UWI REPORT

Sport and Exercise Medicine Facility
Project Plan

2021

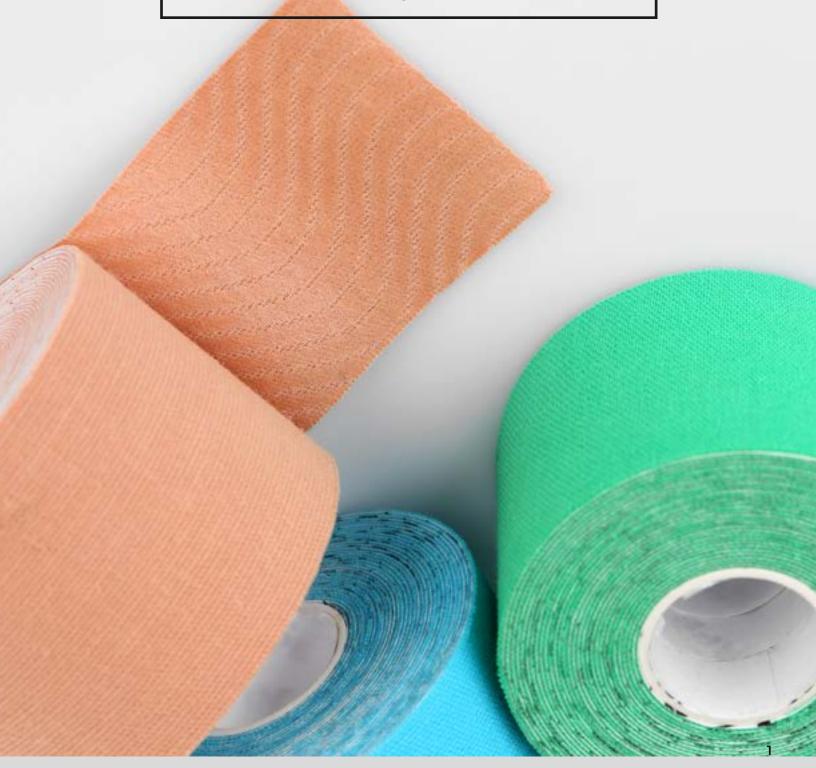




TABLE OF CONTENTS

Background
Scope of Work
Market Analysis 3.1 Geographical Demographics 3.2 Population Demographics
National Strategies 4.1 Strategies Relative to Sport 4.2 Strategies Relative to Tourism
Local Competitive Analysis
External Competitive Analysis
Approach Opportunities
Capital Budget
Site Schematics
Business Model
By the Numbers
Overview of Operating Models 11.1 Internal Models 11.2 Third Party Models
Financing Options
Conclusion
Appendices

1.0 BACKGROUND

In 2017, the University of the West Indies (UWI), Mona Campus in Kingston Jamaica and Usain Bolt Management Limited (UBML) partnered to explore a living legacy project associated with the retirement of the legendary athlete. The objective of this partnership was to ensure that local, regional, and national athletes as well as those visiting for competitions would have access to world class sports medicine services, including: assessment; treatment; rehabilitation; and access to the latest science, technology and sports medicine opportunities.

This initiative aligned strategically with the Jamaica National Sport Policy specially as it relates to Athletes' Development and Well-Being, Physical Fitness, and Healthy Lifestyle. At this time, the project has an estimated cost of \$9.5M USD.

The University of the West Indies has over 56,000 enrolled students and is the prominent post-secondary institution in the Caribbean. The Mona Campus has 19,000 active students and has recently launched the Faculty of Sport.

The Sport Industry is an important contributor to the economic activity of many countries and regions. Sport is an integral part of West Indies culture and is a source of regional and national pride. The region — particularly Jamaica — has continuously produced a number of world class athletes who have been winning medals in the Olympic Games for over seven decades, culminating with the best performance ever for the region at the Beijing Olympics in 2008.

The West Indies (Anglophone Caribbean) are the current dominant sprinters of world track and field athletics, and Jamaica leads the way. More advanced nations are taking aim at Jamaica using tools all at their disposal in science and sport and exercise medicine. It is very important that we make the necessary investments in modern facilities and technologies to take advantage of our talent strength to sustain our dominance.

There is an inherent and significant risk for athletes of becoming injured and unable to participate in major events (including ISSA competitions). In this context, elite athletes require high performance programmes and the requisite facilities and support systems to

avoid or rehabilitate injury as quickly and effectively as possible. This includes applications of medicine and science, complemented by professional skills including the management of sport enterprise and human capital development by the tertiary education system and other interests.

Within the originating study (2017), the Usain Bolt UWI Sport Medicine Centre (UBUSMC) was proposed to service the following objectives:



Project Development

This development speaks to the support facilities that are required to ensure that the talent in Jamaica and the West Indies continue to prosper in a highly competitive sport industry where advanced countries spend lavishly on their athletes — especially in preparation for the Olympics. The focus at this stage is an analysis of the benefits that could be expected from developing a Sport Medicine, Exercise and Science Programme (providing specialised medical and exercise services and the supporting science), the description of the facilities to be established or upgraded to support this programme, and the cost estimate for implementation.



Project Objectives

The objective is to upgrade the existing facilities equipped with up-to-date technologies and equipment to accommodate a world class Sport Medicine, Exercise and Science Programme at the UBUSMC providing world-class sports medicine and science services including assessment, treatment, and rehabilitation.

This will establish and preserve a living legacy befitting our sports legend Usain Bolt and promote the further development and sustainability of his sporting achievements for the benefit of the people of Jamaica, the Anglophone Caribbean, and the wider world.

Within the originating report the primary spaces required were outlined as follows:

Administration Spaces
Operational Spaces
Educational Spaces
Merchandising Space
Equipment (Gym & Rehabilitation Space)

A Fundraising Model was proposed to support the proposed UBUSMC that would target a variety of both public sector and private sector opportunities. As it is understood by this engagement at this time, funds have not yet been raised and fundraising practices have not been actively initiated.

A proposed Governance Model was developed to support the strategic operations of the UBUSMC that would include a ten member Board of Directors, suggested to represent the following organizations:

- 1 Principal UWI Mona or nominee
- 2 Executive Director (UWI)
- 3 CARIMAC Rep.
- 4 Exec. Manager (UBMgt.Ltd)
- 5 Coach (Glen Mills)
- 6 Campus Director of Sport
- **7** GOJ Sports Director / Insport?
- 8 Head G.C. Foster
- 9 Alumni with appropriate expertise (mobilize
- 10 In attendance: an Assistant Registrar

A proposed Capital Budget for the Development of the UBUSMC was created with the operational purpose or goal of the facility resulting on Full Cost Recovery from operations. The highlights of the proposed Capital Budget are as follows:

Budget Item	Value (USD)
Land Assembly	\$1,000,000.00
Building Cost (2 Story, 25,000 Square Feet)	\$2,700,000.00
Infrastructure Work	\$400,000.00
Contingency	\$300,000.00
Professional Fees	\$350,000.00
Sport Medicine Fit Out	\$3,250,000.00
Project Management	\$210,000.00
Regulatory Fees	\$50,000.00
Promotions and Marketing	\$200,000.00
Fitness Equipment FFE	\$1,000,000.00
Endowment Fund Holding	\$1,000,000.00
Total Project Cost	\$10,460,000.00
Total Cost Per Square Foot	\$418.40
Total Non Facility Costs	\$2,060,000.00

In April of 2021, the Government of Jamaica, Ministry of Finance and Public Service and the University of the West Indies expressed interest in services to support technical expertise relative to the proposed Sport and Exercise Medicine Facilities at the Usain Bolt University of the West Indies Sport and Exercise Medicine Centre. In July of 2021, Tim Reid of Orange Crow Leadership was engaged to support the advancement of the next phase of technical work relative to the proposed project.

The following document provides the findings of the contracted work.

•

2.0 SCOPE OF WORK

The scope of work framework that outlined the work to be performed by Orange Crow Leadership is detailed below:



Review the available documents on the proposed Sport Medicine and Exercise Facility, including the existing proposal and Business Plan.



Prepare proposed work plan and draft questions.



Research, organize, and prepare a report on the options for the design, equipping, financing, and operations of the Sport & Exercise Medicine facility in Jamaica.



Conduct an assessment of the local and regional demand for sport and exercise medicine services.



Select and fully describe the two or three most feasible set of options for the delivery for sport and exercise services in Jamaica, based on verifiable data, including market demand data, the local context, the objectives of the project and the global best practice.



For the recommended options, prepare a full equipment and personnel listing, with itemized capital and operating costs based on actual market price, as well as a maintenance plan with associated costs.



Outline of the most appropriate operational arrangements for: the delivery of the desired services; staffing; and delivery of training requirements.



Engage in regular dialogue with the Project Development/Management Consultant to share information and offer advice.



Explore feasible financing arrangements and identify potential partners based on the nature of funding required and potential benefit that will accrue funders.



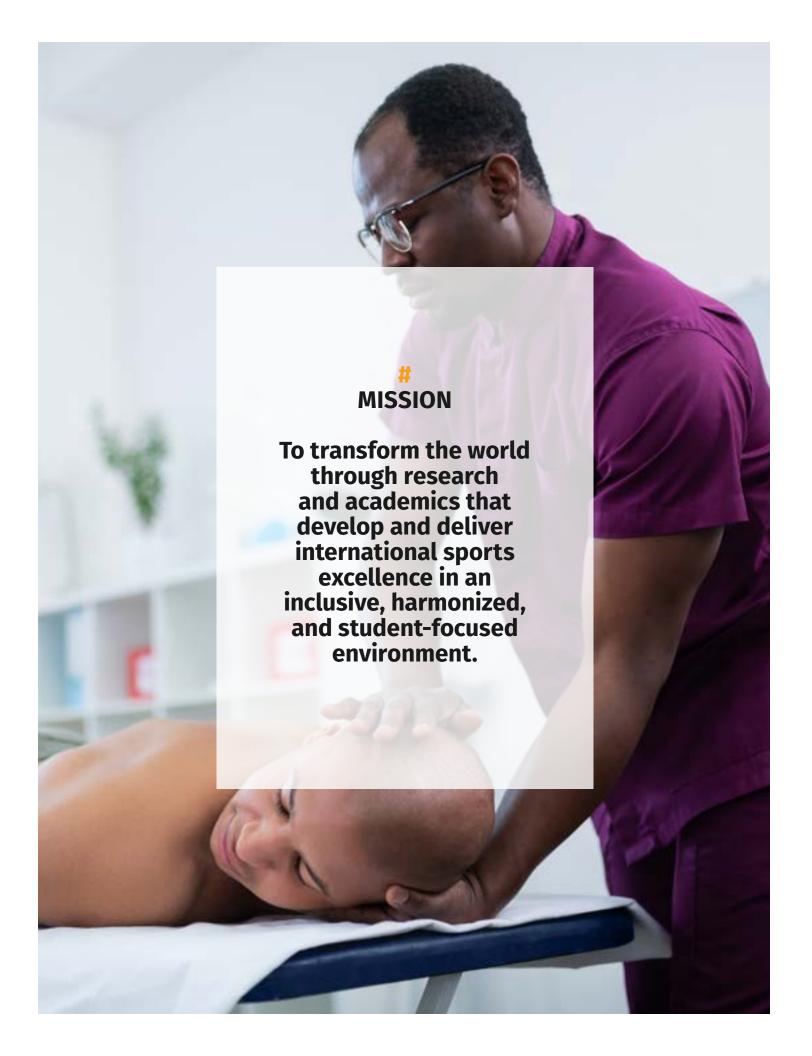
Prepare draft report on the findings and recommendations within 6 weeks of signing.



Coordinate feedback on the draft report.



Revise and finalize report based on feedback and submit to the UWI Faculty of Sport.



3.0 MARKET ANALYSIS

3.1.1 GEOGRAPHICAL DEMOGRAPHICS

Jamacia is divided into 13 parishes (local government). The parishes are grouped into 3 counties – Cornwall County, Middlesex County, and Surrey County.

Each Parish has a capital city:

Kingston and St Andrew

Westmoreland

St Catherine

St Mary

Clarendon

St Thomas

Manchester

of information

St James

Portland

St Ann

Trelawny

20 Allii

Hanover

St Elizabeth

Situated in the Caribbean Sea, Jamaica occupies 10,990 square kilometers in area and is the the third largest island of the Greater Antilles and the Caribbean.

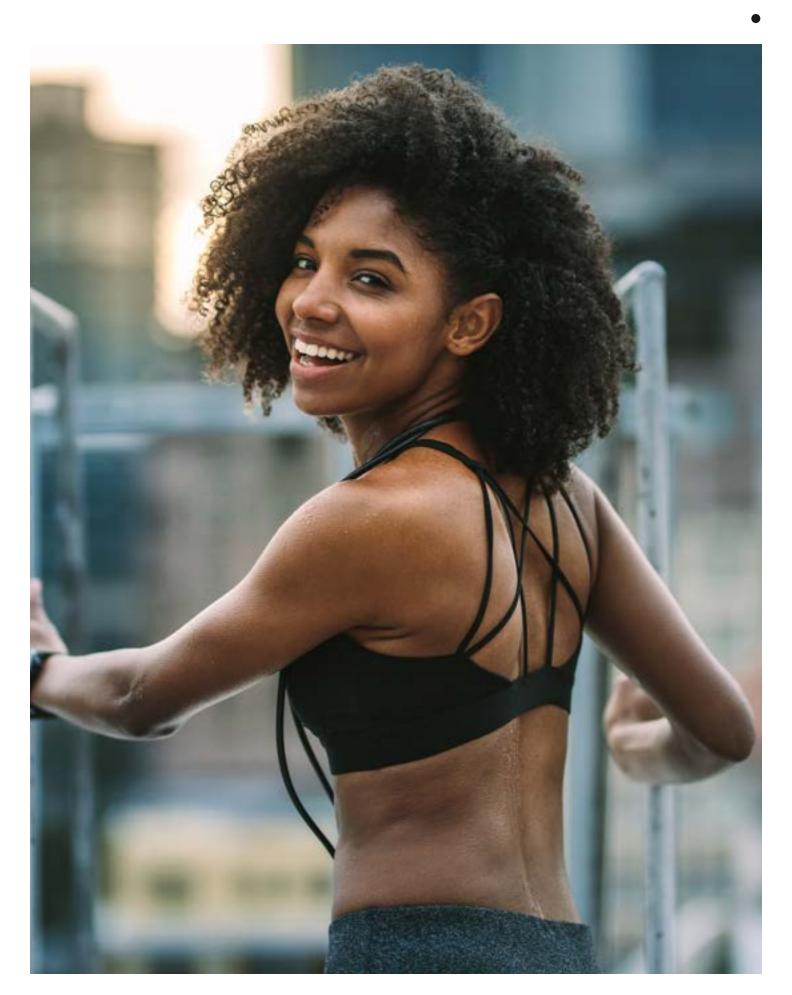
With a population of 2.73 million residents (*Statistical Institute of Jamacia, 2021*), Jamaica is the third most populous Anglophone country in the Americas after the United States and Canada and is the thirty fifth most densely populated country in the world.

The transport structure consists of roadways, railways, and air transport with roadways forming the backbone of the island's internal transport system consisting of 21,000 kilometers of which 15,000 kilometers are paved.

There are three international airports – Norman Manley Int'l Airport in Kingston, Ian Fleming Int'l Airport in Boscobel, St Mary Parish, and the largest is situated in Montego Bay named Sir Donald Sangster Int'l Airport, which is home to the national airline – Air Jamaica.



The Port Authority of Jamaica operates and maintains nine lighthouses to navigate Jamaica's shipping industry. As a shipping lane to the Panama Canal and with proximity to large markets in North America and Latin America, the container terminal at the Port of Kingston has undergone expansion to its capacity in recent years to handle the growth that has already been realized as well as that which is projected in coming years.



3.1.2 POPULATION DEMOGRAPHICS

TOTAL POPULATION AS OF 2019 – STATISTICAL INSTITUTE OF JAMAICA

Total	2,734,092
Female	1,381,983
Male	1,352,109

CITIES IN JAMAICA WITH A POPULATION OF OVER 40,000

Kingston	937,700
New Kingston	583,958
Spanish Town	145,018
Portmore	102,861
Montego Bay	82,867
Mandeville	47,115
May Pen	44,755

POPULATION BY PARISH AS OF 2018 NUMBER OF ALL AGE SCHOOLS BY PARISH

(2016 - Statistical Institute of Jamaica) (Statistical Institute of Jamaica) Kingston and St Andrew 669,773 11 St Catherine 521,249 7 Clarendon 247,702 10 Manchester 191,881 2 St James 185,697

St Ann	174,203	15
St Elizabeth	151,839	8
Westmoreland	145,628	14
St Mary	114,867	1
St Thomas	94,939	2
Portland	82,643	6
Trelawny	75,981	4
Hanover	70,265	7

3.1.3 POPULATION PROJECTIONS

Jamaica's population growth has been relatively unstable over the last 50 years. As of 2019, growth has slowed to 0.26%. Moreover, the population is currently seeing a decline in the 0-14 age group, along with increases in the working and retired population (which is typical for developing countries). Net migration is expected to be -16,000 over the next 30 years, and the birth rate will continue to be 2 children per average Jamaican woman. It is therefore expected that the growth rate will continue to slow before it begins to decline in 2030.

Current projections believe that the growth rate will be down to -0.62% by 2050.

AGE DEMOGRAPHICS AS OF 2019

Age	Population
0-14	702,835
15-19	274,658
20-34	662,326
35-44	357,680
45-59	394,082
60-69	153,221
70 & Over	152,821

Demographic	Median Age
Female	28.6 Years Old
Male	30.1 Years Old
All	29.4 Years Old

Age Group	Male	Female	Total
0-14 26.05%	357,082	345,753	702,835
15-64 65.86%	876,674	900,129	1,776,803
65+ 8.09%	100,777	117,568	218,345



Youth Population

As with the child population, the proportion of youth (15–24) within our population has been declining. In 2005, the number of youth in Jamaica totaled 491,700 (18.5 % of the population). By 2007, however, the number had fallen to 459,139 (17.1 % of the total population). In both survey years, the gender distribution favoured females, who accounted for just over 50 per cent of the youth population. Based on medium level growth projections, this age cohort is expected to decline to 14.6% of the total population by 2030. The gender distribution is expected to be reversed with just over 50% males.

Although the 15-24 age group overlaps with the working age population, it has been singled out because of its vulnerability to a number of social ills. For example, the unemployment rate among youth is more than twice the overall rate for all age groups within the working population. Moreover, they are unfortunately also the primary victims and perpetrators of crime (particularly violent crimes).

The large proportion of youth in our working age population presents an opportunity for our country's development. It is therefore essential that we build the capacity of this group to ensure that it is integral to development planning and implementation.

Working Age Population

Our working age population (15-64 years) was estimated at 1,699,300 (63.4 %) in 2007 and is expected to increase to 1,884,032 (65.6 %) by 2030.

The current and expected 'bulge' in the population of working age is regarded by demographers as a 'window of opportunity' or 'demographic dividend'. This means that there is a higher proportion of persons in the working age relative to the dependent ages (children 0-14 years and the elderly 65 and over). We must position our society to use our surplus population optimally for development. The working age will reach its maximum in 2025 at about 67.0% of the total population.

Elderly Population

Our elderly population (60 years and over) is the fastest growing age group. The dependent elderly (65 years and over) was estimated at 207,700 (7.8 %) in 2005 and by 2007, had grown to 223,961 (8.4%).

Over the period 2007 to 2030, it is estimated that this cohort of our population will increase by 2.8% to 11.2% (321,664).

The changing profile points to the need for greater concentration on programmes for the elderly, and eventually a levelling in the requirements for infrastructure for children and youth.



3.1.4 LABOUR FORCE AND EARNINGS

LABOUR FORCE 2021 - STATISTICAL INSTITUTE OF JAMAICA

Population 14 Years and Over	2,094,400
Labour Force	1,325,400
Employed Labour Force	1,206,000
Unemployed Labour Force	119,400
Outside the Labour Force	769,000
Unemployment Rate	9.0%

SALARIES IN JAMAICA RANGE FROM 24,400 JMD – 430,000 JMD

Average Monthly \$	\$ JMD	\$ USD
Lowest Average	24,400 JMD	\$158 USD
Average	96,400 JMD	\$625 USD
Highest Average	430,000 JMD	\$2,784 USD

Main Industries in Jamaica:

Manufacturing, Mining, Forestry, Agriculture, Fishing, Tourism, Logistics, Information & Communications Technology/Business Process Outsourcing

Median Range

The median salary is 100,000 JMD per month (USD \$647), meaning that 50% of the population are earning less that 100K JMD and 50% are earning more.

Percentiles

- 25 % of Employees earn LESS per month than 56.1K JMD (US \$364)
- 75% of the Population is earning MORE per month than 56.1K JMD (US \$364)
- 75% of the Population is earning LESS per month than 276 K JMD (US \$1,787)
- 25% of the Population is earning MORE per month than 276K JMD (US \$1787)

 ${\it Statistical\ Institute\ of\ Jamaica-www.statinja.gov.jm}$





"Jamaica, the place of choice to live, work, raise families, and do

business."







NATIONAL OUTCOME # 12:

Internationally Competitive Industry Structures (Sport)

Our sportsmen and sportswomen have demonstrated the ability to compete successfully at the highest international levels. The successes of national sporting teams such as the Reggae Boys and Sunshine Girls in international competitions as well as the performance of the Jamaican track and field team at the Beijing Olympics have provided occasions for unprecedented demonstrations of national pride and unity. While our policy framework identifies sport as a strategic priority for Jamaica, the economic potential of sport has not been developed.

Vision 2030 Jamaica will increase the growth of sport as a business and commercial activity that contributes to our economic development and provides a source of wealth for a wide range of professions, including athletes, coaches, trainers, managers, promoters, and entrepreneurs. We will:

- Build the capacity of MSMEs geared at meeting the needs of the 'Business of Sport';
- Develop a sport museum as a resource centre and attraction for local and foreign visitors;
- ✓ Promote Jamaica as a sports tourism destination; and
- Mobilize enterprises within other sectors and industries to expand the value chain and linkages with sport.

To ensure the consistent production of elite athletes, we will:

- Establish strong research capabilities and advanced sport programmes;
- Develop financial support systems; and
- Facilitate the holistic development of our professional athletes.



Strengthen the Role of Sport in all Aspects of National Development Vision 2030

Jamaica will strengthen the role of sport in national development by: broadening opportunities for participation in recreational and competitive sports for persons of all age groups; increasing facilities for sporting events at the national, community and school levels; increasing the number of trained coaches, administrators, and other personnel; strengthening the institutions for sport education and administration; and establishing appropriate and effective policies, legislation, and regulations to promote sport participation.

In charting the future for the development of sport in Jamaica, we will learn from the experiences of other countries that have successful sport industries. For example, Australia offers a model with aspects that are relevant for Jamaica, such as: the establishment of the Australian Institute of Sport as a centre for the development of elite athletes; investment in sport facilities; research and development including sport science and medicine; and capacity development of clubs and sport associations. The role of sport as an economic activity is addressed under selected Sector Strategies:

- Increase physical education and sports programmes in schools
- Increase organized sport activities in communities
- Develop public education programmes on gender equality in sport
- Design/upgrade community facilities for multiuse recreational and competitive sport including activities for the elderly and persons with disabilities
- Ensure a multi-sport mini-stadium in each parish
- Adopt international best practices for training of sports personnel including certification
- Develop sport administration at primary, secondary, tertiary and national levels
- Establish sport academies in Jamaica
- Update the Sport Policy and align it with other policies that affect sport
- Develop effective anti-doping programmes
- Ensure national sporting infrastructure to meet the long-term development of sport

4.1 STRATEGIES RELATIVE TO SPORT

Our athletes have demonstrated the ability to compete successfully at the highest international levels for almost a century.

Athletes such as George Headley, Herb McKenley, Donald Quarrie, Merlene Ottey, Michael McCallum, Courtney Walsh, Veronica Campbell, Usain Bolt, and Asafa Powell have become national icons who have contributed to the fame of Jamaica in ways that are comparable to the contributions made by the island's most famous creative artists.

The successes of national sporting teams such as the Reggae Boys (in football) and Sunshine Girls (in netball) in international competitions and the performance of the Jamaican track and field team at the Beijing Olympics have provided occasions for unprecedented demonstrations of national pride and unity. While the greatest successes have come in track and field events, the range of sports in which Jamaicans have recorded significant international achievements including in cricket, football, netball, boxing, tennis, cycling, swimming, bobsledding, and table tennis.

The National Sports Policy of 1994 aimed to use Jamaica's comparative advantage in sports to support economic and social development and included the establishment of the National Council on Sport.

The National Industrial Policy (NIP) of 1996 also targeted sport as a strategic priority for Jamaica's economic development.

While Jamaican individuals and teams have enjoyed remarkable successes in international competitions, the economic potential of sport in Jamaica has not been developed. There are currently no fully professional sport leagues and relatively limited linkages with other sectors such as tourism, entertainment, health and wellness, printing, and manufacturing.

There is a lack of focus on business opportunities in sport in Jamaica, while the development of the economic potential of sport is limited by inadequate levels of business skills and technology application in sport in addition to limited financing for sporting ventures.

Through its strategies and actions, Vision 2030 Jamaica plans to increase the growth of sport as a business and commercial activity with the potential to contribute to Jamaica's economic development, and to maximize the role of sport as a source of wealth for a wide range of professions, including athletes, coaches, trainers, managers, promoters and entrepreneurs. The development of the economic contribution of sport will involve the full participation of our private sector and will build on the regional dimensions of sport competition and training in the Caribbean.

Issues and Challenges

- 1 Relatively limited access to capital for sports-related enterprises
- Lack of adequate statistics and information on sports to provide a basis for planning and monitoring or to evaluate their economic impact
- 3 Inadequate levels of business skills and technology application in sport enterprises



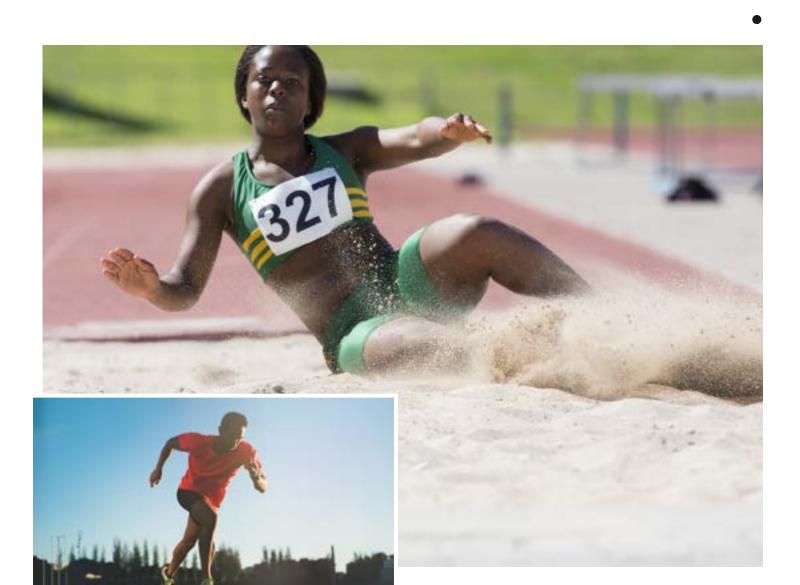
Selected Sector Strategies:

1. Economic Growth and Development

- ✓ Develop MSMEs geared at meeting the needs of the 'Business of Sport'
- Develop a sport museum as a resource centre and attraction for local and foreign visitors
- ✓ Promote Jamaica as a sports tourism destination
- ✓ Mobilize enterprises within the creative industries, manufacturing, gaming, tourism, agriculture, commerce, and other sectors and industries to expand the value chain and linkages with sport

2. Consistent Production of Elite Athletes

- ✓ Establish strong research capabilities in sport
- Develop advanced sport programmes at Sport Academies
- Develop financial support systems to create and sustain elite athletes
- Develop supporting facilities and services to facilitate the holistic development of the professional athlete



NATION BRAND

Jamaica's Nation Brand (sometimes referred to as "Brand Jamaica") is based on the global "share of mind" enjoyed by Jamaica as the cumulative result of the recognition earned from the island's achievements in creative industries, sport, and other areas.

Sport: An important component of our cultural capital is represented by sport. The successes of Jamaica's sportsmen, sportswomen, and national sporting teams at the highest levels of international competition have contributed to the national pride and fame of our country. Sport also has important social benefits including contributions to physical and mental health, socialization of children and adolescents, and community development.

In the Jamaican context, sport has particularly important roles in building unity at the national and community levels, including bridging divisions created by political tribalism. There are existing policy initiatives that will expand and broaden the participation in sport, including policies on healthy lifestyles, the disabled, youth, and the elderly.

Inadequate Facilities and Human Resource Development for Sport: While Jamaicans have demonstrated abundant human talent in sports, there is limited construction and maintenance of infrastructure for sports at the parish and community levels, including schools. This inhibits broad participation in recreational and competitive sport.

There is inadequate capacity for training the increased numbers of sport administrators, coaches, managers, and other personnel needed to support the expansion of sport and its role in national development.

4.2 TOURISM

Tourism is one of the leading growth industries in the global economy.

Jamaica has been one of the best-known resort vacation destinations in the world for decades, and has seen sustained growth of its tourism industry since Independence. In 2006, total arrivals, comprising stopover visitors and cruise passengers, passed the 3 million mark for the first time.

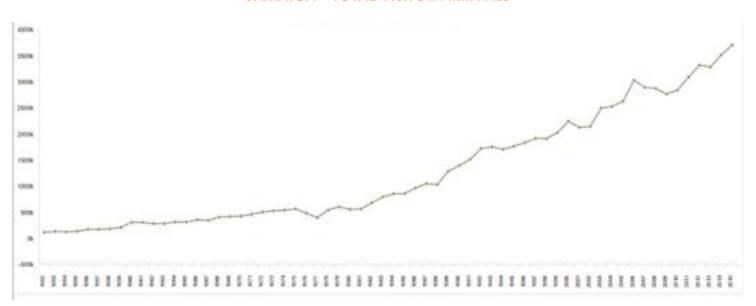
Tourism is one of our leading industries and is a major contributor to GDP and employment as well as a leading earner of foreign exchange.

Vision 2030 Jamaica will realize the vision of an inclusive, world-class, distinctly Jamaican tourism industry that is a major contributor to socio-economic and cultural development, with a well-educated, highly skilled, and motivated workforce at all levels within a safe, secure, and sustainably managed environment.

We will:

- ✓ Widen the participation in the tourism industry by local stakeholders;
- Improve training and working conditions at all levels;
- ✓ Promote investment and economic linkages;
- Diversify our tourism product, source markets, and market segments while improving standards and levels of customer service;
- Increase the value earned and retained from each tourist;
- Increase the use of Jamaican inputs and culture in all areas of the industry; and
- ✓ Strengthen the integration of tourism development with sustainable land use planning and environmental management.

JAMAICA - TOTAL VISITOR ARRIVALS



Source - Jamaica Tourist Board Annual Travel Statistics 2015 - 3.6M Visitors

5.0 LOCAL COMPETITIVE ANALYSIS

5.1 EXISTING FACILITIES RELEVANT TO MONA CAMPUS

Mona Campus is currently home to the following amenities:



Three main football fields which can accommodate night and Premier League matches;



The indoor sports court, which is used for a variety of sporting events including basketball, volleyball, indoor hockey, netball, and badminton;



The Frank Worrell Cricket Ground, which has amenities to host regional and international cricket matches. Two concrete practice pitches are also located at Chancellor Hall;



An Olympic sized swimming pool, with lighting for night use;



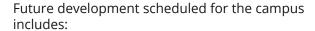
Floodlit tennis and hard courts that facilitate day and night play. Hard courts also exist at Chancellor, Taylor, and Mary Seacole Halls of Residence;



The Training Gymnasium and a small weights room within the UWI Students' Union, which is used primarily by students but is also rented to different associations and individuals through the Sports Unit; and



A newly established beach volleyball/ football court.



- Upgrades to the cricket pavilion;
- The expansion of the gym;
- The construction of a second indoor facility for basketball/volleyball/netball; and
- The addition of lighting and stands for the beach volleyball/football facility.

Moreover, the following future projects have been identified for possible development:

- The creation of a 6,000 seat mini-stadium with an international-sized Mondo Track;
- An indoor Sports arena;
- The establishment of Football Academy;
- ► Hosting the IAAF High Performance Centre; and
- An Institute of Sports Medicine, which is the focus of this report.

MONA CAMPUS AMENITIES





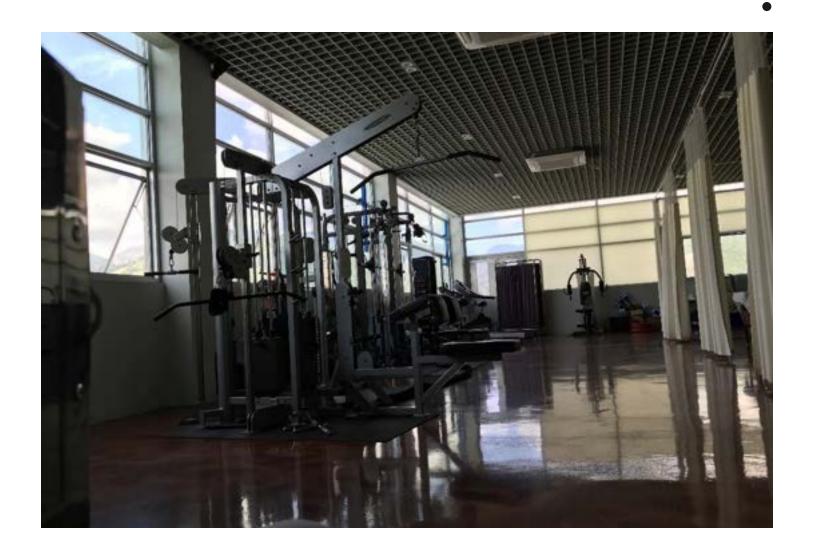












5.2 THE CARIBBEAN INSTITUTE OF SPORTS MEDICINE

Current Sports Medicine Programs at Mona Academy

M.Sc. in Sports Medicine:

"Application of the latest science of injury prevention and management, nutrition, psychology, biomechanics, and applied exercise physiology to enhance the natural talent of an athlete."

Masters in Sports & Exercise Medicine:

"A specialization for registered physiotherapists to manage sports injuries and athletic rehabilitation."

The Establishment of a Caribbean Institute of Sports Medicine is currently in progress to include a School of Physical Therapy as well academic programmes such as Sports Medicine, Sports Psychology, and Sports Rehabilitation. The overall goals of the Institute will include providing improved access to:

- ✓ Medical care;
- Trained physicians, specializing in sports medicine;
- Diagnosis, monitoring and treatment of sports injuries.

COLLEGIATE SPORTS/TEAMS AT UWI

U Sports Team	Regional Competitions/ Tournaments	International Competitions
Badminton (Male & Female)	UWI Games	World University Games coordinated by FISU Badminton Tournament
Basketball (Male & Female)	UWI Games	World University Games coordinated by FISU
Beach Volleyball	UWI Games	Beach Volleyball World University Games coordinated by FISU
Cricket (Male)	Vice Chancellor's Cricket & Red Stripe Bowl Cricket UWI Cave Hill 20/20 cricket competition UWI Games	World University Games coordinated by FISU
Football (Male & Female)	CUSA Games and Tournament UWI Games	Costa Rico Football Invitational World University Games coordinated by FISU
Hockey (Male & Female)	UWI Games	World University Games coordinated by FISU

U Sports Team	Regional Competitions/ Tournaments	International Competitions
Lawn Tennis (Male & Female)	UWI Games	World University Games coordinated by FISU
Netball (Female)	UWI Games	Florida Netball Tournament (Staff and students) World University Games coordinated by FISU
Swimming (Male & Female)	SSFNA Swimming competition UWI Games	World University Games coordinated by FISU
Table Tennis (Male & Female)	UWI Games	Spin Open – USA Table Tennis Association's sanctioned Tournament World University Games coordinated by FISU
Track & Field (Male & Female)	UWI Games	Track & Field World University Games coordinated by FISU
Volleyball (Male & Female)	UWI Games	World University Games coordinated by FISU

The University also has a number of representatives on the National Volleyball, Hockey, Netball, Water polo, and Table Tennis Teams.



NATIONAL/INTERNATIONAL SPORTS TEAMS IN JAMAICA

An examination of the national and international sports teams in Jamaica (of which the teams in the chart below are a sampling) can be helpful in determining several critical factors which may contribute to the success of a sports and exercise medicine facility in Jamaica.

The number of teams across the country indicate the likelihood and/or possibility of partnerships with elite teams outside of the university. Such a partnership would increase utilization and revenue for the facility.

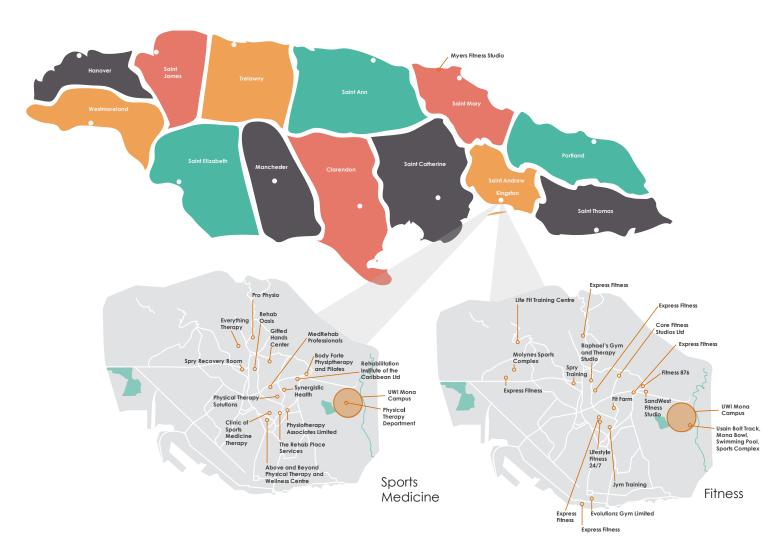
The competitive record of these teams is one indicator of the types of sporting events which these teams may bring to Jamaica, and with them the participating teams who may require sports medicine services throughout the associated tournaments or sporting events.

A number of the teams listed below have histories with sponsorships. Major infrastructure is also often partially funded through sponsorship dollars; possible partners for investment may be revealed through an examination of the types of business and individuals who have supported Jamaican sports in the past.

Team Name	Sport	Appearances and Competitive Record	Sponsorships (Past or Present)
Jamaica National Football Team ("The Reggae Boyz")	National Football (Under the Jamaica Football Federation, and under the global jurisdiction of FIFA)	Sole appearance in the FIFA world cup in 1998	Previous sponsors Romai Sportswear and Kappa as official kit deal/clothing sponsors
Jamaica Tallawahs	Premier League Cricket	Home at Sabina Park	Indian mobile gaming company Paytm First Games became the main sponsor for Jamaica Tallawah for the 2020 season.
Senior Jamaican Netball Team ("Sunshine Girls")	National Netball	Jamaica are the reigning Bronze medalists, having finished third four years ago in Glasgow, defeating England in the bronze medal match. The Sunshine Girls are currently ranked 4th in the INF World Rankings and have been at every netball event at the Commonwealth Games.	Netball receives full media coverage on television, radio and in newspapers. Jamaica's kits are currently supplied by Gilbert Rugby (sports equipment manufacturing brand specializing in rugby union and netball). Sagicor Financial Corporation previously sponsored the team.
Jamaican Fast 5 Netball Team ("FAST5 Girls")	National Fast5 Netball	Plays in the Netball World Cup, Commonwealth Games, Fast5 World Netball Series (Fastnet)	Netball receives full media coverage on television, radio and in newspapers. Jamaica's kits are currently supplied by Gilbert Rugby (sports equipment manufacturing brand specializing in rugby union and netball).
Jamaica National Rugby League Team ("Reggae Warriors")	Jamaica Rugby League Association	Rugby League World Cup, Americas Rugby League Championship	PlayerLayer currently sponsors their kits and will be their sponsor for the Rugby League World Cup. Enigma Merchandise was a previous kit deal sponsor for the team. Additional past partners have included Supreme Ventures Limited, Virgin Atlantic Airlines, Body Bro Gym, and UK-based Kukri Sport UK Limited.
Jamaica National Rugby Union Team ("Jamaica Crocs")	Jamaica Rugby Football Union	Qualifying tournaments for the Rugby World Cup, Caribbean Championship, World Rugby Sevens	Information not Available.
Jamaica National Cricket Team ("Jamaica Scorpions")	First-Class Cricket	Home at Sabina Park (Plays inter- regionally only). Plays in the CG Insurance Super50 Cup and the West Indies Championship.	Information not Available.

•

5.3 EXISTING MARKET IN JAMAICA FOR FITNESS AND SPORTS MEDICINE FACILITIES



Sample local Sports and Exercise Rehabilitation Clinics include:

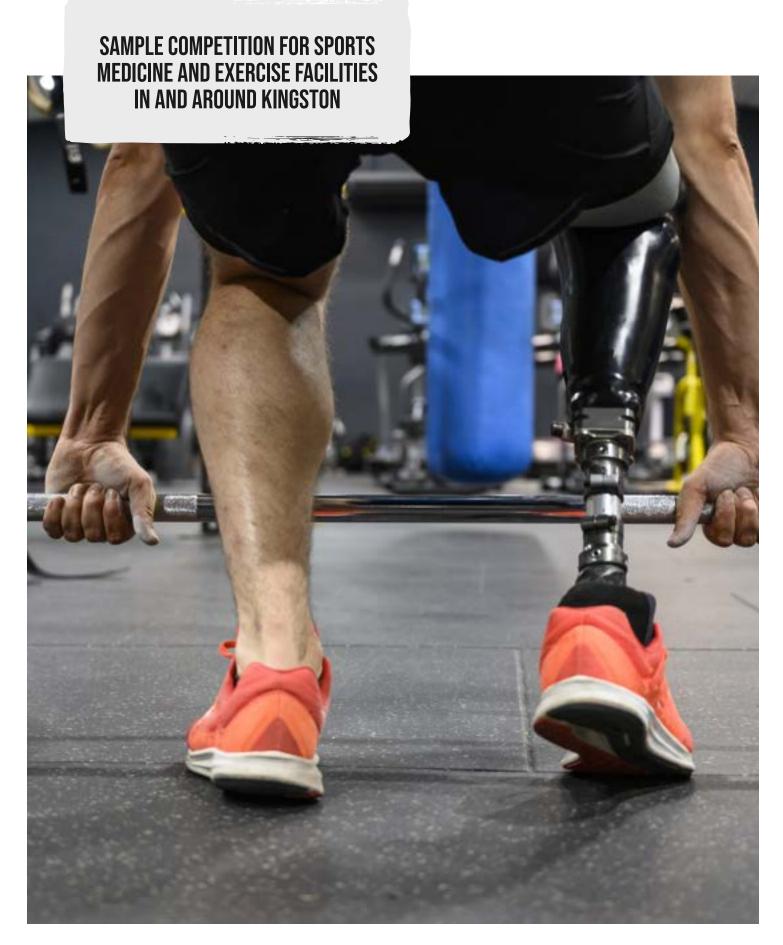
- Rehabilitation Institute of the Caribbean Ltd (most well-appointed and wide ranging services clinic)
- MedRehab Professionals (clinic offering wide variety of physical therapies)
- Gifted Hands Center (masssage, chiropractic, and therapy clinic)
- Rehab Oasis (clinic offering wide variety of physical therapies)
- LES Clinic (offers orthopedic surgery only)

Many of these clinics offer similar services for a comparable fee. An identified gap in offered services amongst the surveyed clinics includes any kind of focus on sports psychology; two out of the five highlighted

centres appear to place some emphasis on this but in a limited capacity.

Moreover, a number of the clinics do have a stock of rehabilitation equipment but have not combined their delivery model with fitness equipment access outside of clinic use. In addition to traditional medicine facilities, best practices for internationally competitive rehabilitation facilities also includes accessible exercise facilities. Few rehabilitation clinics in Jamaica can boast extensive equipment and space dedicated to fitness, and so a sampling of the four most competitive fitness centres in the area have been included for reference regarding the competition for such business:

- Express Fitness
- **▶** Fit Farm
- Myers Fitness Studio
- Aquarius Jamaica



REHABILITATION INSTITUTE OF THE CARIBBEAN LTD.

Cost for Services \$6,000 JMD for Initial Assessment and \$5,000 Per Session Thereafter

Key Highlights

Located in Kingston

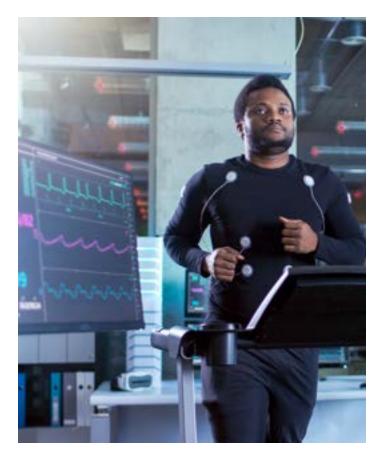
Hours 8AM-4PM

Dr. Paula Dawson holds the distinction of being the only physician in Jamaica with US board certification in Physiatry with a Fellowship training in Interventional Spine, Musculoskeletal and Sports Medicine Rehabilitation.

She is considered to be a pioneer in the development of the discipline of Physical Medicine and Rehabilitation in Jamaica.

Services

- Physical Medicine and Rehabilitation
- Sports Medicine and Rehabilitation
- Stroke and Brain Injury Rehab
- **⊘** Orthopaedics and Musculoskeletal Rehabilitation
- Balance and Proprioceptive Training / Core Strengthening and Stability
- Spinal Cord Injury Rehabilitation
- ✓ Vestibular / Balance Rehabilitation
- **Cancer Rehabilitation**
- **Surn Rehabilitation**
- Srain Injury Rehabilitation
- Neck and Back Pain
- Aquatic Therapy
- Spasticity Management Rehabilitation
- Physiotherapy
- Neuropsychology and Clinical Psychology
- Massage Therapy Sports and Myofascial Pain
- Occupational Therapy
- Nutrition Consultation
- Speech Language and Swallow Therapy



Equipment

- Radial Pulse Activation Therapy (Shockwave Therapy) Using the Auto Wave 695
- **W** Ultrasound
- **⊘** Transcutaneous Nerve Stimulation (TENS)
- Electrical Muscle Stimulation (EMS) also called Neuromuscular Electrical Stimulation (NMES) or Electromyostimulation
- (IFS) Interferential Electrical Stimulation
- Laser Therapy
- **S** Bowflex
- Recumbent Bike
- **⊘** Treadmill Exercise
- Fitter 3D Cross Trainer
- **⊘** BOSU Ball
- **Exercise Swiss/Physio Ball**
- **Over Example 2** Upper Body Ergometer
- Cervical Traction
- Tilt Table
- Heated private therapy pool (ThermaPool)

GIFTED HANDS CENTER

Cost for Services \$13,500 for Initial Assessment (including Chiropractic), \$100/ Minute for Massage

Key Highlights

Located in Kingston and established 2007

Hours 9AM-7PM

Owned by Dr. Shane Bryan (a Certified Chiropractic Extremity Practitioner) and Dr. Karen Bryan, who has worked with national and international athletes and for various national teams since 2000, including at international events (Commonwealth games, PANAM games, Olympics, T-20 Cricket World Cup).

Services

- Graston Technique (a world leading soft-tissue manipulation used extensively in the sports arena)
- Selectrical Stimulation
- **Oiathermy**
- **Traction**
- Mechanical Massage
- PNF (Proprioceptive Neuromuscular Facilitation)
- Trigger Point Therapy
- Muscle Stripping
- Massage Therapy
- **Chiropractic**
- Hydrotherapy
- Fitness Test
- Strength and Conditioning

Equipment

- Ultrasound
- **Others** Unspecified

EVERYTHING THERAPY

Cost for Services \$6,000 for Initial Assessment and \$4,000 Per Session Thereafter

Key Highlights

Located in Kingston

Hours 10AM-6PM

Everything Therapy believes in the multidisciplinary approach to patient / client care while also offering educational courses to health professionals to help spread knowledge and achieve their vision of having Jamaica be amongst the top 5 of the healthiest and happiest countries in the world.

Services

- Aquatic Therapy
- Sports Medicine
- Wound Care
- Weight Management
- Prevention, Health, and Wellness Programs
- Pelvic Floor Management
- Preventative and Functional Movement Screening
- Sport Massage
- Manual Therapy and Myofascial Release
- **⊘** Wound Cleaning and Dressing

Equipment

- Ory Needling / Trigger Point Dry Needling
- Triple-Level Pool
- Thermal and Electrical Stimulation
- **Electromagnetic Stimulation**
- Ultrasound/High Intensity Ultrasound Therapy
- Exercise Equipment
- Kinesiotaping
- Laser Therapy
- Shortwave Diathermy

MEDREHAB PROFESSIONALS

Cost for Services JMD 4,000-6,000 For Initial Assessment

Key Highlights

Located in Kingston

Hours 8AM-7PM

MedRehab Professionals is owned by Durga P. Gogineni, specializing in dry needling, kinesiotaping, pilates, IASTM, vestibular rehabilitation, Muscle Energy Technique, and Manual Therapy.

Services

- Neuromuscular Rehabilitation
- Orthopedic Rehabilitation
- Respiratory Conditions
- Sports Injuries
- Rehab Pilates
- Dietician Consultation
- Therapeutic Massage
- Individualized Exercise Programs
- Free Injury or Wellness Screening

Equipment

- **Shockwave**
- Shortwave Diathermy
- Interferential therapy (IFT)
- **O**Ultrasound
- Transcutaneous Electrical Nerve Stimulation (TENS)
- Pulsed Electro Magnetic Field (PEMF)
- Stimulator (EMS)
- Manual Therapy
- Myofascial Release
- Ory Needling
- **Kinesiotaping**

REHAB OASIS

Cost for Services \$6,500 for Initial Assessment and \$5,000 Thereafter

Key Highlights

Located in Kingston

Hours 8AM-6PM

Rehab Oasis is owned by Dr. Dave Foster and Dr. Nicholas Bromley, who both have specialties in sports rehabilitation management.

Rehab Oasis' team of registered Physical Therapists focus on exercise and pain neuroscience education as an effective way to decrease pain and improve mobility.

Services

- Manual Therapy
- Neurological Rehabilitat ion
- Physical Therapy for Athletes
- Adjunctive Therapies
- Chest Physical Therapy
- Geriatric Rehabilitation
- Workers' Compensation Therapy
- **OVER SET OF SET**

Equipment

- Functional Dry Needling
- **Kinesiology Taping**
- **Cupping**
- Round Trip Visit Transportation
- Pilates Studio

LES CLINIC

Cost for Services Vary by Treatment

Key Highlights

Located in Kingston

Hours 8AM-4PM

Orthopedic Surgery only

The LES Clinic AxioMed Disc Replacement Spine Center exclusively offers the #1 disc replacement technology in Jamaica.

Jamaican-born Dr. Chin is the Team Physician for the Jamaican Track & Field team (including Usain Bolt) and performs surgeries for a number of international cricketers.

Dr. Chin provides outpatient Less Exposure Surgery in Jamaica and Florida (United States) for their spine injuries.

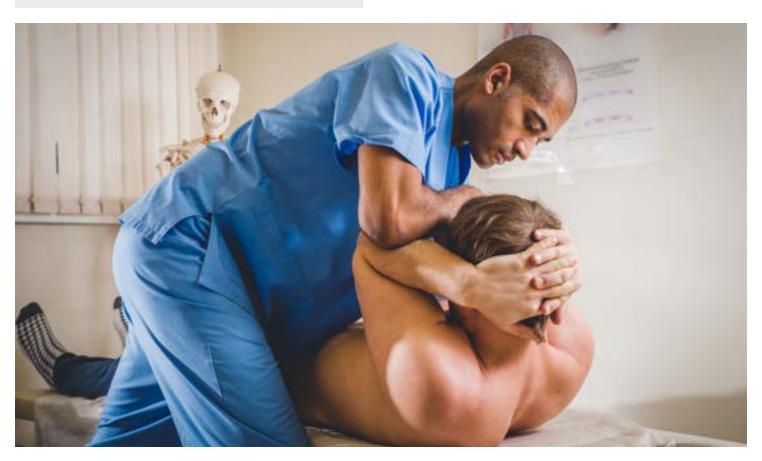
Services

- Orthopedic Surgery
- Spine Surgery
- **Outpatient Surgery**
- Sports Medicine
- Pain Management
- Oisc Replacement

Key Technique

Provides "Less Exposure Surgery" which utilizes the newest technique and technology to perform outpatient surgery that delivers less radiation, preserves the anatomy, allows for minimal blood loss, and promotes a quick recovery.

LES Clinic is operated by the Team Physician for the Jamaican Track and Field Team, but owner Dr. Chin operates out of Florida as well as Jamaica. This is problematic as this means that athletes may need to leave Jamaica to seek medical rehabilitation.



EXPRESS FITNESS

Membership Fees JMD 7,240 Monthly

Key Highlights

Locally Owned and Operated

Open 24/7

Locations in Mandeville, Kingston (x4), Manor Park, New Kingston, Montego Bay Ironshore, Portmore, Savana-La-Mar.

Accessible with Smart Access Card.

Free Perks with Membership.

Services and Equipment

HIIT (High-Intensity Interval Training) Circuit

Free Weights and Machines (Strength, Cardio)

Fit Balls and Stretch Mats

O Dedicated Locker and Towel Availability







FITFARM

Membership Fees JMD 5,500 Monthly

Key Highlights

Locally Owned and Operated

Open 5:30AM-9PM with Weekend Hours

Discounted student, corporate and group rates and boot camp.

Rated Best Overall Gym for the past four years at the Jamaica Amateur Body Body Building Competition.

Claims a One-of-a-Kind Family Atmosphere.

Services and Equipment

- Exercise Programs and Classes
- Free Weights and Machines (Strength, Cardio)
- Outdoor Crossfit-Style Equipment
- Fit Balls, Yoga Mats, Balance Balls, etc. in Studio Space
- Instructors and Personal Trainers







MYERS FITNESS STUDIO

Membership Fees JMD 6,000 Monthly

Key Highlights

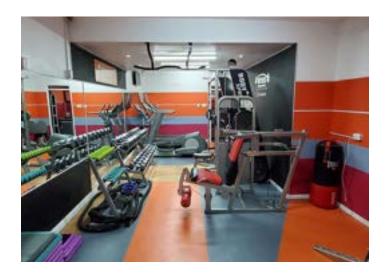
Locally Owned and Operated by Randy Myers and Staff since 2002 in Columbus Heights, Ocho Rios.

Open 24/7 (6AM-6PM During Curfew).

Discounted student, corporate and group rates and boot camp.

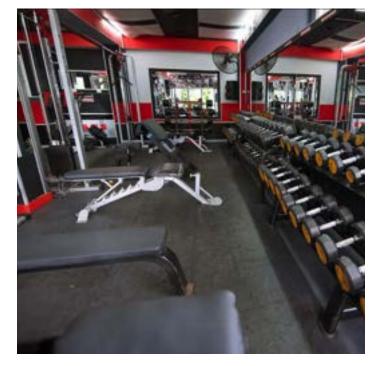
Services and Equipment

- Exercise Programs and Classes
- Free Weights and Machines (Strength, Cardio)
- Offers Online Membership with Zoom Training Sessions, Meal Plan, and Live Classes
- Fit Balls, Yoga Mats, Balance Balls, etc. in Studio Space
- Instructors and Personal Trainers, Meal Plan
- Kids' Specialty Conditional Training
- All Inclusive Membership with Beverage Service
- Massage Centre









AQUARIUS JAMAICA

Membership Fees JMD 6,000 Monthly (3,500 per month with 1-year agreement)

Key Highlights

Locally Owned and Operated

Open 6AM-8PM Daily

Located in Negril Since 2012

Includes a snack and Juice Bar, Supplements, and Gear.

Attached Sports Bar with Gaming Machines and Large screen Tvs .

Services and Equipment

- Free Weights, Smith Machine, Jacob's Ladder
- Spinning, Circuit, Cardio, Treadmills, Elliptical, Recumbent Bike
- Personal Training
- Aerobics room with boxing gloves and punching bag, stability balls, steps, spin bikes and a 50 ft. battle rope









SUMMARY OF EXISTING SPORTS MEDICINE MARKET

Jamaica can boast a number of top-tier Sports and Exercise Medicine and Rehabilitation professionals. Many of these individuals already treat high-level athletes, either within Jamaican clinics or abroad in the United States or on tour. With an international reputation for sports medicine excellence and the already-established sports medicine disciplines at the University of the West Indies, the local market is strong. However, there is still a great opportunity to enhance services and provide a state-of-the-art centre under one roof that supports a wide range of athletes.

SUMMARY OF EXISTING FITNESS MARKET

The market in and around Kingston is saturated with fitness centres, but overall their services are not up to international standard and/or have aging equipment and infrastructure. A handful of fitness centres can independently deliver great service, but the University of the West Indies is well positioned to surpass this standard with the Usain Bolt Sports Medicine and Exercise Centre, if strategic attention is paid to:

- ✓ Top quality service
- ✓ Highest level of facilities with new equipment
- ✓ A broad range of training equipment to cater to varying muscle groups and workout styles
- Clientele Needs and Expectations (i.e. professional athletes)

Key Findings of Facilities Within Kingston:

Express Fitness has great accessibility with a wide variety of locations and 24/7 access, but it does not offer and "over and above" services.

FitFarm is the least expensive of the memberships. However, equipment appears to be aging and while the gym promotes a "family atmosphere" it seems to cater only to amateur athletes.

Key Findings Outside of Kingston:

Myers Fitness Studio offers the most professional atmosphere with the greatest range of services but is not centrally-located. This is the "centre to beat."

Aquarius Jamaica offers a range of equipment but caters to the amateur athlete and sports fan. While wellness is an obvious concern, they do not offer specialized services in athlete wellbeing over and above a typical gym.

Case Study: GC Foster College of Physical Education and Sport

Located nearby in Spanish Town, GC Foster College is a major competitor for student enrolment in Physical Education & Sport programs. The college currently offers the following programs (among others):

- Masters Degree in Physical Education and Sport
- 2 Associate Degree in Sport Fitness Instruction
- Associate Degree in Sports Massage

GC Foster had attempted to open a centre for sports medicine institute but was unsuccessful. The key lessons learned from this endeavour included:

Lead With Experts in Sports Medicine

Facilities of this calibre (catering to collegiate and national athletes) must be run by specialists and/or experts in the field, rather than by a volunteer base. The exception to this would be supervised students enrolled within the University's sports medicine programme.

Promote Expertise in Sports Medicine

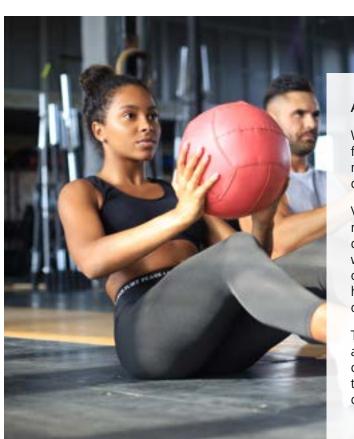
The highest level of education promoted by programmes offered by GC Foster are at the Associate level. A higher qualification level will lead to improved prospects in the job market, credibility in the field of sports and exercise medicine, and top quality service for Jamaican athletes.

Maintain Adequate Funding

GC Foster's funding model for supporting their facilities was unsustainable; without consistent funding, sports medicine and exercise equipment can quickly fall into disrepair, risking its competitiveness in the marketplace.

Incorporate Research

In an industry with rapidly changing technologies and techniques, adding a research component to services not only strengthens the facility's ties to the university but also provides a valuable service to the community.



Additional Key Finding: Be Visible

When amateur and professional athletes are looking for services, the internet is one of the first stops they make. To be competitive on a global scale, a well-designed and thought-out web presence is essential.

Very little online information can be found for the majority of gyms, fitness centres, and sports medicine centres in Jamaica. While some businesses have websites with "under construction" pages, others rely on minimally-informative Facebook pages and others host no web presence at all. Attempts to directly contact these businesses often led to no response.

This minor investment (no more than a Google listing and some time spent in adding to an existing website) can bring in significantly higher business and traffic to the Sports Medicine and Exercise Centre than competitors.

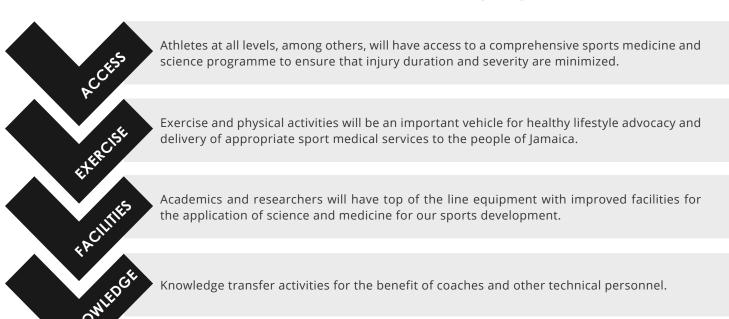
•

6.0 COMPARABLE FACILITY ASSESSMENT

6.1 COMPARABLE FACILITY ASSESSMENT

The UWI Mona Campus has a goal of becoming a world leading, high-performance sport system that is value based while producing sustainable and improved performances at Olympic, Paralympic and other major multi-sport games and identified University, National, and World Championships. The vision will be to create a dynamic and innovative culture that promotes and celebrates participation, excellence, and healthy recovery through high performance sport.

JAMAICA NATIONAL SPORT POLICY (JNSP)



COMPARABLE MARKETS

Orange Crow Leadership sought out best practices from Sports Medicine and Exercise Facilities that have comparable infrastructure and amenities for high-performance athletics in both Canadian Universities (U Sports) and International facilities. This research provided valuable insight and is important within the context of a broader identification of potential options for future strategic plans and infrastructure modeling. One valuable takeaway from this process is that each facility is unique, as is every model and market.

To begin, Orange Crow Leadership completed a review of Canadian U Sports Facilities that were built or had infrastructure upgrades within the last 10 years. The most relevant and comparable facilities shortlisted for further review include:



University of Toronto (Toronto, Ontario) -Goldring Centre for High Performance Sport



Univerity of British Columbia (Vancouver, B.C.) - Allan McGavin Sports Medicine Clinic



University of Alberta (Edmonton, Alberta) -Glen Sather Sports Medicine Clinic



Carleton University (Ottawa, Ontario) -Carleton Sports Medicine Center



McMaster University (Hamilton, Ontario) -David Braley Sport Medicine & Rehabilitation Centre



University of New Brunswick (Fredericton and Saint John, N.B.) - Richard J. Currie Centre

Next, OCL reviewed comparable International facilities including:



Minneapolis, Minnesota, USA - Mayo Clinic Orthopedics and Sports Medicine



University of Bath (Bath, United Kingdom) -Team Bath Physio & Sports Science Centre



University of Pretoria (Pretoria, South Africa) - The High Performance Centre (HPC)



Loughborough University (Loughborough, England) - National Centre for Sport & Exercise Medicine

While each site has a unique development philosophy, and specific lessons could be learned from each site, there were a number of common themes that should be considered:

LONG-TERM APPROACH

A long-term approach that considers decades rather than years of strategic excellence and world-renowned sport science technologies.

DEVELOPMENTAL STRATEGY

A development strategy that considers continuous growth, expansion, and excellence in sport.

LEADERSHIP

Exceptional leadership from University Administration to continue to place emphasis on the need for continual funding and impact in the market.



The following summary charts provide an overview of the U Sports Canada Facilities and International facilities that were analysed:

U Sports Facilities	University of British Columbia Vancouver, BC	University of Alberta Edmonton, Alberta	University of Toronto Toronto , Ontario	Carleton University <i>Ottawa, Ontario</i>	McMaster University Hamilton, Ontario	University of New Brunswick Fredericton & Saint John, New Brunswick
Year Opened	1981. Moved to new building in 2018	1986. Moved to new building in 2012	2014	1972. Moved to new building in 2016	2007	2011
Size/Capacity	20,000 SF	N/A	140,000 SF	6,500 SF	132,000 SF	139,000 SF
User Groups	High Performance, Varsity, Students, General Public					
Construction Costs (\$CAD)	\$11.635 M	N/A	\$59.2 M	N/A	\$31 M	\$62 M
Daily Rates (\$CAD)	\$49-\$99 Dependent on Treatment	\$50-\$125 Dependent on Treatment	Student Gym - \$539/yr Student Medical - \$80	Assessment \$115 Treatment \$95	Student Physio -\$80, Student Treatment \$65	Base gym \$492/yr Aquatics \$235/yr
Sponsors	~	~	~	~	~	~
Gym (Open to Public)	~	~	~	×	~	~
Rehab	~	~	~	~	~	~
Recovery	~	~	~	~	~	~
Sports Physiology	~	~	~	~	~	~
Investigation (MRI, ECG, Etc)	~	~	~	~	~	~
Biomechanics	~	~	~	~	~	~
Fitness Testing	~	~	~	~	~	~

International Facilities	Mayo Clinic Orthopedics and Sports Medicine	University of Bath	University of Pretoria	Loughborough University	
Year Opened	2014	2002	HPC opened in 2002, SEMLI established in 2015	2012 Olympic Legacy project	
Size/Capacity	100,000 SF	140 Acre parcel of land	HPC - 76 Hectares	64,583 SF	
User Groups	High Performance, Professional, General Public	High Performance, Professional, General Public, Students	High Performance, Professional, General Public, Students	High Performance, Professional, General Public, Students	
Construction Costs (\$CAD)	N/A	\$35 M £	N/A	N/A	
Daily Rates (\$CAD)	Dependent on Treatment EXOS Performance training \$2,600+ per week	Fitness facilities: Public - \$550 £/yr. Students - \$299 £/yr. Staff- \$495 £/yr	HPC Membership included in Student Fees. SEMLI rates vary based on diagnosis	Treatment, Training, and Therapy costs vary based on assessment	
Sponsors	✓	✓	N/A	✓	
Gym (Open to Public)	~	~	✓	~	
Rehab	✓	✓	~	~	
Recovery	~	~	~	~	
Sports Physiology	✓	✓	✓	✓	
Investigation (MRI, ECG, Etc)	✓	✓	✓	✓	
Biomechanics	~	~	~	✓	
Fitness Testing	~	~	~	✓	

A short summary of each facility follows. See the complete comparison reports in Appendix A1.



The Goldring Centre for High Performance Sport (part of the University of Toronto Varsity Centre athletic facilities campus) brings together top researchers, graduate students, sport scientists, athletic therapists, coaches, and athletes to create Canada's newest leading Sport Institute. The Centre forms a new and vital hub for sports, research, and therapy, serving both varsity athletes and the wider campus community. The facility features a 2,000-seat competition venue for basketball and volleyball, a large strength and conditioning center, a sports medicine clinic, and research laboratories.

Within the Centre is the David L. MacIntosh Sport Medicine Clinic, which has been treating sport-related injuries in the University of Toronto community for over 78 years. Services are available to anyone with sport or exercise-related injuries or inquiries. The clinic staff includes certified athletic therapists, sport and manual physiotherapists, sport massage therapists, sport physicians, an orthopedic surgeon, and a certified pedorthist. This is also a teaching clinic for professional staff and patients may be seen by an undergraduate or post-graduate student in addition to the supervising clinician.

Goldring Centre for High Performance Sport is considered to be one of the top international sports medicine and training facilities in the world.

The Centre has been designed to welcome everyone from the university and local community who are interested in physical activity and sport - from students, faculty, and staff looking for a great place to work out to intercollegiate, intramural, and international-level student-athletes coming to train, practice, and compete. The Centre and Clinic have also supported the Toronto Maple Leafs, Toronto Raptors, the Toronto Argonauts, and the Toronto FC. The Goldring Centre is also used for academic programmes, children's programmes, and camps. Student and community groups can also rent space within the facility for special events.

The Centre has acted as host for many varsity, national, and international competitions including the Toronto 2015 Pan Am Games.

Cost \$59.2 M Year Opened 2014 Size 140,000 SF 6 Storeys

The center houses two practice courts and a feature court built to the Federal International Basketball's (FIBA) and Federal International Volleyball's (FIVB) standards, as well as support facilities for the courts, including change rooms, a first aid therapy and taping room, coach's offices, and public washrooms. The facility also contains a tiered strength and conditioning space, the sports science and sports medicine facilities, and additional offices and meeting rooms.

Services



Multi-storey sport and exercise facility housing a 2,000-seat, internationally-rated field house for basketball, volleyball, and other court sports



A state-of-the-art strength and conditioning center



Fitness studio for yoga, dance, and other indoor movement activities



Sport medicine clinic



Research and teaching laboratories



Concussion Clinic



Clinical Therapy Services



Intercollegiate Team Care



Practical and Clinical Supervision of Students

Equipment



Gymnasium



Sport Courts



Vera Climbers



Bod Pods (measures body composition and evaluates users for signs of overtraining, effectiveness of a workout program, likelihood of injury, and nutritional planning)



Turf flooring



Rehab/Recovery



Sports Physiology



Investigation



Biomechanics



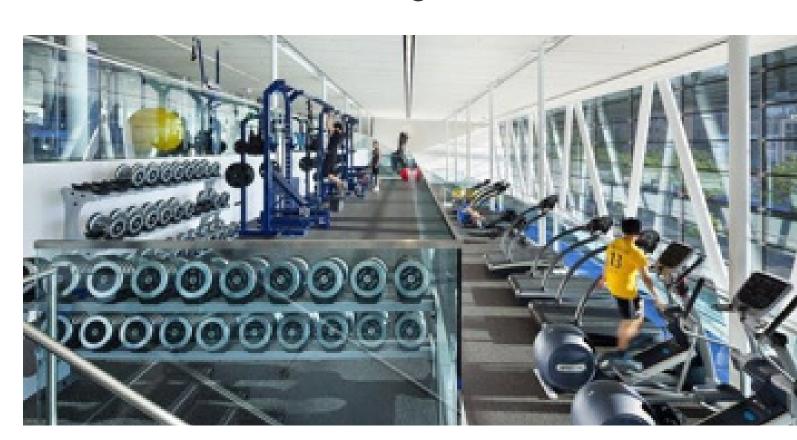
Fitness Testing

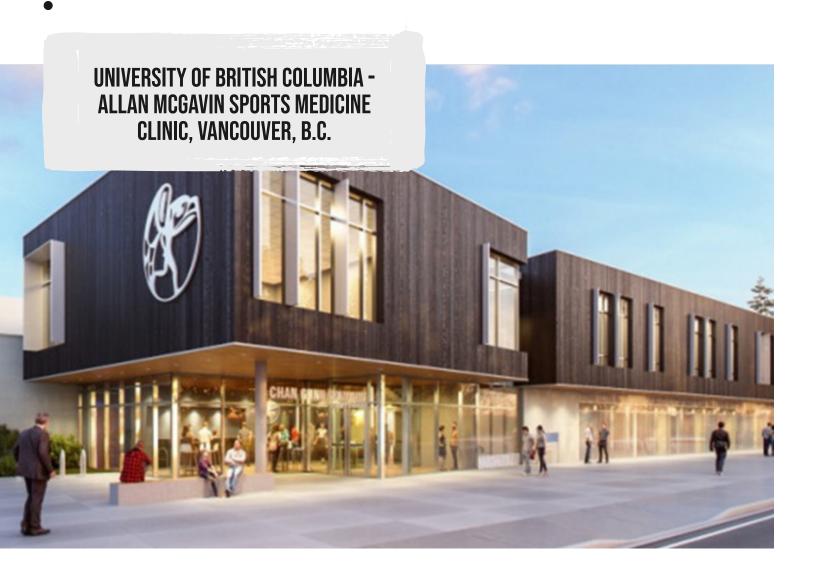


Massage Therapy



Assessment rooms





The Allan McGavin Sports Medicine Centre (AMSMC) is a multidisciplinary on-campus exercise and Sports Medicine Centre that is committed to education, research, service, and the scientific pursuit of knowledge to create better health and human performance in sport.

User groups include high performance athletes, varsity athletes, students, and the general public.

Medical professionals treat approximately 3,500 patients a month with priority support in place for high performance athletes of British Columbia and to members of 16 national teams through cooperation with the PacificSport Group and SportMedBC.

Clinical support is provided to the Vancouver Canucks, the BC Lions, and, in the past, has been given to the Vancouver Grizzlies of the National Basketball Association and the Vancouver Canadians Baseball Club.

Cost

\$11.6 M CAD

Year Opened

2018 (With Upgrades)

Size

20,000 SF 2 Storeys

Sport and Exercise Medicine is the backbone of the clinical services provided at AMSMC, focusing on the diagnosis and management of exercise-related injury or illness. This includes physical examination and appropriate investigations in order to arrive at a working diagnosis including activity modification, rehabilitation exercises, optimizing equipment/ footwear, medications, braces/orthotics, and injections. Many of the AMSMC physicians manage the care of athletes on professional or elite national/provincial teams and several have worked at multiple "major games" including the Olympics, Commonwealth Games, BC Summer Games, and Canada games.

Services

Active Rehabilitation



Sports Physiotherapy





























Services











Gym
Pool
Rehab
Recovery
Sports Phy
Investigat
Biomecha Sports Physiology



Investigation



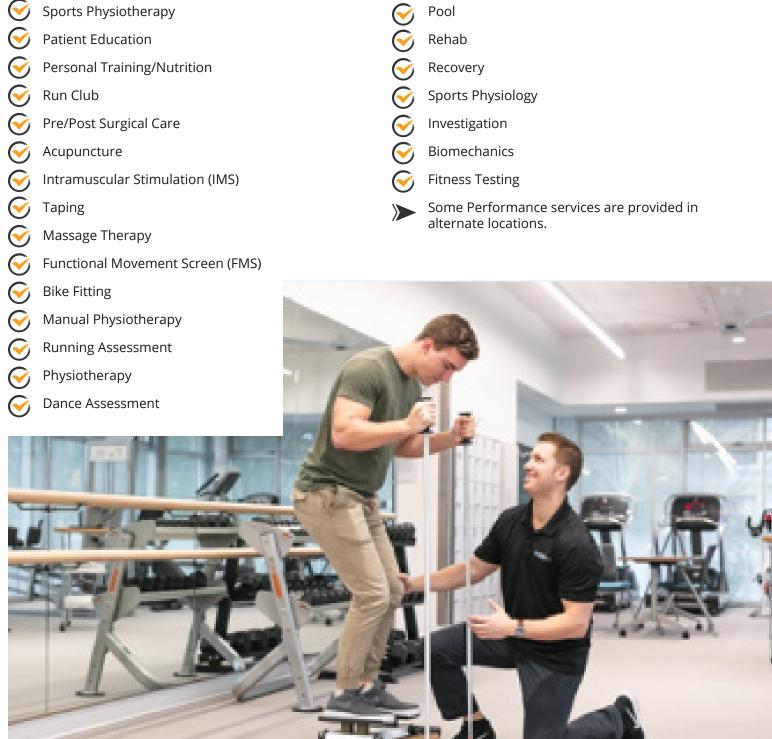
Biomechanics

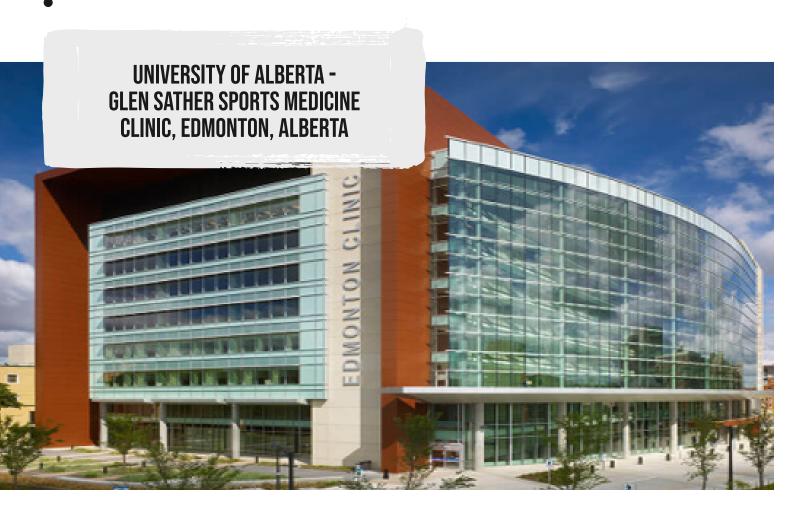


Fitness Testing



Some Performance services are provided in alternate locations.





The University of Alberta's Glen Sather Sports Medicine Clinic (GSSMC) is a multi-faceted facility consisting of an interdisciplinary team of physicians, surgeons, physical therapists, kinesiologists, massage therapists and orthotists who specialize in the assessment, diagnosis, treatment and rehabilitation of musculoskeletal, sport and exercise-related concerns. The Clinic is a center of the Faculty of Rehabilitation Medicine at the University of Alberta and is also a teaching clinic for students and clinicians from affiliated university faculties including Rehabilitation Medicine, Kinesiology, Sport and Recreation, and Medicine and Dentistry.

Plans to introduce a sports medicine and exercise clinic at the University of Alberta began in 1986. The official opening of the Glen Sather Sports Medicine Clinic was October 11, 1988 with infrastructure and equipment upgrades taking place every 10 years. In 2012, the clinic moved to the more spacious quarters in the Kaye Edmonton Clinic, which is located in the heart of the U of A's health sciences facilities. The total cost of the Kaye Edmonton Clinic is \$484 M CAD, although the Glen Sather Sports Medicine Clinic only takes up one floor within this expansive medical building.

Priority is given to high performance and professional athletes including the National Hockey League's Edmonton Oilers, national teams, and varsity athletes. The clinic also supports students, recreational athletes, and the general public.

Cost \$484 M CAD for Entire Clinic

Year Opened

2012 (With Upgrades)

Size

Housed Within Level 2 of Clinic

The clinic provides innovative, inter-disciplinary, and client-centered clinical care for sports medicine and musculoskeletal disorders, including sports medicine and exercise, orthopedic care, sports therapy and musculoskeletal rehabilitation. In addition, the clinic provides education for undergraduate and graduate students, residents, fellows, and specialists from the Faculties of Medicine and Dentistry, Physical Education and Recreation, and Rehabilitation.

Services

Acute Youth Injury Clinic

Telerehabilitation (Virtual) Physiotherapy

Physiotherapy

Performance Rehabilitation

Sport & Exercise Medicine

Massage Therapy

Osteoarthritis Services

Performance Rehabilitation

Functional Agility and Strem (FAST) Knee Program **Functional Agility and Strength Training**

Orthotic Services

Orthopedic Consultation

Canada Osteoarthritis Treatment Classes

Complex Concussion Clinic

Equipment

Rehab

Recovery

Sports Physiology

Investigation

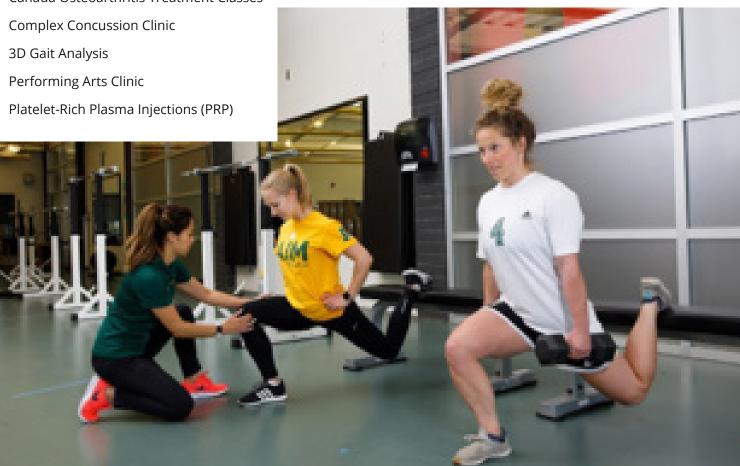
Biomechanics

Fitness Testing

Massage Therapy

Assessment rooms

Performance services are provided in a more traditional open gym setting at an alternate location, Foote Field, with a wide selection of free weights, kettlebells and open space.





The University of Carleton Sports. Medicine Clinic was first established in 1972 by Dr. Don Johnson. At this time, the Clinic was one of the first clinics in Canada to provide diagnosis and treatment for the injured athlete and the active community. Today, after more than 40 years of patient care, education, and clinical research, the clinic has successfully expanded on campus into its new home — the Ice House Hockey Arena. The goal of the Clinic is to be an integral part of each patient's rehabilitation team, with a focus on comprehensive care for sports injuries. Staffing includes physiotherapists, massage therapists, athletic therapists, and strength and conditioning specialists who work to develop a collaborative approach to ensure that recovery and

training work simultaneously in order to strengthen the entire body, develop total-body strength, and balance assisting rehab and injury prevention.

Priority is given to high performance and professional athletes, national teams, and varsity athletes. The clinic also supports students, recreational athletes, and the general public. The Clinic is a physiotherapy provider for patients rehabilitating from orthopedic surgery and for patients who wish to return to athletic competition. Recognized as a National leader in education and professional development, the Clinic provides opportunities for medical and physiotherapy residence students, provides professional development courses, and organizes/hosts monthly sport medicine rounds.

Cost N/A Year Opened 2016 (With Upgrades) Size 6,500 SF

Central to the Clinic's philosophy is the prevention of sports injuries through the promotion of good physical conditioning, hazard free facilities, appropriate protective equipment, safe coaching techniques, and fair play. Carleton Sport Medicine is also internationally recognized for involvement in diagnosing, surgical intervention, and physiotherapy of knee ACL injuries and return to play testing.

Services

Athletic Therapy



Physiotherapy



Strength & Conditioning



Massage Therapy



Orthopedic Surgery Consultations



Pelvic Health



Mental Examination



Chiropody



Return to Play Testing



Baseline Concussion Testing



Bracing



Compartment Pressure Testing



Concussion Care



Cortisone Injections



Nutrition



Orthopedic Surgery Consultations



Platelet Rich Plasma



Primary Care Sports Medicine



Prolotherapy



Shockwave Treatment



Ultrasound Guided Injections



Viscosupplementation



Walk In Clinic

Equipment



Rehab



Recovery



Sports Physiology



Investigation



Biomechanics



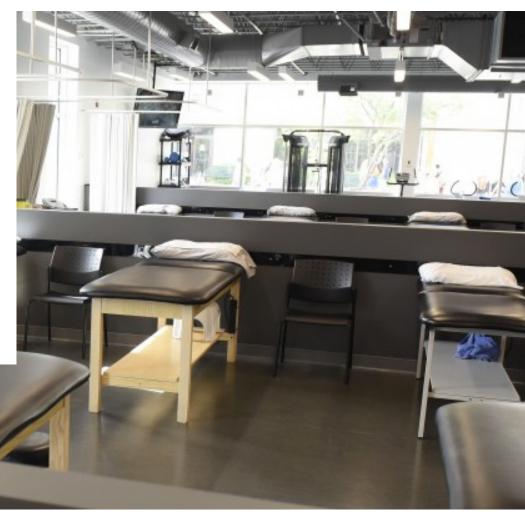
Fitness Testing Massage Therapy



Assessment rooms



Performance services may be set at an alternate location dependent on need





The David Braley Sport Medicine and Rehabilitation Centre is a world class facility located on the McMaster University campus. This multisport facility features a high-performance fitness center, which accommodates a double gymnasium equipped with 1,200 retractable seats suitable for international competition in volleyball and basketball, a four-lane 200-metre track, a four-lane 60-metre sprint track, rock climbing wall, Olympic weightlifting equipment, four internationally sized squash courts, sports medicine facilities, a varsity athlete high-performance fitness assessment lab and training center, multipurpose studios, varsity consultation rooms, trainers offices, and varsity and special event lounges.

The cost to build the facility was approximately \$31 M CAD, with \$20 M originating from the University's student unions.

The Sport Medicine Centre is open to McMaster athletes, students, faculty, staff, and the Greater Hamilton Area community. Priority is given to high performance and professional athletes, national teams, and varsity athletes. Other professional sport affiliations include the Canadian Football league Hamilton Tiger Cats, Hamilton Bulldogs (ice hockey), and the Toronto Rock (lacrosse).

Cost \$31 M Year Opened 2007 Size 132,000 SF

The David Braley Sport Medicine & Rehabilitation Centre offers a wide variety of physician, sport medicine, and rehabilitation services as well as general gym memberships. The Centre combines extensive clinical expertise and advanced medical technology encouraging a collaborative approach to the prevention, assessment, treatment and rehabilitation of sports injuries.

Services

Brace Store - Custom Bracing



Sports Medicine Physicians



Orthopedic Surgeons



Musculoskeletal Ultrasound - Diagnostic & Interventional



Physiotherapy





Massage Therapy
Chiropractic and Active Relea
Osteopathy
Registered Dietitian Services Chiropractic and Active Release Therapy







Custom Orthotics



Concussion Management Program



Platelet-rich plasma injections (PRP)



Tendon Fenestration



Prolotherapy



Steroid Injection







Equipment



Gymnasium



Sport Courts



Indoor Track



Rehab/Recovery



Sports Physiology



Investigation



Biomechanics



Fitness Testing



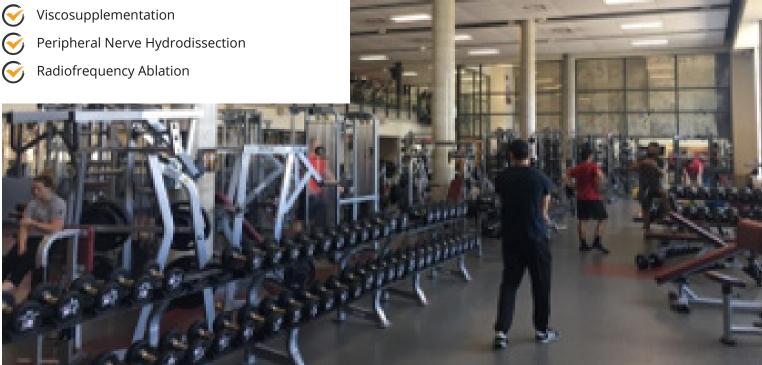
Massage Therapy

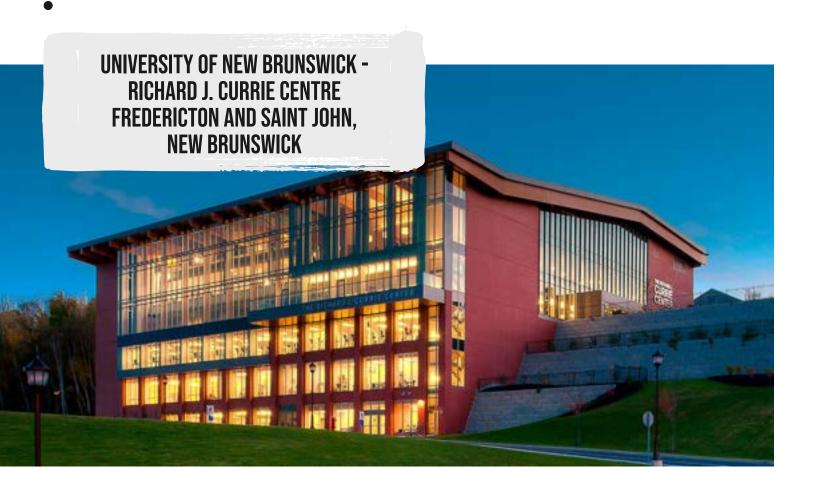


Assessment rooms



Hydrotherapy





The Richard J. Currie Center has been designed to address the integrated wellness needs of the University of New Brunswick (UNB) and the greater Fredericton community. The Center provides facilities for fitness, recreation, and high-performance athletics as well as new space for community research activities and services. The Center contains three full-sized gyms, two of which are recreational, the third being a high-performance gym for varsity athletes.

Key among the multidisciplinary services is the worldclass Human Performance Laboratory which is situated in the heart of the building, adjacent to the walking/ jogging track. The focus of the laboratory is the analysis of body motion and its relation to health, performance, and function. Currie Center is named after UNB Chancellor, Dr. Currie, a UNB alumnus who donated more than \$20 million to support the construction. The provincial government supported with \$10.3 M and the Federal government provided \$8 M for the construction of the Human Performance Laboratory. Almost 700 other alumnus and community members have also donated to the Currie Center through the University's 'Supporter Program'. For a \$1,000 donation, you can name a seat and own a part of UNB's history. There are also other opportunities such as naming a locker room, strength center, and cardio center, as well as a naming a basketball or volleyball net.

Recreation and fitness spaces are available to students, faculty, staff, alumni, and members of the greater Fredericton community.

Cost \$62 M Year Opened 2011 Size 139,000 sq ft 5 Storeys

The Human Performance Laboratory is the only one in Canada that has a jogging track passing through it, and that uses the world's first 16-megapixel motion capture system by Vicon. This system and higher-resolution cameras enable researchers to model the body more accurately and gain an improved understanding of normal and pathological motion.

Services



Biomechanics



Strength training



Physical Disabilities



Fitness and Performance Analysis



Human Motion



Rehabilitation



Ergonomic Assessment



Clinical and Performance Analysis



Three-Dimensional Gait Analysis for Foot/Ankle



Orthopaedic Surgery



High Density Electromyography (EMG) Analysis for Neuromuscular Function





Equipment



Gymnasium



Sport Courts



Rehab/Recovery



Sports Physiology



Investigation



Biomechanics



Fitness Testing



Massage Therapy



Assessment rooms



Pool including Hydrotherapy featuring six lanes and a diving tank



Eleiko Olympic Weightlifting Competition sets



Benches, weights, curl bars, plyometric boxes, bands, mats, foam rollers, etc.



Cardio equipment



Boulder-dedicated climbing wall



Squash courts



12 Vicon Nexus T160 cameras



Zerowire EMG system



Delsys Trigno wireless 8ch EMG



Noraxon wireless system



Cybex isokinetic dynamometer



XSensor pressure imaging system



Kistler force plates



BalanceQuest (balance tracking, IScan 3D pupil tracking system)



The Mayo Clinic of Orthopedics and Sports Medicine is a global leader in the surgical and non-surgical treatment of orthopedic injuries, sports and musculoskeletal injury prevention and rehabilitation, concussion research, orthobiologics, and diagnostic and interventional ultrasound. The team uses advanced motion analysis and strength equipment, specialized lifting platforms, and multiple playing surfaces—wood for basketball and volleyball, artificial grass for turf sports, and synthetic ice for hockey—to help athletes from a range of sports achieve their peak performance level. Within the building, there is a dedicated 22,000 SF sports medicine and rehabilitation center.

The facility also houses EXOS Performance Training, with sports experts specializing in the training of professional and high-performance athletes.

The Clinic is open to high performance and professional athletes and the general public offering world class expertise in hockey, golf, baseball, softball, and running programs that focus on sport-specific motions and mechanics. It is the preferred medical provider for the Minnesota Timberwolves of the National Basketball League (NBA) and Minnesota Lynx of the Women's National Basketball League (WNBA).

Cost N/A Year Opened 2014 Size 100,000 SF 4 Storeys

The Mayo Clinic Orthopedics & Sports Medicine offers clinical, high performance, and specialty services. The Mayo Clinic also conducts research in areas including biomechanics and cartilage restoration, and performs clinical trials and other clinical research in virtually every area of musculoskeletal injury.

Services

Clinical:

Orthopedic Surgery

Physical Medicine & Rehabilitation

Physical Therapy

Athletic Training

Diagnostic Imaging

Regenerative MedicineConcussion Management

Performance:

Sports Fitness Programming

EXOS Performance Training

🔇 ACL Injury Risk Reduction

Performance Nutrition Services

Sport Expertise – Baseball, Softball, Hockey, Running, Golf

Specialty:

ACL Clinic

Hip Preservation Clinic

Knee Cartilage Clinic

Knee Meniscus Clinic

🥎 Knee Multi-Ligament Clinic

Overhead Athlete Clinic

Patella Instability Clinic

Rotator Cuff Clinic

Shoulder Instability Clinic

Equipment

Sport Courts

Rehab/Recovery

Sports Physiology

Biomechanics

Fitness Testing

Advanced X-ray system that incorporates cone beam CT (and 3-D capabilities), fluoroscopy and fully robotic digital X-ray

Oual-energy X-ray absorptiometry system to measure bone density and body composition

Musculoskeletal ultrasound and regenerative medicine procedures

Platelet-rich plasma and bone marrow aspirate concentrate injections

Minimally invasive ultrasound technology to treat chronic soft tissue and tendon damage

Biomechanics and movement analysis laboratory for sports medicine research





The University of Bath has a dedicated team of highly qualified therapists and practitioners at the Team Bath Physio & Sport Science Centre providing a range of services to University of Bath student-athletes and National Sport Governing Bodies. All services and amenities are located on site at the Team Bath Sports Training Village (STV) and bookable through high performance coaches. The STV facilities include a gym, Olympic Legacy swimming pool, athletics track, pitches, and courts.

Upon opening the STV, the university has hosted several sport tourism events including the European Youth Summer Olympic Days, the European Modern Pentathlon Championships, and the Fed Cup Europe/Africa Zone competition.

The facilities at the University of Bath have also been used as a training base by many individual Olympians and Paralympians as well as a pre-competition training and acclimatization camp base for sports like rugby, netball, athletics, swimming, hockey, badminton, and others.

The Centre is open to University students, staff, and the public. In addition, professional, high performance and elite athletes use STV as their home training and rehabilitation base including England Rugby and Bath Rugby; Coventry City, Southampton, Bristol City and Bristol Rovers FC; England Netball; British Swimming, and British Beach Volleyball.

Cost \$35 M £ Year Opened 2002 Size 140 Acre parcel of land

Team Bath physiotherapists are highly qualified and experienced practitioners working with elite athletes across a diverse range of sports – including athletics, bobsleigh, football, gymnastics, hockey, luge, netball, skeleton, swimming, and tennis – and with a host of governing bodies, as well as at major events such as the World University Games.

Services

 \bigcirc

Physiotherapy



Sports Massage



Strength & Conditioning



Sports Nutrition



Sports Psychology



Sport Science



Fitness Testing





Equipment



Sport Courts



Pool



Track



Field/Pitches



Rehab/Recovery



Sports Physiology



Biomechanics



Fitness Testing



Wattbikes



Lifting platforms, squat racks, bench-press stations



Gym rig (including four more lifting platforms)



Eight rowing machines



A large range of free weights going up to 65kg



Resistance machines



Free weights area



Versa Climbers



20m Sprint track with prowler, tyres and farmer's



23-Bike spin studio with state-of-the-art Matrix CXP bikes



A functional area featuring TRX battle ropes, rip trainers, slam balls



Ski-Erg



🏹 Rope grappler



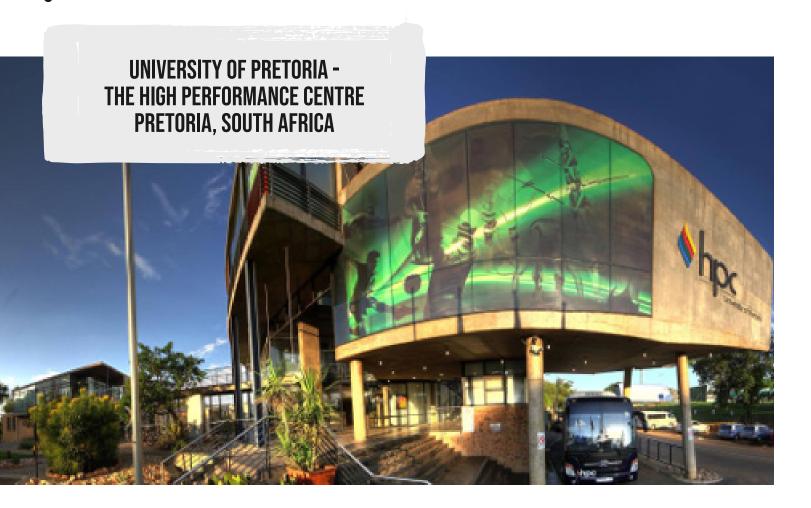
S Force and S Drive machines



Cardio equipment



Expansive mirrored multi-function studio with sprung wooden flooring



The High Performance Centre (HPC) is situated on the Hillcrest Sport Campus of the University of Pretoria and offers full hospitality services, access to world class sports facilities, and sport science and medical services. The Sport, Exercise Medicine and Lifestyle Institute (SEMLI), located in the HPC main building, provides additional specialist services such as assessments, medical practitioners, physiotherapists, psychologists, nutritionists, bio-mechanists, and more to patients, clients, visiting national and international athletes, and the public.

The vision of the SEMLI is to be an international leader in scientific, translational research that promotes health and well-being in the population through lifestyle interventions, reducing exercise-related injuries and medical complications, and promoting sporting excellence. SEMLI was conceived not only to build on the on-field success of University of Pretoria athletes and clubs, but to support sports performance in athletes and exercise participation in the broader population. Many high performance professional athletes including Olympians and Paralympians train at HPC and use SEMLI services.

Cost N/A Year Opened HPC - 2002 Size 76 Hectares of sports-dedicated land

The clinic provides innovative, inter-disciplinary, and client-centered clinical care for sports medicine and musculoskeletal disorders, including sports medicine and exercise, orthopedic care, sports therapy, and musculoskeletal rehabilitation. In addition, the clinic provides education for undergraduate and graduate students, residents, fellows, and specialists from the Faculties of Medicine and Dentistry, Physical Education and Recreation, and Rehabilitation.

Services

Semli Sport & Exercise Medicine

Semli Biokinetics

Semli Sports Physiotherapy

Semli Nutrition

Semli Sport Science

Semli Psychology

Sports injury treatment and rehabilitation

Post-operative orthopedic rehabilitation

Injury prevention strategies

Injury screening and risk factor identification

Back & neck treatment

Equipment

Sport Courts

Pool

Track

Field/Pitches

Rehab/Recovery

Sports Physiology

Biomechanics

Fitness Testing





The National Centre for Sport and Exercise Medicine (NCSEM) is an Olympic legacy project delivering education, research, and clinical services in sport, exercise, and physical activity. It aims to apply world-class expertise to policies and practice that will benefit everyday people through to elite athletes. A newly built, dedicated space houses the East Midlands hub at Loughborough University, which has been specifically designed to facilitate the translation of research into education, training, and clinical services.

The East Midlands hub is a partnership between the University of Leicester, Loughborough University, The University of Nottingham, University Hospitals of Leicester Trust, and Nottingham University Hospitals Trust.

The NCSEM supports Loughborough University athletes and clubs, the general public, and many high-performance professional athletes including Olympians and Paralympians.

Cost N/A Year Opened 2012 Size 64,583 sq ft

The NCSEM brings together leading clinicians and healthcare professionals to provide a range of services for patients in the area of sport and exercise medicine, cardiac and pulmonary rehabilitation, orthopaedics, and exercise- and mindfulness-based cognitive therapy.

Services

Sport & Exercise Medicine



Biokinetics



Sports Physiotherapy



Nutrition



Sport Science



Psychology



Orthopedics



Rehabilitation and musculoskeletal health



Mental health and wellbeing



Supporting athlete performance and injury prevention



Providing a focal point for advice and guidance on sport, exercise and physical activity, injury and rehabilitation.



Equipment



Nine consulting rooms



Talking therapy room



3T MRI scanner



Ultrasound



X-ray



DEXA scanner



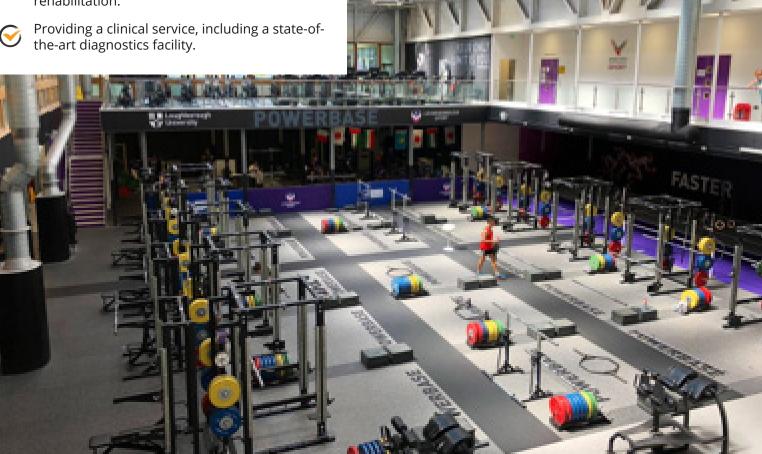
Functional analysis rehabilitation lab



Computer assisted rehabilitation environment



Medical physics and clinical engineering



7.0 APPROACH OPPORTUNITIES

In the 2017 study, there was a recommended approach that a roughly \$10.5M USD Sport and Exercise Medicine Centre be developed to meet the needs of athletes at each stage of development from across the Nation while supporting the competitiveness of Jamaica in hosting major international events that generate valuable sport tourism and economic development. This proposed facility suggested the construction of a new facility that was primarily funded by the University of the West Indies, the Government of Jamaica, and Private or Corporate Philanthropic Donation or Sponsorship. This was the recommended approach at the time of the report.

As this project team was engaged there was a strategic planning session hosted with a number of members of the UWI leadership team who provided an update on the 2017 recommendation progress and the suggested options for advancing the development of a competitive Sport and Exercise Medicine Centre at the Mona Campus in Jamaica. The result of this discussion highlighted three approaches for consideration should the desired project transition from a concept to an impactful and integrated asset within the Jamaican sport development system. The options discussed were as follows:

Sport and Exercise Medicine Centre (Approach and Opportunities)

Continue with Existing Facilities

Currently the Faculty of Sport has access to a number of sport-related facilities on the Mona Campus and access to a Sport Therapy location within the Medical Sciences Building. This approach could continue in the future.

Opportunities

- Limited financial investment
- Limited instructional changes
- Limited staffing needs
- Plan in place

Risks

- Does not meet current need
- Does not position WUI faculty of Sport as leaders
- Restricts financial and athlete growth
- Continue to under-perform in this space

Phased Approach -Leveraging Existing Assets

An opportunity to develop space within the current Gymnasium Facility was explored in the planning session, or alternatively leveraging space within the Cricket Facilities. This would re-purpose existing infrastructure until such time as a new facility could be developed.

Opportunities

- Space currently exists with limited utilization
- Available space is close to sporting amenities and aquatics
- Cost of Conversion minimized

Risks

- Existing state of infrastructure is poor
- Re-purposing costs may exceed new build
- Does not achieve "world class"
- Limits revenue and athlete growth

Phased Approach -Building New

There is an opportunity to develop a phased strategy to a new facility. This strategy would consider developing the Sport and Exercise Medicine Needs, and Wellness and Fitness Needs, and then developing the Administrative and Academic Space as funds were available.

Opportunities

- Opportunity to attract major sport tourism events
- Opportunity for sponsors and private donations
- Achieves sport and university goals
- Improves athlete health and performance
- Achieves cost recoveryLand availability

Risks

- Cost of development is significant
- Achieving a competitive position requires space and investment
- Ability to fundraise
- Ability to secure grants
- Lack of UWI funding available
- Access to sponsors and donors

As this project team completed the global scan of recommended comparable facilities provided by the UWI Team, the primary goals of the 2017 report were revisited. These goals included the following desired outcomes:

Project Development Goals	Continue with Existing Facilities	Phased Approach Leveraging Existing Assets	Phased Approach Building New						
Scoring of each strategy was performed against the 2017 proposed goals for the Sport and Exercise Medicine Facility. A 0 score was provided if the goal was not achieved, and a 1 score was provided if the goal was achieved. The only possible scores were 0 or 1.									
Ensure that the talent in Jamaica and the West Indies Continues to prosper in a very competitive sport industry	0	0	1						
Upgrade Existing Facilities	0	1	1						
World Class Sport Medicine, Exercise and Science Programmes	0	0	1						
Promote further development and sustainability for the people of Jamaica and the Caribbean and the wider world	0	1	1						
Access to Athletes at all Levels	1	1	1						
Wellness Activities	1	1	1						
Academics and Researchers will have top of the line equipment with improved facilities	0	0	1						
Regular knowledge transfer for the benefit of coaches	1	1	1						
Sport psychology facilities will be significantly improved	0	0	1						
Anti-doping facilities will be more readily available	0	0	1						
JFF Football Academy and IAAF High Performance Centre will have access to world class accessible sport medical services	0	0	1						
Total Project Development Score	3	5	11						

G

With the completion of a global scan and research on market leading practices at other reputable and comparable post-secondary institutions in conjunction with evaluating the originating project goals, it became apparent that there was truly only one option for the University of the West Indies, The Government of Jamaica, and the Usain Bolt Management Limited: the phased development of new Sport and Exercise Medicine Facilities within the Mona Bowl, at the University of the West Indies.

Any other possible approach would simply fail on the project goals, and both the Nation and the University would struggle with global competitiveness and lose valuable revenue and economic development opportunities while, most importantly, failing the development of athletes of all ages and all sport. It is the perspective of this consulting team (based on the provided research) that the only direction is the development of a new facility within a phased timeline or the redevelopment of the project goals and desired outcomes.

With an aligned recommendation that the only approach for consideration that meets a globally

competitive Sport and Exercise Medicine offering amongst post-secondary institutions and achieves the project objectives is the development of a new facility, the team proposed best practices in advancing the development of a new facility based on the learnings from researched facilities. It is important to note that many of the selected sites for research were originally positioned in a similar state to the University of the West Indies and Jamaica within aging infrastructure, lagging competitiveness on an international stage, growing sport medical expectations for major event hosting, and the need to enhance athlete care, reduce injuries, expand research, and improve the opportunities within the Faculties of Sport, Kinesiology, and Human Kinetics. In nearly each instance where the development of a new facility was proposed, there was an event-driven reason that supported the financial model; this may have included an International Level Event, a National Event, or a complex Regional Event that provided foundational financial support. Although each facility research had a unique funding model, it is this position of this document that the baseline expectation for funding for the proposed facility should consider the following:

Sport and Exercise Medicine Centre Funding Assembly								
Percent of Total Project Cost	Overview of Funding Avenue or Agent	Funding Examples						
20%	Major Sport Tourism Event or Hosting	Host Agency	+	Int. Gov. Body	+	Individual Teams		
20%	National Investment	Grant	+	Tax Increase	+	Applied Levy		
20%	Regional, Provincial, Municipal Investment	Grant	+	Tax Increase	+	Divert Spend		
20%	Owner or Primary Stakeholder Investment (University)	Fees	+	Sponsors	+	Donors		
20%	Financing or Contribution from Operations	User Fee	+	Government Support	+	Traditional		

The project team believes that the best approach to achieve the objective of the 2017 plan and the current needs of Jamaica and UWI is the development of a new facility. Working together, the University and the Nation should consider an active opportunity to compete for hosting rights for major Sport Tourism Events that may provide an opportunity to advance the desired mandate related to Sport and Exercise Medicine and may have funding available to support the hosting experience. The partners should consider the involvement of all levels of government, the investment of the University, and the opportunities for financing. Based on the examples that the team has researched, achieving success will require all possible funding partners to engage in the project with financing options based on a viable business model, donor and sponsor investment, and funding opportunities associated with major event hosting.

8.0 CAPITAL BUDGET

For the purpose of this Capital Budget overview, all funds have been standardized in USD effective 09.18.2021. It should be noted that the values shared within this document are relative to financial conversion at the time of study.

In the original 2017 study, the proposed project cost for the development of the Usain Bolt UWI Sport Medicine Centre was \$10,460,000 USD. The size of the proposed development was a two level development with 25,000 square feet of space. This development suggests a development cost of \$418.00 USD per spare foot.

Budget Item	Value (USD)
Land Assembly	\$1,000,000.00
Building Cost (2 Story, 25,000 Square Feet)	\$2,700,000.00
Infrastructure Work	\$400,000.00
Contingency	\$300,000.00

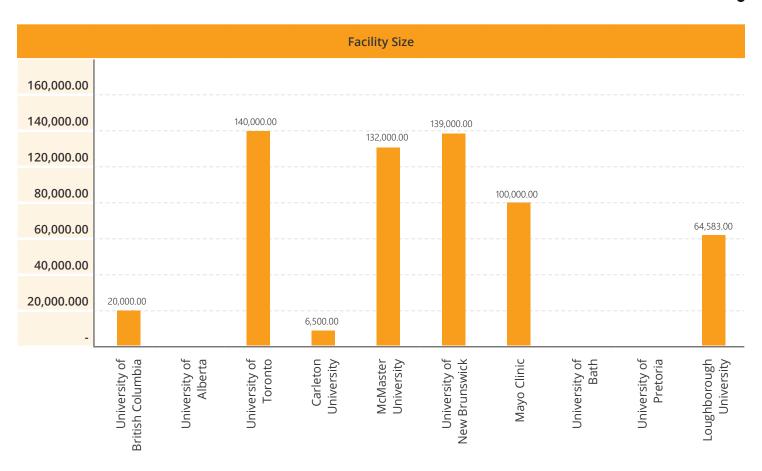
Budget Item	Value (USD)
Professional Fees	\$350,000.00
Sport Medicine Fit Out	\$3,250,000.00
Project Management	\$210,000.00
Regulatory Fees	\$50,000.00
Promotions and Marketing	\$200,000.00
Fitness Equipment FFE	\$1,000,000.00
Endowment Fund Holding	\$1,000,000.00
Total Project Cost	\$10,460,000.00
Total Cost Per Square Foot	\$418.40
Total Non Facility Costs	\$2,060,000.00



Based on the research that has been performed to date, the proposed size of the original plan at 25,000 square feet has a material variance to best practice in world class facility development. However, there may be an opportunity to provide slightly more competitive pricing for the proposed facility based upon market research. Using an average-based approach, the average cost per square foot of a proposed facility after inflation is applied should be \$387 USD per square foot and the average facility size should be 86,000 square feet. This would suggest based on the market research that the original plan proposed is 61,000 square feet smaller than average and has a per square foot cost that is \$80.45 greater than the average price research. The following table summarizes the results of comparable market data:

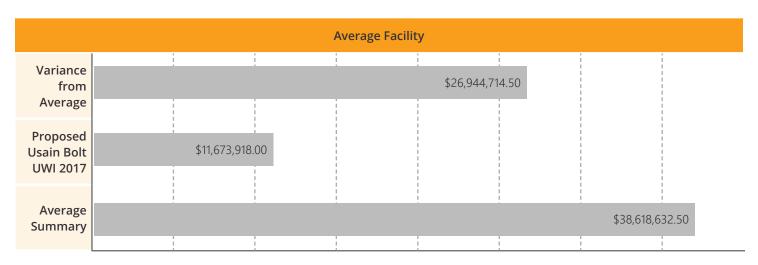
Facility Location	Facility Size	Cost of Construction (USD)	Average Cost per Square Foot (USD)	Construction Cost Inflation Adjustment	Average Cost per Square Foot + Inflation
University of British Columbia	20,000.00	\$9,118,197.00	\$455.91	\$9,933,764.00	\$496.69
University of Alberta					
University of Toronto	140,000.00	\$46,394,264.00	\$331.39	\$53,394,264.00	\$381.39
Carleton University	6,500.00				
McMaster University	132,000.00	\$24,294,293.00	\$184.05	\$32,053,866.00	\$242.83
University of New Brunswick	139,000.00	\$48,588,587.00	\$349.56	\$59,092,616.00	\$425.13
Mayo Clinic	100,000.00				
University of Bath		\$48,080,866.00			
University of Pretoria					
Loughborough University	64,583.00				
Average Summary	86,011.86	\$35,295,245.40	\$330.23	\$38,618,632.50	\$386.51
Proposed Usain Bolt UWI 2017	25,000.00	\$10,460,000.00	\$418.40	\$11,673,918.00	\$466.96
Variance from Average	61,011.86	\$24,835,245.40	\$88.17	\$26,944,714.50	\$80.45







•



A significant finding of the research performed was that included in the development of almost every facility reviewed was the inclusion of a fitness or wellness center. Although this additionally space of between 15,000 and 25,000 square feet augments the to total capital cost of construction it was an essential element of the operating business model that supported the sustainability of the facility. As cost sustainability and operational sustainability has been a priority of this project the inclusion of a fitness center within the proposed Usain Bold UWI Sport and Exercise Medicine Centre has been considered a necessity within this plan. The project team have developed an overview of the proposed capital budget for this project based on most recent findings.



Facility Size and Cost	Optimistic		Moderate		Conservat		
	Size	Cost	Size	Cost	Size	Cost	Percent of Total Space
Sport and Exercise Medicine Centre (Total Size)	103,214.23	\$39,893,202.56	86,011.86	\$33,244,335.46	68,809.49	\$26,595,468.37	
Common Space	12,385.71	\$4,787,184.31	10,321.42	\$3,989,320.26	8,257.14	\$3,191,456.20	12%
Mechanical and Supply	5,160.71	\$1,994,660.13	4,300.59	\$1,662,216.77	3,440.47	\$1,329,773.42	5%
Fitness Space	20,642.85	\$7,978,640.51	17,202.37	\$6,648,867.09	3,761.90	\$5,319,093.67	20%
Rehabilitation Space	7,225.00	\$2,792,524.18	6,020.83	\$2,327,103.48	4,816.66	\$1,861,682.79	7%
Recovery Space	10,321.42	\$3,989,320.26	8,601.19	\$3,324,433.55	6,880.95	\$2,659,546.84	10%
Sport Physiology Space	10,321.42	\$3,989,320.26	8,601.19	\$3,324,433.55	6,880.95	\$2,659,546.84	10%
Investigation and Injury (MRI, X-ray)	4,128.57	\$1,595,728.10	3,440.47	\$1,329,773.42	2,752.38	\$1,063,818.73	4%
Testing	4,128.57	\$1,595,728.10	3,440.47	\$1,329,773.42	2,752.38	\$1,063,818.73	4%
Private Therapy	8,257.14	\$3,191,456.20	6,880.95	\$2,659,546.84	5,504.76	\$2,127,637.47	8%
Administration	5,160.71	\$1,994,660.13	4,300.59	\$1,662,216.77	3,440.47	\$1,329,773.42	5%
Research	5,160.71	\$1,994,660.13	4,300.59	\$1,662,216.77	3,440.47	\$1,329,773.42	5%
Academic	10,321.42	\$3,989,320.26	8,601.19	\$3,324,433.55	6,880.95	\$2,659,546.84	10%
Total	103,214.23	\$39,893,202.56	86,011.86	\$33,244,335.46	68,809.49	\$26,595,468.37	100%
Average Cost/SF (Global Study)	\$386.51						

The recommended capital program for the development of a world class sport and exercise medicine center should consider a project with between 70,000 and 100,000 square feet that includes a fitness centre. The anticipated budget for the proposed facility should consider a total project cost of between \$26M and \$40M USD at an average square foot cost of \$387 USD per square foot. The project should remain consistent with the original development cost of a two-level facility.

For the purposes of framing this new footprint of the proposed facility the following concept plans consider a four level Sport and Exercise Medicine Centre incorporated into the Mona Bowl at the UWI. The following concept plans are consistent with the above outlined recommendation at a 70,000 square foot facility.

For the purposes of exploring development options Three scaled hand sketches have been provided in the following locations:

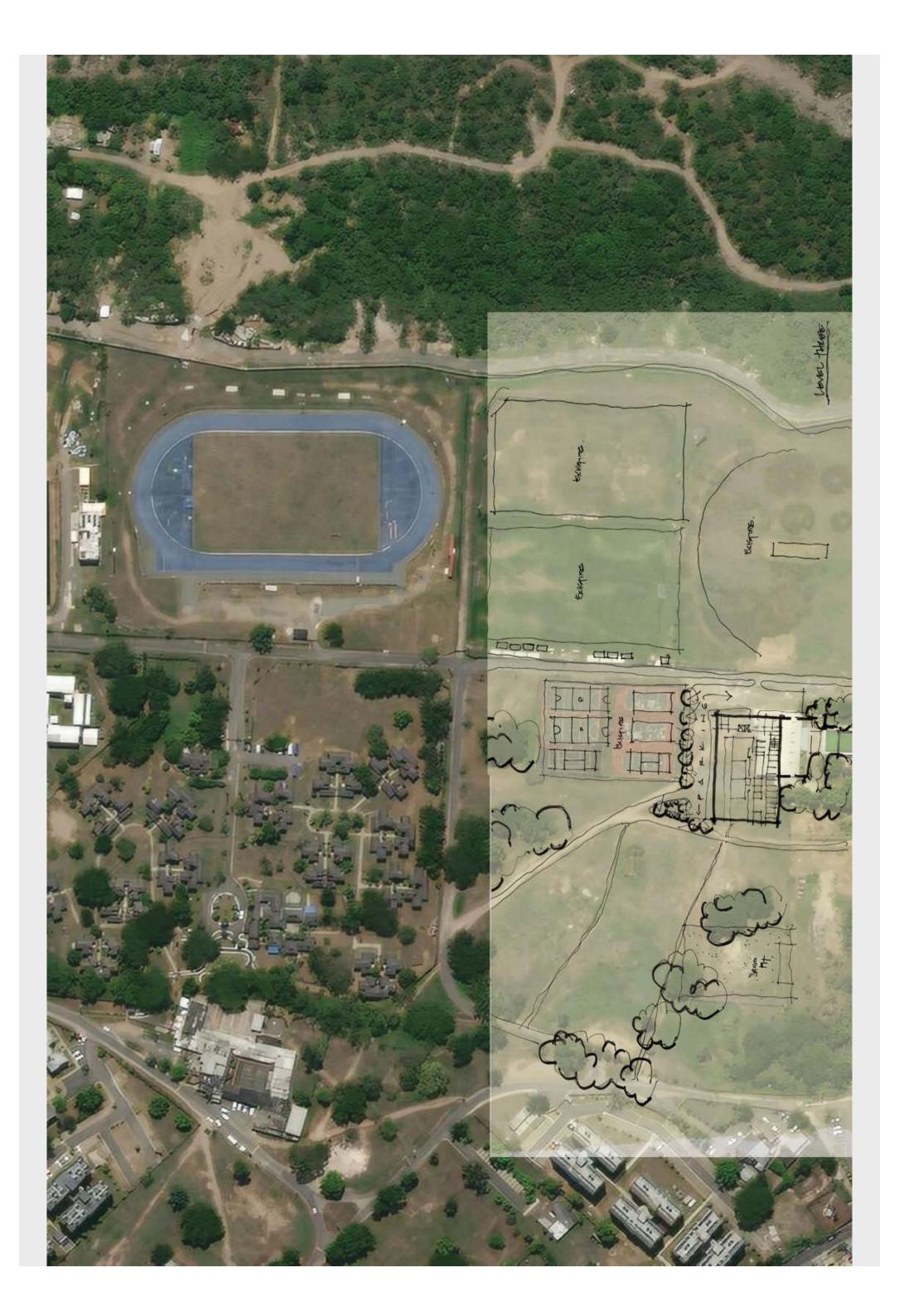
- 1 Location One: Current Gymnasium Site (Adjacent to the Pool)
- 2 Location Two: Usain Bolt Track and Field
- 3 Location Three: Adjacent to Court Space

It is valuable to note as this program advances that the proposed facility at 70,000 square feet on four levels has a number of site development options for consideration.

PLACEHOLDER PAGE FOR ADDITIONAL CONTENT AND FORMATTING















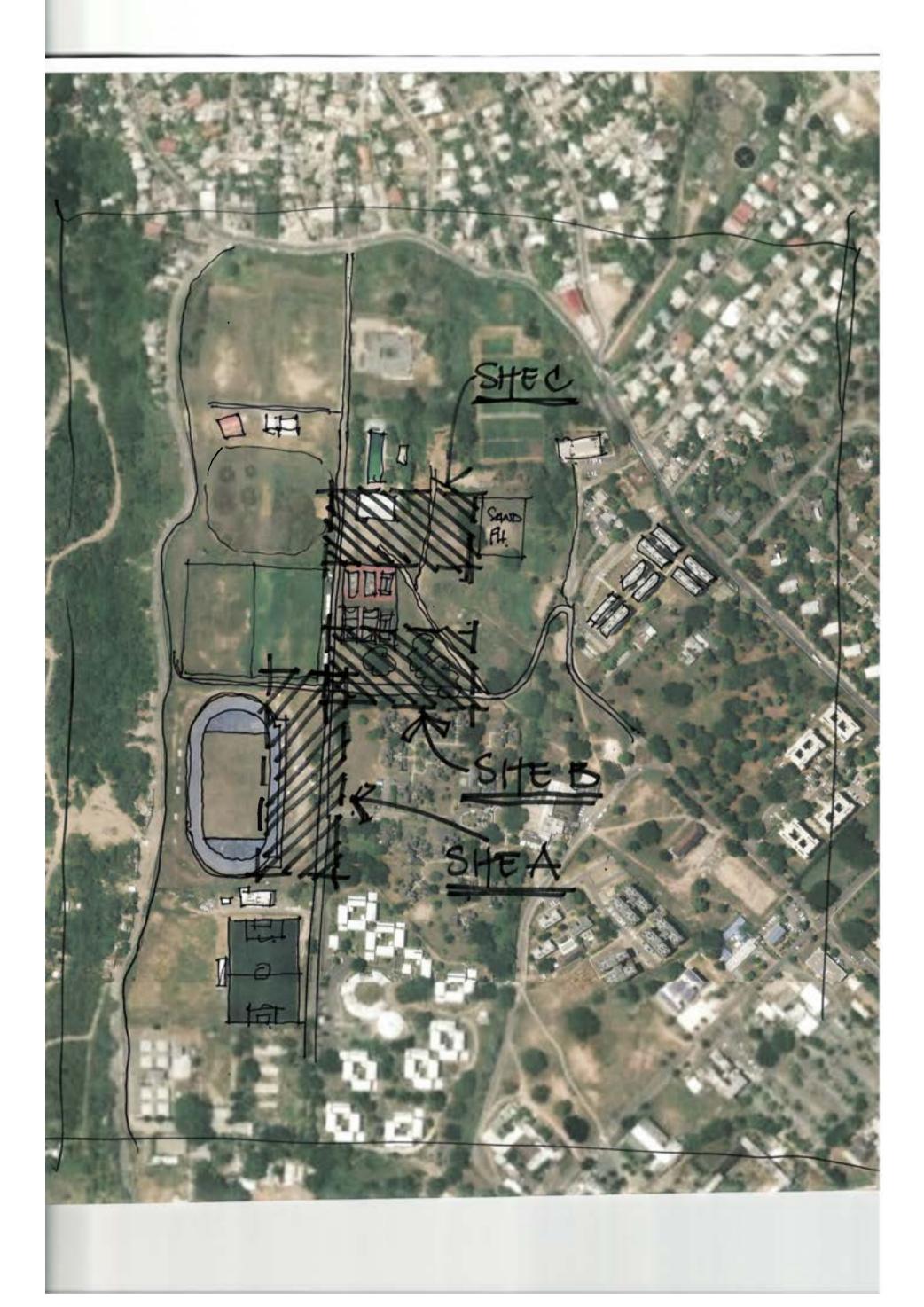












PLACEHOLDER PAGE FOR ADDITIONAL SITE SKETCHES AS NEEDED

Additional Sketch: Elevations

PLACEHOLDER PAGE FOR ADDITIONAL SITE SKETCHES AS NEEDED

Additional Sketch: Elevations

10.0 BUSINESS MODEL

Based on the research that has been performed to date, it is recommended that the project scope relative to the Sport and Exercise Medicine Centre at the University of the West Indies be expanded to include not only the medical and therapeutic sport options, but also considerations for the inclusion of a competitive fitness space. Based on the exploration of the model utilized in other jurisdictions as well as the opportunities in the local market, the inclusion of a fitness center will be essential to the sustainability of the facility. This may be a material shift to the original scope of work and plan, but it is believed that — within this operating model — the justification for this shift will become apparent.

The operational model for the proposed facility is relatively streamlined from a 'revenue and expense' perspective, with primary comparable revenue opportunities and expense requirements remaining common amongst most facilities. For the purpose of standardization, the revenue and expense models for the proposed facilities have been standardized as a percent of cost to support the alignment of the various facilities that were explored and the local market costs of service delivery.

Recognizing that there is a valuable opportunity for the University of the West Indies to leverage the proposed facilities on campus for research and academic advancement, there may be a strong opportunity to also leverage work placements, cooperative learning opportunities, or student employment to improve overall facility efficiencies through management by the university. Concurrently, this would help expand the academic offerings and employment opportunities for students.

Consistent with the recommendations of the Capital Program, it is recommended that the proposed facility position strategically in the following four key positions:

RODUCT

The product should: be considered a highly professional, high quality, and current in technology and application; with well trained staff; be well maintained and well serviced; and be customer service oriented. The product positioning should support distinguishing the brand Regionally and as a true market leader on a global stage.

ACE

The offering should commence on the Mona Campus as the Hub Facility. This facility should engage the various sport and recreational offerings around the proposed facility site; it should be considered that the development of a new structure might assist with some of the development needs for track and field, football, cricket, court sport, and gymnasium space. This is a valuable development opportunity that would offer significant strategic advantage for the facility. For instance, the proximity to the National Football Facilities should additionally be considered a valuable asset. Once the initial site is developed, it would be advisable to consider the development of a Hub and Spoke strategy, where satellite or ancillary service offerings are positioned in other high density locations (such as Spanish Town, Portmore, or Montego Bay).

ROMOTION

Promotion should rely on the World Class Nature of the facility and should be proven in alignment with a greater Sport Tourism Hosting Strategy supported by the Jamaica National Sport Policy. Promotion should be heavily aligned with the delivery of exceptional sporting results at a National and International Level and for athletes of all levels of skill. Highlighting the technical alignment with the Faculty of Sport at UWI will support the quality and credibility of the facility and the services it offers.

BICE

In an effort to support access to all athletes, pricing should be based on market research and should be positioned in the mid-range within the competitive market position. The Price Strategy should consider a middle to lower range to acquire market share, and then should elevate pricing at 3% or a reasonable inflationary value annually as growth and proven performance is achieved. The facility should launch with a market penetration strategy to drive market share and a position around the quality and service of the experience.

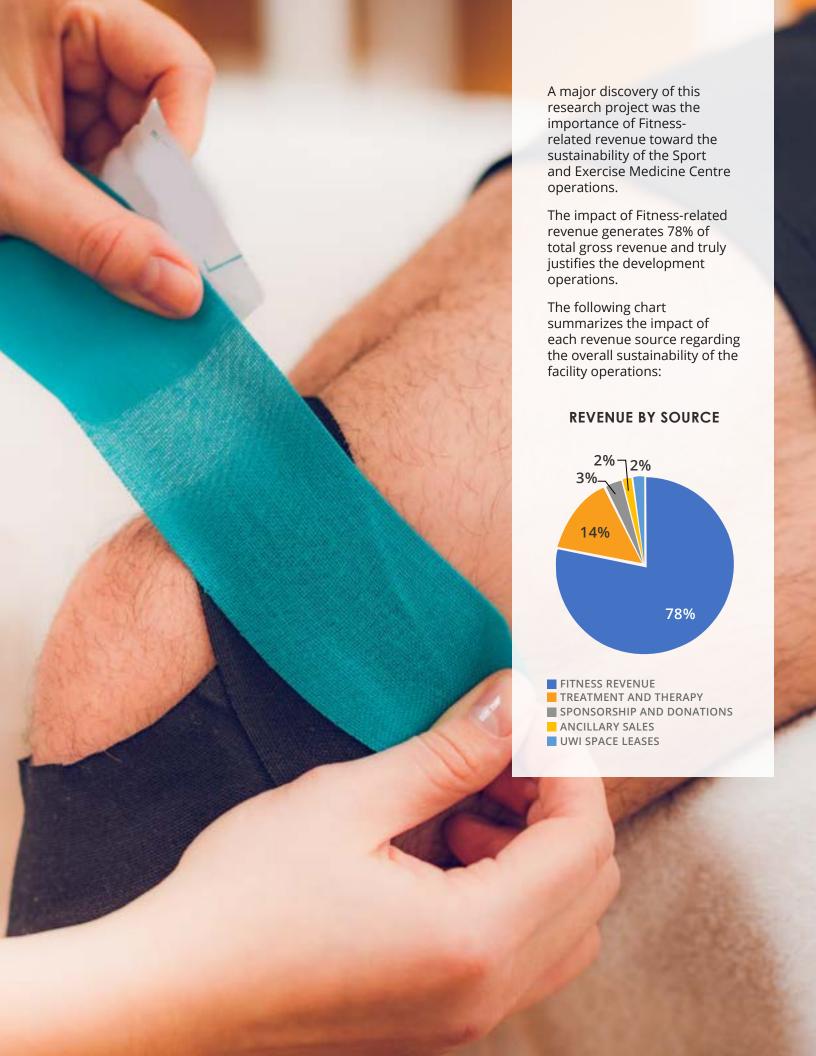


Sport and Exercise Medicine Centre Operational Model			
Fitness Memberships	Treatment and Therapy	Sponsorships and Donations	Ancillary Sales
Student Memberships	Hourly Treatment	Sponsors	Sport Equipment Sales
Staff Memberships	Assessment	Donors	Sport Merchandise Sales
Public Membership	Testing	Advertising	Braces, Supports, Etc.
Sport Organization Memberships	Nutrition		
	Sport Psychology		

RECOMMENDED BUSINESS MODEL

Based on global research and best practices the following operational business model has been developed as a initial model for the proposed Sport and Exercise Medicine Centre at the University of the West Indies.

	Annual Budget Target	Comments
Fitness Revenue		
Students	\$760,000.00	Include Fitness Centre in Tuition (\$40/yr x 19,000 Enrolled)
Staff	\$84,000.00	Include All Staff (\$240 (Half Annual Public Fee) x 350 Staff)
Public	\$2,400,000.00	Annual Membership (\$480/yr) x 5,000
Sport Organization Membership	\$200,000.00	\$40 Annual Fee x 5,000 Members
Treatment and Therapy		
Hourly Treatment	\$627,264.00	6 Services an Hour, \$45 per Hour, 360 Per Year, 80% Use
Sponsorship and Donations		
Sponsors	\$100,000.00	One Naming Right Sponsor, Numerous Annual Partners
Donors	\$25,000.00	Ongoing Campaign Plus Naming Right Sponsor
Advertising	\$20,000.00	Annual Advertising in Space
Ancillary Sales		
Sport Equipment	\$25,000.00	
Sport Merchandise	\$20,000.00	
Braces, Supports, Etc.	\$40,000.00	
UWI Space Leases		
Classroom and Research Space	\$100,000.00	20,000 Square Feet x\$5 per Square Foot Lease
Total Revenue	\$4,401,264.00	
Expenses		
Labour Cost	\$1,760,505.60	40% of Revenue
Utilities and Overhead	\$880,252.80	20% of Revenue
Cleaning and Maintenance	\$660,189.60	15% of Revenue
Annual Maintenance Budget	\$264,075.84	6% of Revenue
Capital Replacement Fund	\$652,101.12	8% of Revenue
Total Expense	\$3,917,124.96	
Annual Projected Earnings	\$484,139.04	
Margin of Sale	11%	



11.0 BY THE NUMBERS

The following segment of this report summarizes the key findings of this report in a meaningful way for the reader and is intended to support a quick reference guide to the core findings and discoveries that will assist the ownership group and key stakeholders with the advancement of the proposed Sport and Exercise Medicine Centre.

11.1 POPULATION DEMOGRAPHIC FINDINGS

The Kingston area offers the greatest population density to support the proposed development. In a Hub and Spoke model, Kingston should be the primary site with satellite opportunities being created when time, demand, and budget exists. Satellite developments should be considered in Portmore and Montego Bay.

Designation by Population

Hub	Satellite
Kingston – 937,700	Portmore – 102,861
	Montego Bay – 82,867

Alignment with Strategic Vision:

Vision 2030 Jamaica – National Development Plan (2009) offers a number of aligned strategic principals with the proposed development. This strategic framework should be leveraged to support political, public, and funding support to advance the proposed development.

 National Outcome #2 proposes the advancement of World-Class Education and Training. The proposed development will not only offer world class opportunities for quality of life and healthy lifestyles but will additionally support the advancement and competitiveness of the University of the West Indies as a powerful global post secondary leader. National Outcome #12 proposes competitive industry structure (sport) and aligns perfectly with the proposed development of a Sport and Exercise Medicine Centre at the University of the West Indies. It enhances the business of sport and the opportunities around global and regional hosting as well as economic opportunities in sport tourism, and advances research and the holistic development of amateur and professional athletes.

11.2 AN EXISTING MARKET

There are a number of existing providers in the Sport and Exercise Medicine marketplace across the country of Jamaica. The traditional operating hours of these facilities are 8 hours per day, traditionally during regular business operation hours. The hourly treatment rates are comparable to other jurisdictions across the globe, which suggests that a viable business model can exist in the current market.

Hourly Treatment Rate High (USD) \$91.00

Hourly Treatment Rate Low (USD) \$26.90

The inclusion of a Fitness Centre is considered a critical element for the sustainability of the proposed venue and, as such, is recommended for development. There are a number of successful Fitness Centers across Jamaica and in the local market, which suggests that there is business viability in the space. Additionally, the development of a Fitness Facility at the University of the West Indies is a priority item to support student experience and the competitiveness of the Faculty of Sport and varsity programs.

Monthly Membership Fee High (USD) \$49.00

Monthly Membership Fee Low (USD) \$37.00

11.3 A CONCEPT DEVELOPMENT

A standard element of post secondary facility development is the advancement of a Sport and Exercise Medicine Centre; this is of particular competitive importance when there is quality varsity sport, national training programs, and Faculties of Sport, Kinesiology, or Human Kinetics.

The development of a competitive facility at the University of the West Indies will therefore be essential to future global competitiveness.

In 2017, an original study was performed in examination of the proposed development, and the work performed within this document updates the prior work with a global review of market competition in the space.

The Original Plan (2017)			
Facility Size	25,000 Square Feet		
Facility Cost (USD)	\$10,460,000 (\$11,673,918 in 2021 value)		
Cost per Square Foot (USD)	\$418.40 (\$466.96 in 2021 value)		

This engagement performed a review of a number of global sports and exercise medicine centers that are currently operational and internationally competitive, both within and outside of university contexts.

The findings of this research suggests that — should the University of the West Indies desire a World-Class facility — there will be a need to include a fitness facility within the development and expand the proposed footprint. There is however, an opportunity to achieve a potentially more competitive rate per square foot than previously anticipated. Based on market research, the proposed development should consider the following framework to achieve this:

The Revised Plan (2021)			
Facility Size	70,000 Square Feet		
Facility Cost (USD)	(USD) \$27,055,612 (Current Market Value)		
Cost per Square Foot (USD)	\$387 (Current Market Value)		

The proposed development of a new and competitive facility should be considered within the Mona Bowl on the UWI Campus. There is sufficiant available land and an opportunity to integrate the new development to enhance the operational performance of the existing gymnasium sport courts, track and field facilities, football facilities, and cricket facilities. There is also an opportunity to offer benefit to the National

Football training facilities. Three site locations have been proposed within the scope of this report for consideration and future exploration (see Section 9 for details).

A Business Model that Works

A draft operational business model has been proposed within the framework of this report. It considers a revenue model that focuses on five core lines of business: Fitness Revenue; Treatment and Therapy; Sponsors and Donors; Ancillary Sales; and Lease space. The expense model for the facility applies a global standard based on revenue performance and considers core expenses as follows: labour cost; utilities and overhead; cleaning; and maintenance. It also includes lifecycle management investment for annual facility maintenance and capital replacement. This operational model delivers an 11% margin on sale.

Revenue	\$4,401,264 USD
Expense	\$3,917,124 USD
Earnings	\$484,139 USD
Margin of Sale	11%

A New Destination

If developed, the proposed Sport and Exercise Medicine Centre will offer a valuable destination on the Mona Campus. This destination will support improved recruitment, quality of life, student experience, athlete performance, and a number of additional impressions on the campus to enhance sponsorship and advertising opportunities.

Modeling suggests the following annual visitations based on the successful delivery of the proposed facility. These visits provide an exceptional opportunity for placement and a possible catalyst or instigator facility for future development and growth.

Location	Visits			
Fitness Centre				
Students	304,000.00			
Staff	10,500.00			
Public	275,000.00			
Athletes	325,000.00			
Treatment				
Hourly Visits	13,824.00			
Faculty of Sport	17,500.00			
Sport Tourism	50,000.00			
Total Visitation	995,824.00			

12.0 OVERVIEW OF OPERATING MODELS

Note: Content for discussion after review.



13.0 FINANCING OPTIONS

13.1 OVERVIEW OF FINANCING

When considering the operating mode for the proposed Sport and Exercise Medicine Centre, it is important to consider a number of key foundational elements.

The Capital Development costs propose a 70,000 square foot facility (based on market research) as well as the importance of including a Fitness Facility within this footprint for cost recovery. This development at market rate is anticipated to cost \$27,055,612 USD, which considerably exceeds the original proposed size and budget. Acknowledging this difference, it is important to recognize that this facility size and investment provides a market-competitive facility for a post-secondary institution.

The investment considers the ability to source funding from Major Events, Government, investment by the University of the West Indies, and private financing. Should all investment opportunities be realized, there will remain a need for debt servicing in the amount of \$5,411,122 over the financing term.

Based on a variety of financing arrangements (and without an understanding of the borrowing abilities of the University of the West Indies or the financing rates) the following tables suggest financial models that may either work or present risk.

The annual operational earnings from the proposed facility suggests approximately \$485,000 in annual earnings potential. There is an additional \$616,000 within the proposed budget to support annual maintenance and Capital replacement and, as such, there may be some flexibility. However, this will come with long term capital replacement and ongoing maintenance risk.

The following tables suggest the cost of borrow associated with the proposed facility:

Debt and Borrowing: \$5,411,122.00

Annual Earnings: \$484,139.04

Term	Rate	Monthly Payment	Annual Payment
10	3%	\$52,250.00	\$627,000.00
15	3%	\$37,368.00	\$448,416.00
25	3%	\$25,660.00	\$307,920.00
30	3%	\$22,813.00	\$273,756.00
40	3%	\$19,370.00	\$232,440.00

Term	Rate	Monthly Payment	Annual Payment
10	5%	\$57,393.00	\$688,716.00
15	5%	\$42,790.00	\$513,480.00
25	5%	\$36,632.00	\$439,584.00
30	5%	\$39,048.00	\$468,576.00
40	5%	\$26,092.00	\$313,104.00

Term	Rate	Monthly Payment	Annual Payment
10	10%	\$71,508.00	\$858,096.00
15	10%	\$58,148.00	\$697,776.00
25	10%	\$49,170.00	\$590,040.00
30	10%	\$47,486.00	\$569,832.00
40	10%	\$45,948.00	\$551,376.00

13.2 RECOMMENDED MODEL

Given the need to finance a portion of the development, there are a number of Operational Models that could be considered. However, given the financial earnings potential of the development, the recommended operating model suggests that the space is owned, operated and managed by the staff at the Faculty of Sport and the facility is owned by the University of the West Indies. Given the reputational position of UWI, self-ownership and management will have significant operational benefit. Most importantly — and given the importance of the operating revenue associated with the Fitness Centre if financing is required, the only option to service borrowing is that UWI manage and operate the facility.

In a scenario where there is debt on the development (as outlined) the financing will be dependent upon the revenue and earnings from the Fitness Centre. As such, it must be self-operated as a leasing scenario or it will not have the capacity to generate the necessary earnings to service the debt on the facility.

Based on the proposed operating model and the concept capital investment required to facilitate the development of the proposed facility, the goal should be to limit the debt on the development of the facility.

If there is an opportunity to secure funding from a variety of sources to manage the costs of construction, development, and/ or furniture, fixtures, and equipment, the operating model for the facility should support the short- and long-term management and maintenance of the facility and generate a value positive earnings operations for the University. If the cost of construction cannot be managed without debt, the focus on financing should be minimizing the cost of borrowing to a rate that preferably does not exceed 5% but must not exceed 10%. In any financing arrangement, the term will be critical and, should borrowing be required, the term of financing should be extended to a maximum potential with the flexibility to apply lump sum annual payments (should a surplus of funding exist).



14.0 CONCLUSION

Note: Content for discussion after review.







COMPARABLE FACILITY ASSESSMENT

National Policies Comparison.

Canada - Jamaica Comparison

The UWI Mona Campus has a goal of becoming a world leading, high-performance sport system that is values based while producing sustainable and improved performances at Olympic, Paralympic and other major multi-sport games and identified University, National, and World Championships. The vision will be to create a dynamic and innovative culture that promotes and celebrates participation, excellence and healthy recovery through high performance sport.

Within Federal Canadian Sport Policy, high-performance sporting goals state that "Canadians are systematically achieving world-class results at the highest levels of international competition through fair and ethical means". The purpose of the Canadian High Performance Sport Strategy is to articulate a desired state for the designated strategic areas of focus and their respective outcomes. The strategy is built around three visionary pillars: People, System and Culture.

People

Athletes, coaches and system experts are holistically supported and have the tools to systematically improve to achieve world class results in a values-based high performance sport system



system

The high-performance sport system is principled, nimble, and innovates to enhance high performance opportunities and outcomes



of bigh po

A culture of high performance exists where integrity, trust and inclusivity foster collaboration across the system in both official languages as appropriate to reduce linguistic barriers

The Canadian Strategy for Sport Excellence is very similar to the key goals from the Jamaica National Sport Policy (JNSP) that are relevant to sport development objectives and the endeavours of Higher Education Institutions: Athletes' Development & Well-Being, and Physical Fitness & Healthy lifestyle.

JNSP main benefits include:

Athletes at all levels among others, will have access to a comprehensive sport medicine and science programme to ensure that injury duration and severity are minimized;

Exercise and physical activities will be an important vehicle for healthy lifestyle advocacy and delivery of appropriate sport medical services to the people of Jamaica;

Academics and researchers will have top of the line equipment with improved facilities for the application of science and medicine for our sports development;

Knowledge transfer activities for the benefit of coaches and other technical personnel.



Comparable Markets.

OCL sought out best practices from Sports Exercise & Medicine Facilities that have comparable infrastructure and amenities for high-performance athletics in both Canadian Universities (U Sports) and International facilities. This research provided valuable insight and is important within the context of a broader identification of potential options for future strategic plans and infrastructure modeling. One valuable takeaway from this process is that each facility is unique, as is every model and market.

To begin, OCL completed a review of Canadian U Sports Facilities that were built or had infrastructure upgrades within the last 10 years. The most relevant and comparable facilities shortlisted for further review include:

- University of Toronto (Toronto, Ontario) Goldring Centre for High Performance Sport
- Univerity of British Columbia (Vancouver, British Columbia) Allan McGavin Sports Medicine Clinic
- University of Alberta (Edmonton, Alberta) Glen Sather Sports Medicine Clinic
- Carleton University (Ottawa, Ontario) Carleton Sports Medicine Center
- McMaster University (Hamilton, Ontario) David Braley Sport Medicine and Rehabilitation Centre
- University of New Brunswick (Fredericton and Saint John, New Brunswick) Richard J. Currie Centre

Next, OCL reviewed comparable International facilities including:

- Minneapolis, Minnesota, USA Mayo Clinic Orthopedics and Sports Medicine
- University of Bath (Bath, United Kingdom) Team Bath Physio & Sports Science Centre
- University of Pretoria (Pretoria, South Africa) The High Performance Centre (HPC)
- Loughborough University (Loughborough, England) National Centre for Sport and Exercise Medicine

While each site has a unique development philosophy, and specific lessons could be learned from each site, there were a number of common themes that should be considered:

Long-term Approach

A long-term approach that considers decades rather than years of strategic excellence and world-renowned sport science technologies.

Developmental Strategy

A development strategy that considers continuous growth, expansion and excellence in sport

Leadership

Exceptional leadership from University Administration to continue to place emphasis on the need for continual funding and impact in the market.





University of Toronto Toronto, Ontario

Goldring Centre for High Performance Sport







University of Toronto.

The Goldring Centre for High Performance Sport, part of the University of Toronto Varsity Centre athletic facilities campus, brings together top researchers, graduate students, sport Scientists, athletic therapists, coaches, and athletes to create Canada's newest leading Sport Institute. The Centre forms a new and vital hub for sports, research and therapy, serving both varsity athletes and the wider campus community. The facility features a 2,000-seat competition venue for basketball and volleyball, large strength and conditioning center, sports medicine clinic, and research laboratories. The core of the program is a pair of very large rooms: the field house and the strength and conditioning center. This facility is considered to be one of the top international sports medicine and training facilities in the world winning many architectural design awards.

Within the Centre is the David L. MacIntosh Sport Medicine Clinic which has been treating sport-related injuries in the University of Toronto community for over 78 years. Services are available to anyone with sport or exercise-related injuries or inquiries. The clinic staff includes certified athletic therapists, sport and manual physiotherapists, sport massage therapists, sport physicians, an orthopedic surgeon, and a certified pedorthist. This is also a teaching clinic for professional staff and patients may be seen by an undergraduate or post-graduate student in addition to the supervising clinician.

Construction Costs - The total cost of the Goldring Centre for High Performance Sport is \$59.2M CAD.

Year Opened - Construction completion in 2014.

Size/Capacity - Six stories total (2 are below grade); 140,000 square feet.

Hours of Operation - Gym times: Monday to Friday: 9:00 am - 11:45 am; 4:00 pm - 9:00 pm, or by appointment

Daily Rates – Gym membership: Students \$539/yr, Alumni & Staff \$715/yr; Community \$996/yr; Seniors \$539/yr. Other services pay per use. Medical Clinic: Students \$80/app.; Private Patients \$120/app.; Therapy \$80/app.

Major Sponsors – Canadian Olympic Committee and Athletics Canada, Ontario Ministry of Training, Colleges and Universities, private donors.

User Groups – The Centre has been designed to welcome everyone from the university and local community interested in physical activity and sport - from students, faculty and staff looking for a great place to work out, to intercollegiate, intramural and international-level student-athletes coming to train, practice and compete. The Centre and Clinic have also supported the Toronto Maple Leafs, Toronto Raptors, the Toronto Argonauts, and the Toronto FC. The Goldring Centre is also used for academic programs, children's programs and camps. Student and community groups can rent space within the facility for special events. The Centre has acted as host for many varsity, national and international competitions including the Toronto 2015 Pan Am Games.



University of Toronto.

Services -The center houses two practice courts and a feature court built to the Federal International Basketball's (FIBA) and Federal International Volleyball's (FIVB), standards, as well as support facilities for the courts, including change rooms, a first aid therapy and taping room, coach's offices and public washrooms. The facility also contains a tiered strength and conditioning space, the sports science and sports medicine facilities and additional offices and meeting rooms.

Services include:

- Multi-storey sport and exercise facility housing a 2,000-seat, internationallyrated field house for basketball, volleyball and other court sports
- \checkmark A state-of-the-art strength and conditioning center
- ✓ Fitness studio
 Yoga, dance and other indoor movement activities
- ✓ Sport medicine clinic✓ Research and teaching laboratories
- ✓ Concussion Clinic
- ✓ Concussion Clinic
 ✓ Clinical Therapy Services
- ✓ Intercollegiate Team Care
- ✓ Practical and Clinical Supervision of Students

Equipment & Amenities - The building includes assessment and rehabilitation space, labs, fitness testing areas.

Amenities include:

- ✓ Gymnasium
- ✓ Sport Courts
- ✓ Vera Climbers
- ✓ Bod Pods (measures body composition and evaluates users for signs of overtraining, effectiveness of a workout program, likelihood of injury and nutritional planning)
- ✓ Turf flooring
- ✓ Rehab/Recovery
- ✓ Sports Physiology
- ✓ Investigation✓ Biomechanics
- ✓ Fitness Testing
- ✓ Massage Therapy
- ✓ Assessment rooms











University of British Columbia Vancouver, B.C.

Allan McGavin Sports Medicine Clinic







University of British Columbia.

The Allan McGavin Sports Medicine Centre (AMSMC) is a multidisciplinary, on-campus, exercise and Sports Medicine Centre that is committed to education, research and service and the scientific pursuit of knowledge to create better health and human performance in sport.

Construction Costs - \$11.635 M CAD.

Year Opened - Founded in 1981 at the University of British Columbia (UBC), the AMSMC was a pioneer in the multi-disciplinary treatment of sports injuries. The facility was upgraded in 2018 and is now housed in the Chan Gunn Pavilion at UBC.

Size/Capacity - The two-story, 20,000-square-foot pavilion includes increased capacity and enhanced space for the AMSMC including Primary Care Sport Medicine, Physiotherapy and Orthopedics.

 $\textbf{Hours of Operation} - 6:00 \ \text{am} - 10:00 \ \text{pm for associated Gym facility membership.} \ Physical therapy services 8:00 \ \text{am} - 5:00 \ \text{pm or by appointment.}$

Daily Rates - \$99.99 monthly for public gym/trainer use, \$49.99 for student use. All costs sponsored for high performance athletes by Federal Government or University Services. Medical services have costs to be determined based on diagnosis.

Major Sponsors - BC Health, Ledcor, private donations.

User Groups – High Performance Athletes, Varsity Athletes, Students, General Public. Medical professionals treat approximately 3,500 patients a month. Priority support is in place for high performance athletes of British Columbia and to members of 16 national teams through cooperation with the PacificSport Group and SportMedBC. Clinical support is provided to the Vancouver Canucks, the BC Lions, and in the past, has been given to the Vancouver Grizzlies of the National Basketball Association and the Vancouver Canadians Baseball Club.



University of British Columbia.

Services - Sport & Exercise Medicine is the backbone of the clinical services provided at AMSMC, focusing on the diagnosis and management of exercise-related injury or illness. This includes physical examination and appropriate investigations in order to arrive at a working diagnosis including activity modification, rehabilitation exercises, optimizing equipment/footwear, medications, braces/orthotics, and injections. Many of the AMSMC physicians manage the care of athletes on professional or elite national/provincial teams and several have worked at multiple "major games" including the Olympics, Commonwealth Games, BC Summer Games, and Canada games. A core group are involved in the day-to-day care of the UBC Thunderbirds – UBC's varsity athletic teams.

Services include:

- ✓ Active Rehabilitation
- √ Sports Physiotherapy
- ✓ Patient Education
- ✓ Personal Training/Nutrition
- ✓ Run Club
- √ Pre/Post Surgical Care
- ✓ Acupuncture
- ✓ Intramuscular Stimulation (IMS)
- ✓ Taping
- √ Massage Therapy
- ✓ Functional Movement Screen (FMS)
- ✓ Bike Fitting
- √ Manual Physiotherapy
- ✓ Running Assessment
- ✓ Physiotherapy
- ✓ Dance Assessment

Equipment & Amenities - The building includes rehabilitation space, gym, and labs for research into movement mechanisms, injury recovery strategies and optimal exercise training for high performance athletes.

Amenities include:

- ✓ Gym
- ✓ Pool
- ✓ Rehab
- ✓ Recovery
- ✓ Sports Physiology
- ✓ Investigation
- ✓ Biomechanics
- ✓ Fitness Testing
- Some Performance services are provided in alternate locations.











University of Alberta Edmonton, Alberta

Glen Sather Sports Medicine Clinic

Location: Level 2, Kaye Edmonton Clinic



University Alberta.

The University of Alberta's Glen Sather Sports Medicine Clinic (GSSMC) is a multi-faceted facility consisting of an interdisciplinary team of physicians, surgeons, physical therapists, kinesiologists, massage therapists and orthotists who specialize in the assessment, diagnosis, treatment and rehabilitation of musculoskeletal, sport and exercise-related concerns. The Clinic is a center of the Faculty of Rehabilitation Medicine at the University of Alberta and is also a teaching clinic for students and clinicians from affiliated university faculties including Rehabilitation Medicine, Kinesiology, Sport and Recreation and Medicine & Dentistry.

Construction Costs - The total cost of the Kaye Edmonton Clinic is \$484 M CAD, however, the Glen Sather Sports Medicine Clinic only takes up one floor within this expansive medical building.

Year Opened - Plans to introduce a sports medicine and exercise clinic at the University of Alberta began in 1986. The official opening of the Glen Sather Sports Medicine Clinic was October 11, 1988 with infrastructure and equipment upgrades taking place every 10 years. In 2012, the clinic moved to the more spacious quarters in the Kaye Edmonton Clinic, which is located in the heart of the U of A's health sciences facilities.

Size/Capacity - Space is allocated to only level 2 of the Kaye Edmonton Clinic which has a total building size of 62,300 square meters.

Hours of Operation - Monday through Friday from 7:30 am. to 4:00 pm or by appointment.

Daily Rates – All services are pay per use and dependent on diagnosis with exception of massage therapy pricing ranging from \$50-125 CAD.

Major Sponsors - Alberta Health, private donors.

User Groups – Priority is given to high performance and professional athletes including the NHL's Edmonton Oilers, national teams and varsity athletes. The clinic also supports students, recreational athletes and the general public.



University of Alberta.

Services - The clinic provides innovative, inter-disciplinary, client-centered clinical care for sports medicine and musculoskeletal disorders, including sports medicine and exercise, orthopedic care, sports therapy and musculoskeletal rehabilitation. In addition, the clinic provides education for undergraduate and graduate students, residents, fellows and specialists from the Faculties of Medicine and Dentistry, Physical Education and Recreation, and Rehabilitation.

Services include:

- ✓ Acute Youth Injury Clinic
- ✓ Telerehabilitation (Virtual) Physiotherapy
- ✓ Physiotherapy
- ✓ Sport & Exercise Medicine
- ✓ Massage Therapy
- ✓ Osteoarthritis Services
- ✓ Performance Rehabilitation
- ✓ Functional Agility and Strength Training (FAST) Knee Program
- ✓ Orthotic Services
- ✓ Orthopedic Consultation
- ✓ Canada Osteoarthritis Treatment Classes
- ✓ Complex Concussion Clinic
- ✓ 3D Gait Analysis
- ✓ Performing Arts Clinic
- ✓ Platelet-Rich Plasma Injections (PRP)

Equipment & Amenities - The building includes assessment and rehabilitation space, labs, fitness testing areas.

Amenities include:

- ✓ Rehab
- ✓ Recovery
- ✓ Sports Physiology
- ✓ Investigation
- ✓ Biomechanics
- ✓ Fitness Testing✓ Massage Therapy
- √ Assessment rooms
- Performance services are provided in a more traditional open gym setting at an alternate location, Foote Field, with a wide selection of free weights, kettlebells and open space.









Carleton University Ottawa, Ontario

Carleton Sports Medicine Center







Carleton University.

The University of Carleton Sport Medicine Clinic was first established in 1972 by Dr. Don Johnson. At this time, the Clinic was one of the first clinics in Canada to provide diagnosis and treatment for the injured athlete and the active community. Today, after more than 40 years of patient care, education, and clinical research, the clinic has successfully expanded on campus into its new home, the Ice House Hockey Arena. The goal of the Clinic is to be an integral part of each patient's rehabilitation team, with a focus on comprehensive care for sports injuries. Staffing includes physiotherapists, massage therapists, athletic therapists and strength and conditioning specialists who work to develop a collaborative approach to ensure that recovery and training work simultaneously in order to strengthen the entire body, develop total-body strength and balance assisting rehab and injury prevention.

Construction Costs – N/A, Clinic is under private ownership.

Year Opened -The Sports Medicine Clinic at Carleton University officially kicked off its expansive new space in 2016.

Size/Capacity – 6,500 square foot center in the Ice House facilities.

Hours of Operation - Monday through Friday from 8:00 am. to 4:00 pm or by appointment. Every Monday a Walk-In Clinic is open from 5:00 pm - 8:00 pm.

Daily Rates – Assessment \$115; Treatment \$95; Extended Treatment \$95. Other treatment costs are based on assessment.

Major Sponsors – Carleton University.

User Groups – Priority is given to high performance and professional athletes, national teams and varsity athletes. The clinic also supports students, recreational athletes and the general public. The Clinic is a physiotherapy provider for patients rehabilitating from orthopedic surgery and for patients who wish to return to athletic competition. Recognized as a National leader in education and professional development, the Clinic provides opportunities for medical and physiotherapy residence students, provides professional development courses and organizes/hosts monthly sport medicine rounds.



Carleton University.

Services - Central to the Clinic's philosophy is the prevention of sports injuries through the promotion of good physical conditioning, hazard free facilities, appropriate protective equipment, safe coaching techniques and fair play. Carleton Sport Medicine is also recognized Internationally for $% \left\{ 1\right\} =\left\{ 1\right\} =$ involvement in diagnosing, surgical intervention and physiotherapy of knee ACL injuries and return to play testing.

Services include:

- ✓ Athletic Therapy
- ✓ Physiotherapy
- ✓ Strength & Conditioning
- ✓ Massage Therapy
- ✓ Orthopedic Surgery Consultations ✓ Pelvic Health
- ✓ Mental Examination
- ✓ Chiropody
- ✓ Return to Play Testing
- ✓ Baseline Concussion Testing
- ✓ Bracing
- √ Compartment Pressure Testing
- ✓ Concussion Care
- ✓ Cortisone Injections
- ✓ Nutrition
- ✓ Orthopedic Surgery Consultations
- ✓ Platelet Rich Plasma
- ✓ Primary Care Sports Medicine
- ✓ Prolotherapy ✓ Shockwave Treatment
- ✓ Ultrasound Guided Injections
- √ Viscosupplementation
- ✓ Walk In Clinic

Equipment & Amenities - The building includes assessment and rehabilitation space, labs, fitness testing areas.

Amenities include:

- ✓ Rehab
- ✓ Recovery
- ✓ Sports Physiology
- ✓ Investigation
- ✓ Biomechanics
- ✓ Fitness Testing
- ✓ Massage Therapy ✓ Assessment rooms
- Performance services may be set at an alternate location dependent on







McMaster University Hamilton, Ontario

David Braley Sport Medicine & Rehabilitation Centre







McMaster University.

The David Braley Sport Medicine & Rehabilitation Centre is a world class facility located on the McMaster University campus. This multisport facility features a high-performance fitness center, which accommodates a double gymnasium equipped with 1,200 retractable seats suitable for international competition in volleyball and basketball, a four-lane 200-metre track, a four-lane 60-metre sprint track, rock climbing wall, Olympic weightlifting equipment, four internationally sized squash courts, sports medicine facilities, a varsity athlete high-performance fitness assessment lab and training center, multipurpose studios, varsity consultation rooms, trainers offices, and varsity and special event lounges.

Construction Costs – The cost to build the facility was approximately \$31 M CAD, with \$20 M originating from the University's student unions.

Year Opened - The facility was opened in 2007 with upgrades and the addition of the indoor track in 2020.

Size/Capacity - 132,000 sq ft.

Hours of Operation - Monday through Thursday from 8:00 am. to 8:00 pm or by appointment. Friday 8:00 am to 3:30 pm.

Daily Rates – Student Physio Assessment \$80, Treatment \$65; Public Physio Assessment \$90, Treatment \$75. Other treatment rates vary. McMaster students pay a year-round membership fee to support the facility as part of their mandatory student union fees. Community Gym memberships \$460/yr CAD.

Major Sponsors - Royal Bank of Canada.

User Groups – The Sport Medicine Centre is open to McMaster athletes, students, faculty, staff, and the Greater Hamilton Area community.

Priority is given to high performance and professional athletes, national teams and varsity athletes. Other professional sport affiliations include the Canadian Football league Hamilton Tiger Cats, Hamilton Bulldogs (ice hockey), and the Toronto Rock (lacrosse).



McMaster University.

Services - The David Braley Sport Medicine & Rehabilitation Centre offers a wide variety of physician, sport medicine and rehabilitation services as well as general gym membership. The Centre combines extensive clinical expertise and advanced medical technology encouraging a collaborative approach to the prevention, assessment, treatment and rehabilitation of sports injuries.

Services include:

- ✓ Brace Store
 - Custom Bracing
- ✓ Sports Medicine Physicians
- ✓ Orthopedic Surgeons✓ Musculoskeletal Ultrasound Diagnostic & Interventional
- ✓ Physiotherapy
- ✓ Massage Therapy
- ✓ Chiropractic and Active Release Therapy
- ✓ Osteopathy
- ✓ Registered Dietitian Services
- ✓ Custom Orthotics
- ✓ Concussion Management Program
- ✓ Platelet-rich plasma injections (PRP)
- ✓ Tendon Fenestration
- ✓ Prolotherapy
- ✓ Steroid Injection
- √ Viscosupplementation
- ✓ Peripheral Nerve Hydrodissection
- ✓ Radiofrequency Ablation

Equipment & Amenities - The building includes assessment and rehabilitation space, labs, fitness testing areas.

Amenities include

- √ Gymnasium
- ✓ Sport Courts
- ✓ Indoor Track
 ✓ Rehab/Recovery
- ✓ Sports Physiology
- ✓ Sports Physiology
 ✓ Investigation
- ✓ Biomechanics
- ✓ Fitness Testing
- ✓ Massage Therapy✓ Assessment rooms
- ✓ Hydrotherapy









University of New Brunswick Fredericton and Saint John, New Brunswick

Richard J. Currie Centre







University of New Brunswick.

The Richard J. Currie Center has been designed to address the integrated wellness needs of the University of New Brunswick (UNB) and the greater Fredericton community. The Center provides facilities for fitness, recreation and high-performance athletics as well as new space for community research activities and services. The Center contains three full-sized gyms, two of which are recreational, the third being a high-performance gym for varsity athletes. Key among the multidisciplinary services is the world-class Human Performance Laboratory which is situated in the heart of the building, adjacent to the walking/jogging track. The focus of the laboratory is the analysis of body motion and its relation to health, performance and function.

Construction Costs – The cost to build the Center was approximately \$62 M CAD.

Year Opened – The Center was opened on Oct. 7, 2011.

Size/Capacity - Five-story's and 139,000 sq ft.

Hours of Operation - Monday through Friday from 6:00 am to 9:30 pm. Saturday & Sunday from 8:30 am to 7:00 pm.

Daily Rates – UNB full time students pay a year-round membership fee to support the facility as part of their mandatory student union fees. Base gym memberships for the community are \$492 CAD per year. Aquatics membership is \$235 CAD per year. Medical services have costs to be determined based on diagnosis.

Major Sponsors – Currie Center is named after UNB Chancellor, Dr. Currie, a UNB alumnus who donated more than \$20 million to support the construction. The provincial government supported with \$10.3 M and the Federal government provided \$8 M for the construction of the Human Performance Laboratory. Almost 700 other alumnus and community members have also donated to the Currie Center through the University's 'Supporter Program'. For a \$1,000 donation, you can name a seat and own a part of UNB's history. There are also other opportunities such as naming a locker room, strength center, cardio center as well as a naming a basketball or volleyball net.

User Groups – Recreation and fitness spaces are available to students, faculty, staff, alumni and members of the greater Fredericton community.



University of New Brunswick.

Services - The Human Performance Laboratory is the only one in Canada that has a jogging track passing through it and uses the world's first 16megapixel motion capture system by Vicon. This system and higherresolution cameras enable researchers to model the body more accurately and gain an improved understanding of normal and pathological motion.

Services include:

- ✓ Biomechanics
- √ Strength training
- ✓ Physical Disabilities
- ✓ Fitness and Performance Analysis
- ✓ Human Motion
- √ Rehabilitation
- ✓ Ergonomic Assessment
- ✓ Clinical and Performance Analysis
- ✓ Three-Dimensional Gait Analysis for Foot/Ankle
- ✓ Orthopaedic Surgery
- ✓ High Density Electromyography (EMG) Analysis for Neuromuscular Function

Specialized Equipment:

- ✓ 12 Vicon Nexus T160 cameras
- ✓ Zerowire EMG system
- ✓ Delsys Trigno wireless 8ch EMG
- √ Noraxon wireless system
- ✓ Cybex isokinetic dynamometer
- ✓ XSensor pressure imaging system
- ✓ Kistler force plates
- ✓ BalanceQuest (balance tracking, IScan 3D pupil tracking system)

Equipment & Amenities - The building includes assessment and rehabilitation space, labs, fitness testing areas.

Amenities include:

- √ Gymnasium
- ✓ Sport Courts
- √ Rehab/Recovery
- ✓ Sports Physiology
- ✓ Investigation
- ✓ Biomechanics
- √ Fitness Testing
- ✓ Massage Therapy
- ✓ Assessment rooms
- ✓ Pool including Hydrotherapy featuring six lanes and a diving tank
- ✓ Eleiko Olympic Weightlifting Competition sets
- ✓ Benches, weights, curl bars, plyometric boxes, bands, mats, foam rollers, etc.
- ✓ Cardio equipment
- ✓ Boulder-dedicated climbing wall
- ✓ Squash courts





Championship Hosting.

U Sports Canada: Minimum Medical Standards for National Championship Event Hosting

All competing institutions must have the following services available to the athletes competing in a U SPORTS Championship. Each institution may determine how the care is delivered/accessed by athletes, but each component should be part of the institution's medical portfolio.

Medical Professionals

Overview of Athletics Department Medical Team

- Physician, Medical Institution
- Physicians, Match Day (collision/combative sports only)
- Head Therapist
- · Medical team representatives

Allied Health Resources

- · Certified Athletic Therapist and/or Licensed Physiotherapist
- Massage Therapist
- Chiropractor
- Dentist

On-Site Medical Coverage and Skill Requirements for Competition

Each sport has different risk factors associated with training and competition. Consequently, sports will be classed as Collision/Combative, Contact, and Non-Contact. Competition medical staffing and equipment needs will differ with each sport classification. Medical skill sets are required to be available on the sideline during competition.





Championship Hosting.

U Sports Canada: Minimum Medical Standards for National Championship Event Hosting

General Equipment Requirements

Certain equipment is to be on hand at all competitions. It is the responsibility of the host to have the following medical equipment on site and operational.

All events will have the following at the playing facility:

- Automated External Defibrillator (AED)
- · Oxygen and delivery devices
- · Long and short limb splints/slings with appropriate strapping materials
- Crutches
- Blanket
- Ice and ice bags
- Water accessibility
- Biohazardous waste management agents and disposal devices
- Taping supplies & Adhesive spray
- · Assessment table
- · Team sports competitions—an assessment table will be provided at the venue for the visiting team
- · Tournament competitions all teams will have access to assessment tables to be used on a communal basis
- Sheltered or designated area that creates a working area to manage patient care and confidentiality issues
- Stretcher

Facilities

The following facility requirements are necessary for medical purposes for all sports:

- An identified space where medical staff can assess, discuss, and/or treat an athlete's injury in a confidential manner.
- For field sports, a small tent that can provide shelter and a barrier to identify a "no go" area for teammates and spectators.
- Male and female washrooms. For field events that lack dressing rooms close by, a porta-potty is required to be on site.
- · A private area for doping control.







Minneapolis, Minnesota USA

Mayo Clinic Orthopedics & Sports Medicine



Mayo Clinic Orthopedics & Sports Medicine.

The Mayo Clinic of Orthopedics & Sports Medicine is a global leader in surgical and non-surgical treatment of orthopedic injuries, sports and musculoskeletal injury prevention and rehabilitation, concussion research, orthobiologics, and diagnostic and interventional ultrasound. The team uses advanced motion analysis and strength equipment, specialized lifting platforms, and multiple playing surfaces—wood for basketball and volleyball, artificial grass for turf sports, synthetic ice for hockey—to help athletes from a range of sports achieve their peak performance level. The facility also houses EXOS Performance Training, with sports experts specializing in the training of professional and high-performance athletes.

Construction Costs - N/A

Year Opened - 2014

Size/Capacity - 100,000 sq ft building with four floors. Within the building there is a dedicated 22,000 sq ft sports medicine and rehabilitation center.

Hours of Operation - Clinic Hours: Monday - Friday 8:00am - 5:00pm. EXOS Performance Hours: Monday - Thursday: 6:00am - 7:00pm; Friday: 6:00am - 5:00pm.

Daily Rates - Costs vary on basis of diagnosis and treatment. EXOS Performance training cost starts at \$2600+ per week.

Major Sponsors - Minnesota Timberwolves, Minnesota Lynx (preferred status).

User Groups - The Clinic is open to high performance and professional athletes and the general public offering world class expertise in hockey, golf, baseball, softball, and running programs that focus on sport-specific motions and mechanics. It is the preferred medical provider for the Minnesota Timberwolves of the National Basketball League (NBA) and Minnesota Lynx of the Women's National Basketball League (WNBA).



Mayo Clinic Orthopedics & Sports Medicine.

Services - The Mayo Clinic Orthopedics & Sports Medicine offers clinical, high performance, and specialty services. The Mayo Clinic also conducts research in areas including biomechanics, cartilage restoration and performs clinical trials and other clinical research in virtually every area of musculoskeletal injury.

Clinical Services include:

- ✓ Orthopedic Surgery
- ✓ Physical Medicine & Rehabilitation
- ✓ Physical Therapy
- ✓ Athletic Training
- ✓ Diagnostic Imaging
- ✓ Regenerative Medicine √ Concussion Management

Performance Services include:

- ✓ Sports Fitness Programming ✓ EXOS Performance Training
- ✓ ACL Injury Risk Reduction
- ✓ Performance Nutrition Services
- ✓ Sport Expertise Baseball, Softball, Hockey, Running, Golf

- ✓ ACL Clinic
- √ Hip Preservation Clinic
- ✓ Knee Cartilage Clinic
- ✓ Knee Meniscus Clinic
- ✓ Knee Multi-Ligament Clinic ✓ Overhead Athlete Clinic
- ✓ Patella Instability Clinic
- ✓ Rotator Cuff Clinic
- ✓ Shoulder Instability Clinic

Equipment & Amenities - The building includes assessment and rehabilitation space, labs, fitness testing areas.

Amenities include

- ✓ Sport Courts
- √ Rehab/Recovery
- ✓ Sports Physiology
- ✓ Biomechanics ✓ Fitness Testing
- ✓ Advanced X-ray system that incorporates cone beam CT (and 3-D capabilities), fluoroscopy and fully robotic digital X-ray
- ✓ Dual-energy X-ray absorptiometry system to measure bone density and body composition
- ✓ Musculoskeletal ultrasound and regenerative medicine procedures
- ✓ Platelet-rich plasma and bone marrow aspirate concentrate injections
- \checkmark Minimally invasive ultrasound technology to treat chronic soft tissue and tendon damage
- ✓ Biomechanics and movement analysis laboratory for sports medicine









University of Bath Bath, United Kingdom

Team Bath Physio & Sports Science Centre



University of Bath.

The University of Bath has a dedicated team of highly qualified therapists and practitioners at the Team Bath Physio & Sport Science Centre providing a range of services to University of Bath student-athletes and National Sport Governing Bodies. All services and amenities are located on site at the Team Bath Sports Training Village (STV) and bookable through high performance coaches. The STV facilities include a gym, Olympic Legacy swimming pool, athletics track, pitches and courts. Upon opening the STV, the university has hosted several sport tourism events including the European Youth Summer Olympic Days, the European Modern Pentathlon Championships and the Fed Cup Europe/Africa Zone competition. The facilities at the University of Bath have also been used as a training base by many individual Olympians and Paralympians as well as a pre-competition training and acclimatization camp base for sports like rugby, netball, athletics, swimming, hockey, badminton and others.

Construction Costs – \$35 M \pm

Year Opened - 2002

Size/Capacity – Bath University sits on a 140 acre parcel of land.

 $\textbf{Hours of Operation} - \textbf{Monday through Friday 6:30 am} - 10:00 \ pm. \ Saturday \ and \ Sunday \ 8:00 \ am - 7:00 \ pm.$

Daily Rates - Fitness facilities: Public - \$550 £/yr. Students - \$299 £/yr. Staff- \$495 £/yr

Major Sponsors – Haines Watts, Rengen, Centurion, O'Neil's.

User Groups — Open to University students, staff and the public. In addition, professional, high performance and elite athletes use STV as their home training and rehabilitation base including England Rugby and Bath Rugby; Coventry City, Southampton, Bristol City and Bristol Rovers FC; England Netball; British Swimming and British Beach Volleyball.



University of Bath.

Services -Team Bath physiotherapists are highly qualified and experienced practitioners working with elite athletes across a diverse range of sports – including athletics, bobsleigh, football, gymnastics, hockey, luge, netball, skeleton, swimming and tennis – and with a host of governing bodies, as well as at major events such as $\,$ the World University Games.

Physio and Sport Science Services include:

- √ Physiotherapy
- ✓ Sports Massage
- ✓ Strength & Conditioning
- ✓ Sports Nutrition
- ✓ Sports Psychology
- ✓ Sport Science
- ✓ Fitness Testing



Equipment & Amenities - The building includes assessment and rehabilitation space, labs, fitness testing areas.

Amenities include:

- ✓ Sport Courts ✓ Pool
- ✓ Track
- ✓ Field/Pitches
- √ Rehab/Recovery
- ✓ Sports Physiology ✓ Biomechanics
- ✓ Fitness Testing
- ✓ Wattbikes
- ✓ Lifting platforms, squat racks, bench-press stations
- ✓ Gym rig (including four more lifting platforms)
- ✓ Eight rowing machines
- ✓ A large range of free weights going up to 65kg
- ✓ Resistance machines
- ✓ Free weights area
 ✓ Versa Climbers
- ✓ 20m sprint track with prowler, tyres and farmer's walk
- ✓ 23-bike spin studio with state-of-the-art Matrix CXP bikes
- ✓ A functional area featuring TRX battle ropes, rip trainers, slam balls
- ✓ Ski-Erg
- ✓ Rope grappler
 ✓ S Force and S Drive machines
- ✓ Cardio equipment
- ✓ Expansive mirrored multi-function studio with sprung wooden flooring







University of Pretoria Pretoria, South Africa

The High Performance Centre



University of Pretoria.

The High Performance Centre (HPC) is situated on the Hillcrest Sport Campus of the University of Pretoria and offers full hospitality services, access to world class sports facilities and sport science & medical services. The Sport, Exercise Medicine and Lifestyle Institute (SEMLI) located in the HPC main building, provides additional specialist services such as assessments, medical practitioners, physiotherapists, psychologists, nutritionists, bio-mechanists and more to patients, clients, visiting national and international athletes and the public. The vision of the SEMLI is to be an international leader in scientific, translational research that promotes health and well-being in the population through lifestyle interventions, reducing exercise-related injuries and medical complications, and promoting sporting excellence.

Construction Costs - N/A

Year Opened - HPC opened in 2002, SEMLI was established in 2015.

Size/Capacity – The HPC is situated on the University of Pretoria's sports grounds offering 76 hectares of sports dedicated land.

 $\textbf{Hours of Operation} - \textbf{Monday through Friday 7:00 am} - 9:00 \ pm. \ Saturday \ and \ Sunday \ 8:00 \ am - 7:00 \ pm.$

Daily Rates - HPC Membership included in Student Fees. SEMLI rates vary based on diagnosis.

Major Sponsors - N/A

User Groups – SEMLI was conceived not only to build on the on-field success of University of Pretoria athletes and clubs, but to support sports performance in athletes and exercise participation in the broader population. Many high performance, professional athletes including Olympians and Paralympians train at HPC and use SEMLI services.



University of Pretoria.

Services - SEMLI provides world class scientific and clinical service delivery through the use of modern technology. Fundamental to the success of the Institute is its unique multi-disciplinary approach to research and scientific/clinical services, allowing constant interaction and collaboration between expert specialists.

Physio and Sport Science Services include:

- √ Semli Sport & Exercise Medicine
- ✓ Semli Biokinetics
- ✓ Semli Sports Physiotherapy
- ✓ Semli Nutrition
- ✓ Semli Sport Science
- ✓ Semli Psychology
- \checkmark Sports injury treatment and rehabilitation
- $\checkmark \ \mathsf{Post-operative} \ \mathsf{orthopedic} \ \mathsf{rehabilitation}$
- √ Injury prevention strategies
- \checkmark Injury screening and risk factor identification
- ✓ Back & neck treatment
- √ Postural improvement

Equipment & Amenities - The building includes assessment and rehabilitation space, labs, fitness testing areas.

Amenities include: ✓ Sport Courts

- ✓ Sport Coul
- ✓ Pool ✓ Track
- ✓ Field/Pitches
- ✓ Rehab/Recovery
- ✓ Sports Physiology
- ✓ Biomechanics
- ✓ Fitness Testing











Loughborough University Loughborough, England

National Centre for Sport and Exercise Medicine



Loughborough University.

The National Centre for Sport and Exercise Medicine (NCSEM) is an Olympic legacy project delivering education, research and clinical services in sport, exercise and physical activity. It aims to apply world-class expertise to policies and practice that will benefit everyday people through to elite athletes. A newly built, dedicated space houses the East Midlands hub at Loughborough University which has been specifically designed to facilitate the translation of research into education, training and clinical services. The East Midlands hub is a partnership between the University of Leicester, Loughborough University, The University of Nottingham, University Hospitals of Leicester Trust and Nottingham University Hospitals Trust.

Construction Costs - N/A

Year Opened – 2012 Olympic Legacy project.

Size/Capacity - 64,583 sq ft

Hours of Operation – Monday through Friday 8:00 am – 6:00 pm.

Daily Rates – Treatment, Training and Therapy costs vary based on assessment.

Major Sponsors - Hospital Trusts, 2012 Olympic Legacy Project

User Groups – The NCSEM supports Loughborough University athletes and clubs, the general public, and many high-performance professional athletes including Olympians and Paralympians.



Loughborough University.

Services - The NCSEM brings together leading clinicians and healthcare professionals to provide a range of services for patients in the area of sport and exercise medicine, cardiac and pulmonary rehabilitation, orthopaedics, and exercise- and mindfulness-based cognitive therapy.

Services include:

- ✓ Sport & Exercise Medicine
- ✓ Biokinetics
- ✓ Sports Physiotherapy
- ✓ Nutrition
- ✓ Sport Science
- ✓ Psychology
- ✓ Orthopedics
- ✓ Rehabilitation and musculoskeletal health
- ✓ Mental health and wellbeing
- ✓ Supporting athlete performance and injury prevention
- Providing a focal point for advice and guidance on sport, exercise and physical activity, injury and rehabilitation.
- ✓ Providing a clinical service, including a state-of-the-art diagnostics facility.

Equipment & Amenities - The building includes assessment and rehabilitation space, labs, fitness testing areas.

Amenities include:

- ✓ Nine consulting rooms
- \checkmark Talking therapy room
- ✓ 3T MRI scanner
- ✓ Ultrasound
- ✓ X-ray
- ✓ DEXA scanner
- √ Functional analysis rehabilitation lab
- ✓ Computer assisted rehabilitation environment
- ✓ Medical physics and clinical engineering



Comparison Chart – U Sports.

Summary Comparison Chart

The following summary chart provides an overview of the U Sports Canada Facilities that were analyzed.

Location	University of British Columbia Vancouver, BC	University of Alberta Edmonton, Alberta	University of Toronto Toronto , Ontario	Carleton University Ottawa, Ontario	McMaster University Hamilton, Ontario	University of New Brunswick Fredericton & Saint John, New Brunswick
Year Opened	1981. Moved to new building in 2018	1986. Moved to new building in 2012	2014	1972. Moved to new building in 2016	2007	2011
Size/Capacity	20,000 sq ft	N/A	140,000 sq ft	6,500 sq ft	132,000 sq ft.	139,000 sq ft.
User Groups		High Performance, Varsity, Students, General Public				High Performance, Varsity, Students, General Public
Construction Costs (CAD)	\$11.635 M	N/A	\$59.2 M	N/A	\$31 M	\$62 M
Daily Rates (CAD)	\$49-\$99 Dependent on Treatment	\$50-\$125 Dependent on Treatment	Student Gym - \$539/yr Student Medical - \$80	Assessment \$115 Treatment \$95	Student Physio -\$80 Student Treatment \$65	Base gym \$492/yr Aquatics \$235/yr
Sponsors	✓	✓	✓	✓	✓	✓
Gym (open to public)	✓	х	✓	x	✓	✓
Rehab	✓	✓	✓	✓	✓	✓
Recovery	✓	✓	✓	✓	✓	✓
Sports Physiology	✓	✓	✓	✓	✓	✓
Investigation (MRI, ECG, etc)	✓	✓	✓	✓	✓	✓
Biomechanics	✓	✓	✓	✓	✓	✓
Fitness Testing	✓	✓	✓	√	✓	✓



Comparison Chart – International.

Summary Comparison Chart

The following summary chart provides an overview of the International facilities that were analyzed.

Location	Mayo Clinic Orthopedics and Sports Medicine	University of Bath	University of Pretoria	Loughborough University
Year Opened	2014	2002	HPC opened in 2002, SEMLI established in 2015.	2012 Olympic Legacy project
Size/Capacity	100,000 sq ft	140 acre parcel of land	HPC - 76 hectares	64,583 sq ft
User Groups	High Performance, Professional, General Public	High Performance, Professional, General Public, Students	High Performance, Professional, General Public, Students	High Performance, Professional, General Public, Students
Construction Costs	N/A	\$35 M £	N/A	N/A
Daily Rates	Dependent on Treatment EXOS Performance training \$2600+ per week	Fitness facilities: Public - \$550 £/yr. Students - \$299 £/yr. Staff- \$495 £/yr		Treatment, Training and Therapy costs vary based on assessment
Sponsors	✓	✓	N/A	✓
Gym (open to public)	✓	✓	✓	✓
Rehab	✓	✓	✓	✓
Recovery	✓	✓	✓	✓
Sports Physiology	✓	✓	✓	✓
Investigation (MRI, ECG, etc)	✓	✓	✓	✓
Biomechanics	✓	✓	✓	✓
Fitness Testing	✓	✓	✓	✓



Comparable Markets - Staffing.

Only those practitioners who meet the minimum qualifications and standards as set out by their respective professional organizations may be considered or hired professionally as a 'Sports Medicine Practitioner'. At minimum, staff had recognized diplomas, degrees or doctorates in supervisory or management positions.

The following staffing list was common amongst ALL comparable Facilities:





