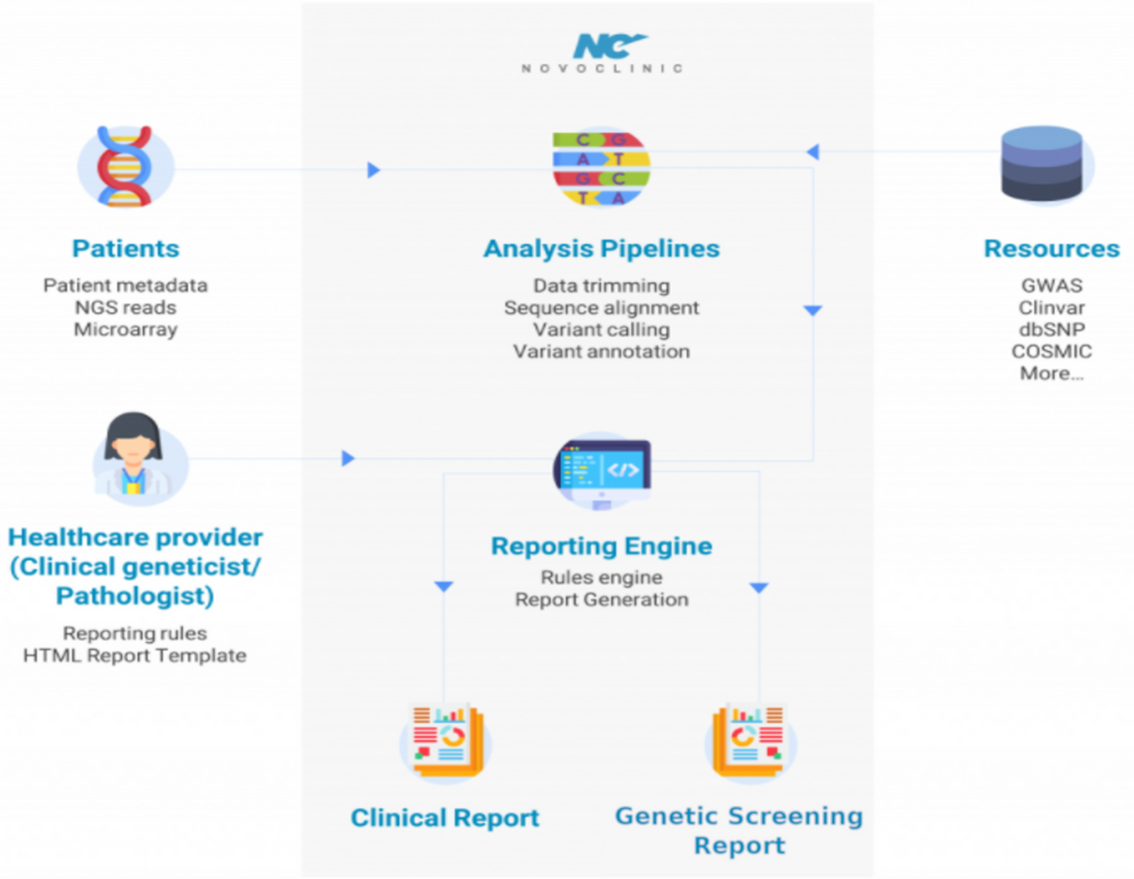
A complete toolset for long reads error correction using high quality short reads for mapping & genome assembly

ANALYSIS PLATFORMS

- A **user friendly**, web-enabled **genome data management** and **analytics platform** with secure interface and access control.
- Empower Scientists to run **complex bioinformatics analysis** without bioinformatics algorithm knowledge
- Designed for **Biological Scientist**
- Multi-proprietary platforms
- **Hassle-free** project creation, file uploading, analysis pipeline selection before running your project.
- Powered by novoAlign & novoSort



ANALYSIS PLATFORMS



- A **patient-centric** clinical next-generation sequencing analysis(NGS) platform developed for **precision medicine**
- **Integrated solutions -** sample management, NGS analysis pipelines & clinical report generation
- **Sample** and **data tracking** for **quality control** and **compliance**.
- **Version controlled** clinical analysis pipelines for **reproducibility** and **quality assurance**
- **User friendly** and **customizable** report generation system
- **Actionable outcome** reporting developed with clinicians for clinicians

NOVOCLINIC

REPORTS

www.novocraft.com

+ GENETIC SCREENING REPORT

DISEASE

Likelihood to get :
CORONARY HEART DISEASE
CANCER
ADULT ONSET DISORDER
EARLY ONSET DISORDER
RARE DISEASE CARRIER
OTHERS i.e Lifestyles

+ CLINICAL REPORT

DRUGS SENSITIVITY OR EFFECTIVENESS

+ HLA TYPING REPORT

- Auto Immune Disease
- Specific Virus Immunity Issues
- Organ Transplant Matching
- Drugs adverse effect
- LOH in Cancer
- Collaboration with Cleveland Clinic, Ohio, USA

+ NON-INVASIVE PRENATAL REPORT

+ ANCESTRAL REPORT

NOVOCLINIC

ACCURACY

- Our clinical analysis pipelines uses novoAlign which improves variant calling and provide accurate and reproducible results to clients.

ACTIONABLE

- Localised genetic mutation database with actionable outcome - Malaysia & Asia Pacific region via collaboration with universities (Future)

COMPETITIVE ADVANTAGE

NOVOCLINIC

CUSTOMIZABLE

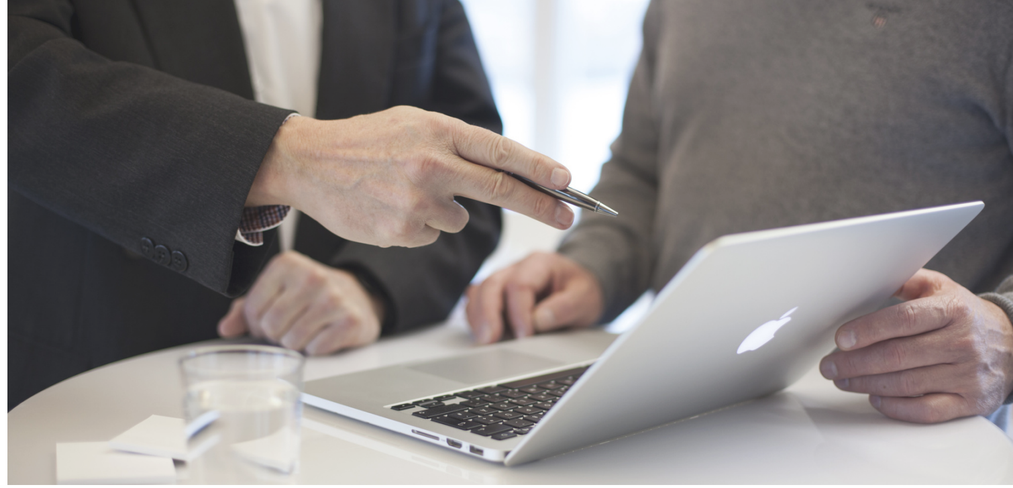
- Dedicated local teams:
  1. Development of clinical analysis pipelines & report generation
  2. Clinical report template customization

PRICE

- We have the advantage of hiring quality local graduates - cost effective bioinformatics solutions with high expertise and quality

COMPETITIVE ADVANTAGE

SERVICES & CONSULTANCY



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BIOINFORMATICS SERVICES

- Result Assessment & Quality Control
- Genome Assembly & Annotation
- Transcriptome Analysis, etc

CONSULTANCY

- Project Design
- Development & Deployment
- Assessment & QC

TRAINING

- Custom Workshop & Seminar
- Attachment programmes

CLIENTS

www.novocraft.com

novoAlign

MAYO CLINIC

Takeda

SANOFI

pieriandx

Bristol Myers Squibb™

CENTOGENE
THE RARE DISEASE COMPANY

City of Hope

INVITAE

healthincode

fulgent

NIH National Institutes of Health
Turning Discovery Into Health

NHS
Guy's and St Thomas'
NHS Foundation Trust

BROAD INSTITUTE

HARVARD

Washington University in St. Louis

McGill UNIVERSITY

UCL

LUNDS UNIVERSITET

Universität Basel

novoWorx

CHULABHORN ROYAL ACADEMY
Chulabhorn Graduate Institute

UNIVERSITI TEKNOLOGI MARA

novoClinic

MYGENOME
ETHICAL LIFE SCIENCE

novoSort

Dovetail GENOMICS

NEW YORK GENOME CENTER

dkfz. GERMAN CANCER RESEARCH CENTER
IN THE HELMHOLTZ ASSOCIATION

HelmholtzZentrum münchen
German Research Center for Environmental Health

Consultancy & Services

Roche

gsk GlaxoSmithKline

Janssen

IMR
INSTITUTE FOR MEDICAL RESEARCH MALAYSIA

UNIVERSITI MALAYSIA SABAH

UNIVERSITI SAINS MALAYSIA

MARDI

FRIM

.....and many more

PAST TRAININGS, WORKSHOPS & ATTACHMENT PROGRAMME

- Introduction for Applied Microbial (Pathogen) Analysis, IMR - 2022
- Introduction to RNA-Seq Analysis Workshop, Sengenics-MARDI, September 2019, Kuala Lumpur

1.

- Shotgun Metagenomics Analysis Workshop, UiTM, June 2019, Kuala Lumpur
- De novo assembly using long-reads error correction, Universiti Malaysia Sabah, 2015
- Workshop: Piecing the Sequence Puzzle; a Novocraft Approach, Plant & Animal Genome Asia Conference, Singapore, July 2015
- Amplicon Analysis, TEIN 4 Workshop, August 2015, Jakarta, Indonesia

PAST TRAININGS, WORKSHOPS & ATTACHMENT PROGRAMME

- RNASeq: Introduction to Expression Analysis, TEIN 4 Workshop, August 2015, Jakarta, Indonesia
- MicroRNA Analysis Training, UMS, August 2016, Novocraft Technologies Sdn. Bhd

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- Plant Genome Annotation Workshop, October 2016, MARDI, Selangor, Malaysia

- Hybrid Genome Assembly Workshop, UMS, November 2016, Novocraft Technologies Sdn. Bhd.

MANAGEMENT TEAM

COLIN F. HERCUS

CEO & Co-Founder

More than 4 decades of experience in software development. Joined the bioinformatics industry since 2002. Developed novoAlign, a Genome Aligner software, that has more than 200 licensees all over the world including Clinical Testing Laboratories

HANIZA HASHIM

COO & Co-Founder

Close to 3 decades of experience in Business Development for Softwares and IT companies like NTT Data and CISCO.

AKZAM SAIDIN

Principle Scientist

A bioinformatics scientist with close to 2 decades of experience in biological data analysis. Strong background in molecular biology and experience in managing small to large-scale next-generation sequence data analysis.

LET'S CONNECT WITH US!

NOVOCRAFT
TECHNOLOGIES SDN BHD

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