

# **CSEG Foundation 2016 Annual Report**

## **Report from the Foundation Chair**

**Larry Herd, Chair and Director** 

Is that a glimmer of positivity I see on the horizon? Perhaps we're finally on the way out of our doldrums. This year the Foundation, as did many organizations in the Earth Sciences field, experienced the effects of the continued market downswing. Last year, the Foundation board approved a deficit budget year which would have the effect of reducing our overall asset account by roughly \$96,000. Due to the diligent efforts of our committees and volunteers, we expect the actual deficit to be less than \$50,000; an amount that is more than offset by interest and capital growth gains in the CSEGF endowment investments.

With our asset base being so strong, the Foundation Board of Directors specifically elected to continue funding the programs that the Foundation supports in spite of reduced income, so that our services to the public and specifically our students were not adversely affected. The Board will continue to monitor our financial situation and make prudent budgeting and fund allocation decisions while ensuring the continuation of our core programs. This will likely mean continued deficit budgeting for 2017 and perhaps the following year until the industry recovers from the current market troubles.

#### Who we are:

The CSEG Foundation is a *registered Canadian organization* – the charitable operating arm of the Canadian Society of Exploration Geophysicists. It was initiated in 2003-04 as the brainchild of several CSEG Past Presidents and received charitable status in 2006. It is managed by an independent Board of Directors, is closely aligned with the CSEG and is ultimately controlled by the CSEG. The **Mission** of the CSEGF is: *to encourage and support scientific, educational and charitable activities that benefit geophysicists through the solicitation of contributions aimed at promoting the development of geophysical knowledge, education and public awareness.* 

When the Foundation attends public events, career fairs, conferences for university students, high school science teachers and career counsellors, we strive to make the public more aware of geophysicists' contribution to the well-being of Canadian society. We convey to educators, students and the public our key role in not only the petroleum and mining industries but also in environmental engineering and the mapping of natural hazards. The scientists and support persons in the CSEG are ethical and conscientious stewards of the environment. They help to find and develop the resources essential to our daily lives.

The Foundation is a volunteer-run organization with only a small staffing overhead. Funding to support the Foundation's activities comes from generous donations from the public, members, corporate sponsors and the CSEG itself. Thanks to all who have contributed to this year's success through either your volunteer time or your financial support.



**2016 Board of Directors:** (names in **bold** are Directors; \*designates a CSEG past-President) Each Director's term is nominally three years and candidates may be nominated either by the membership or through a nominating committee.

Larry Herd\* (Chair), Annette Milbradt (Secretary)), Mike Clement (Treasurer), Susan Thomson (Assistant Treasurer) (Finance), Marian Hanna\* (CSEG President and Representative to the Foundation), Perry Kotkas\* (Past Chair and Special Projects Fund Chair), Doug Uffen\* (Outreach Chair), Doris Ross (Fund Development Chair), Neil Orr (Fund Development Vice-Chair), Craig Mosher (Scholarships Chair), Kun Guo (Travel Grants and Learning Subsidies Chair), Helen Isaac (Communications Chair), Neil Rutherford\* (Governance Chair), Brodie Sutherland (Earth Science for Society Chair), Don Lawton (CSEG Distinguished Lecturer Chair), Jim Racette (CSEG Managing Director), Alyssa Middleton (CSEG staff).

#### This year's highlights

- **Foundation assets** grew in excess of \$2.1M thanks to the generous donations of our members and corporate supporters and the income generated from our investments.
- For the 2017 budget year, the Foundation Board elected to allocate \$18,000 of the annual operating funds to specifically support programs for unemployed members under the Special Projects Fund committee chaired by Perry Kotkas.
- The sixth Earth Science for Society (ESfS) in March hosted over 750 members of the public, 300 Girl Guides and 1,500 junior high school students from more than 11 schools. In 2016, the CSEG Foundation "adopted" ESfS and became the long-term Parent Organization for the event. Brodie Sutherland chairs the ESfS committee and is looking forward to the next event on March 19-21, 2017.
- Outreach/University Student Outreach (USO)/Public Outreach continued to support students
  in universities and high schools, and to inform educators and the public at large about
  geophysics and the CSEG while maintaining a close eye on expenses. Doug Uffen chairs
  Outreach, the Foundation's largest committee, accounting for about half of our operating
  budget outside ESfS. Outreach sent representatives with informational displays and handouts to
  teachers' conferences, science and physics conferences, career counsellor's conferences, and
  career fairs. This year, Outreach plans to initiate a stronger national on-line presence by utilizing
  videos and webinars.
- We continue to support post-secondary education and students through our Scholarship committee's efforts chaired by Craig Mosher. From 42 applications for university scholarships, the Foundation awarded 12 scholarships to students at eight universities across Canada. In addition, one scholarship was awarded to a student at a technical institute, and three scholarships were awarded to high school students entering university in the fall of 2016.
- The Foundation provided **travel grants and learning subsidies** (Kun Guo, chair) to help Canadian undergraduate and post graduate students take courses and attend conferences, seminars and geoscience field trips. In 2016, \$8000 in funding was provided to assist over 25 recipients in support of travel or registration in events during the 2016 calendar year.



- Our 2016/2017 Distinguished Lecturer is Laurie Weston Bellman, who is giving her talk entitled "Data Interpretation and Integration from a Seismic Perspective – The Excitement of Innovation" to various different universities and institutions across Canada and into Alaska, wrapping up in April, 2017.
- The **Geophysical Industry Field Trip** (GIFT) took over 40 students from eight different universities to various host companies, where they learned about operations, processing, interpretation and other elements of applied geophysics.
- Seismic in Motion for Students, run jointly with the CAGC, took more than 200 high school students to the Waiparous area to spend a day seeing all the aspects of seismic field operations, learn about job opportunities, and hear how we minimize environmental impact.
- Our Fund Development Committee, chaired by Doris Ross, has been working diligently to finalize the details of our new Planned Giving campaign - "Preserving the Future of Geophysics in Canada", which is set to launch in January, 2017.

In the big picture, the CSEG Foundation's ongoing success is attributable to several things:

- A strong Board of Directors with various levels of experience, a good set of Governance procedures, and advice and input from experienced and engaged members.
- Outstanding volunteers, some who have contributed for many years and some who are brand new, creating a dynamic mixture of experience, enthusiasm, energy and new ideas.
- Excellent financial support from our donors, including a number of very significant individual donations.

#### **Foundation Finance Committee Report - 2016**

Mike Clement – Treasurer and Director
Susan Thomson – Assistant Treasurer and Director

Not unexpectedly, this past year has again been a challenging one for the CSEG Foundation in terms of fund raising and sponsorship for our programs and therefore the CSEG Foundation Board was cautious and judicious when planning the budget for the 2016 fiscal year. The Board and the committees worked hard to strike a balance between the continuance of funding long-term charitable programs and showing restraint and fiscal management while capitalizing these same programs. In late 2015, the Board approved a deficit 2016 budget of approximately \$96,000.00.

The CSEG had been a major contributor to the Foundation from inception through to 2014. With their contributions and the generous support of the CSEG members, both corporate and individual, the CSEG Foundation was able to grow its endowment each year since inception in 2007. This was accomplished while increasing the number of programs and the charitable scope of the Foundation. With initial donations from the CSEG and members, the endowment started with assets of \$457,000.00 in the commencement year. That endowment has grown through funding and interest to greater than \$1.5M. This value in not yet sufficient to sustain the current annual program expenditures without further fund development, but it is a phenomenal start over only a few years.



As with all profit and not-for-profit charitable organizations in Alberta over the 2015 and 2016 recessionary years, the CSEG and the CSEG Foundation have witnessed a sharp drop in revenues available to fund their operations. Subsequently, the CSEG has temporarily discontinued the flow of capital to the Foundation endowment. In fact, the CSEG Foundation has allowed, within their budget, for the support of the CSEG office operations that directly accommodate the day-to-day interests of the CSEG Foundation, a legitimate and reasonable request given the current climate.

I am pleased to report that even though the CSEG Foundation revenues have dropped significantly for reasons just stated, the 2016 year end projections are showing an approximate deficit of only \$50,000.00; an amount that is more than offset by interest gains in the CSEGF endowment investments. At the time of this report the Foundation is likely to have year-end assets of about \$2.092M. In 2014 and 2015, the audited reports show total equity of \$2.160M and \$2.030M, respectively.

Of particular note this year was the Canada Revenue Agency's audit of the CSEGF financial record for the period of January 1, 2013 to December 31, 2014. This was this Foundation's first audit since the outset and it went extremely well. Only two areas of non-compliance were identified and each was easy to resolve. In fact, one had already been identified and the Foundation had been waiting for feedback from the CRA for recommendations.

This year it is paramount for the financial committee to recognize the hard work of all the Foundation subcommittees to maintain the CSEGF programs which are so important to the Geoscience community while finding ways to curb spending without curtailing the integrity of the programs. The CSEG Foundation finances are managed by a team of hard working individuals and I personally want to thank Susan Thomson, Spryng Kubicek, Murray Hunter, Adrian Smith, Doug Uffen, Jim Racette, and Alyssa Middleton for their invaluable efforts and professionalism in maintaining the CSEGF financial record. Special thanks also to Annette Milbradt, whom, although she has stepped away from the day-to-day operations of the finance committee, still disburses invaluable knowledge to the aforementioned team when needed.

I welcome anyone who would like to view the previous years' audited financial statements of the CSEG Foundation to visit the website: <a href="http://cseg.ca/foundation/about-the-cseg-foundation">http://cseg.ca/foundation/about-the-cseg-foundation</a>

# **Foundation Fund Development Committee Report**

Doris Ross, Chair Neil Orr, Vice Chair

In a difficult year for both corporations and individuals, new donations were understandably less than in previous years. That being said, we continued to receive meaningful support, and on behalf of the Board of Directors and all of the students and CSEG members who benefited from Foundation programs, we thank all of you who have contributed to the Foundation.

The CSEG Foundation assets at the end of October were \$2,010,625 and the Endowment reached \$1,548,625. We received \$112,161 from previous pledges, new donations, and sponsorship for programs. The CSEG has, in previous years, made significant donations to the Foundation which were no



longer possible in 2016. Fortunately, our strong financial position allowed us to maintain our programs, albeit somewhat reduced and with expenses trimmed, and provide cost-sharing funds back to the CSEG.

The Fund Development Committee met monthly, concentrating more on plans for the future than on fundraising for this year. Funds from Corporations helped finance some of our programs but no additions were allotted to the endowment. We have pared expenses without making significant reductions in any of our programs, and we have not budgeted reductions in 2016. The Directors believe that we need to maintain our programs more than ever during a downturn. We also believe that when we are ready to start soliciting donations again, we can remind potential donors that their previous donations allowed us to maintain our programs during difficult times.

We are excited to finally announce the launch of our **Planned Giving** campaign: "**Preserving the Future of Geophysics in Canada**" in January, 2017. Financial gifts to the CSEG Foundation raised through this program will strengthen the future of the Geosciences by investing in activities that support the members of our Society and profession. A Planned Gift will leave a lasting impact and legacy for the profession for years to come. Our Foundation is strong and ready to reach for the next level of commitment from its members. A well-funded base of support will ensure that the CSEG Foundation is stable and sustainable well into the future. We all have an opportunity to honour our profession and those who have worked to build our community of geophysicists with a financial commitment that will foster the next generation of earth scientists!

# **Special Projects Fund Committee Report**

#### **Perry Kotkas, Chair and Director**

The Special Projects Fund (SPF) was created in April of 2016 in order to "support members of the geoscience community during the current economic downturn on projects outside the annual budget of the CSEGF". Special consideration is given to under-employed and unemployed CSEG members.

<u>2016 SPF Committee:</u> Chair: Perry Kotkas, members: Susan Thompson, Dan Loas <u>2017 SPF Committee:</u> Chair: Perry Kotkas, members: Susan Thompson, Doris Ross

#### 2016 Projects:

- 1. Financial support for those attending the Geoconvention
- 2. Financial support for those attending the CSEG Symposium
- 3. Financial Support for those attending the CSEG Doodletrain.
- 4. Financial support for certain activities of the CSEG "EPP" (Emerging Professionals Program), although at year-end, the EPP has managed to run their activities without assistance from the SPF.

2016 Budget: \$18,000.00

2017 Budget: will be similar.



Accessing support from the CSEGF Special Projects Fund: Please contact the CSEG office for more information and to be routed to the appropriate Foundation Committee member. Make sure you allow enough time for your project to be reviewed and approved by the CSEGF Board (one meeting, monthly), and for enough time to properly advertise the project for which support is requested.

#### **Outreach Committee Report**

#### **Doug Uffen, Chair and Director**

Frugality was the theme of the year for the Outreach and USO Committees. Operating with a \$90,000 expenditure budget, the Outreach and USO team of volunteers managed to execute their collective programs at a significant cost savings. As this is being written in mid-December, budget projections anticipate that the committees will be able to execute their programs this year for a savings of approximately \$18,000. Kudos go out to the organizing committee and all the volunteers for executing this program so cost effectively. The committee's focus was to mitigate airplane travel along with hotel and meal expenditures as much as was reasonably possible, using local volunteers where we can. The Outreach and USO committees do have offsetting revenues and much appreciation goes out to all our sponsors of our various events. In 2017, our expenditure budget has been set at \$70,000 for a net cost to the Foundation for the Outreach and USO programs of just under \$29,000. Our plans next year will focus upon more cost effective ways for delivery of our efforts in the long-term. An on-line web-based Outreach program is being developed so that we can reach out to schools and the public that reside outside major urban centres in Canada by using You-tube like video material. The program will showcase all aspects of geophysics and potential career paths, not just those that lead into the oil patch. For USO, we hope to have more senior level matriculated material that may make use of webinars as well as videos. This on-line initiative is in concert with the longstanding desire for the CSEG to expand our reach nationally across the country. This on-line program, once it is ready for roll-out, will help the CSEG Foundation and the society to be less Calgary-centric and oil patch-centric. It will also be less expensive to operate and maintain in the future. Personal interaction with the public and students will always be a foundation of our program but awareness can be heightened appreciably across the country with a stronger on-line presence.

As part of Public Outreach, chaired by Deepi Mand in the first half of the year and Sam Quiroga in the second half, the CSEG Foundation attended several career fairs across Western Canada, including Edmonton, Calgary and Vancouver, and including U of C and U of A. With our booth we were able to reach out to hundreds of students and present to them the science of geophysics using PowerPoint presentations and interactive seismic displays. We received numerous requests from teachers to provide in-school presentations. In March of 2016, eleven (11) schools attended, bringing approximately 1500 students, the seventh highly successful Earth Science for Society (ESfS) exhibition. Hundreds of members of the public also attended the exhibition. On the Sunday, 300 children, from non-school groups like the Girl Guides, received guided tours of the event. It was a very well received event with lots of booth traffic and one event that is sure to be successful in 2017.

Our Schools Outreach program this year, chaired by Alessandro Carducci, included the Calgary City Teachers Convention (CCTC), the Alberta Teacher's Association (ATA Conference in Banff), and the



Seismic in Motion Field School in addition to several school presentations. The Seismic in Motion field experience proves year after year to be a great event. We provided school buses for 150 students so that they could experience a unique "hands-on" education about the practical field aspects of our industry.

Our University Student Outreach (USO) program, chaired initially by Frank Ryan and most recently by Laura Osorio, includes events such as the Challenge Bowl, Mentorship for student and young professionals, and the geophysical field school, GIFT. Several student conferences are also supported by this program. This year the Mentorship program was united with the Junior Geophysicists Forum (JGF) for an opening night event to kick-off the 2016/2017 mentorship program. By all accounts, this approach met with huge success.

Last but not least, thanks goes out to Dennis Ellison, who is our current past chairman of Outreach and USO, for his organizational skills and financial governance during his presidential term. Taking control of our financial reporting was a key step in being able ultimately to save the money we did this year. Our finances are currently being managed by the very capable Adrian Smith, who has recently moved to Newfoundland but continues to be our finance person.

The Outreach and USO committees are approaching 2017 with a new sense of optimism, with the excitement and desire to move on-line with our material and message.

## **Earth Science for Society Committee Report**

Brodie Sutherland, Chair Glenn Malcolm, Vice Chair



#### Earth Science for Society March 19-21, 2017 - http://esfscanada.com/

In 2016, the CSEG Foundation agreed to become the long-term Parent Organization of Earth Science for Society (ESfS), an annual exhibition that demonstrates how the earth sciences play a critical role in our society. The exhibition is organized by a committee of over 30 volunteers who work throughout the year to ensure a successful event. From March 13th to 15th, 2016, the ESfS exhibition hosted close to 2,500 attendees. The enthusiastic visitors included 1484 students, 766 members of the public, and 300 Girl Guides. Twenty-four exhibitors provided stimulating interactive displays and our 27 generous sponsors provided \$81,000 in financial support. The exhibition relies upon the support of over 100 enthusiastic volunteers covering 200 shifts and accounting for over 700 volunteer hours. The ESfS event is a revenue neutral event for the CSEG Foundation, relying on funds that the ESfS volunteers raise themselves.

In 2017, the 7th annual ESfS exhibition will be held March 19th to 21st. Planning is well underway with 1074 students and 354 youth group participants already signed-up.



### **Foundation Scholarship Committee Report**

Craig Mosher, Chair and Director Steven Kim, Senior Trustee Ian Watson, Junior Trustee

2016 was another successful year in the 47-year history of the CSEG Foundation's scholarship program. In 2016, the scholarship committee was able to allocate \$23,000 to 12 post-secondary students across Canada. The committee would like to acknowledge the individuals, oil and gas operating companies, service companies, the Rob Shugg Memorial Fund, the CSEG Doodlespiel and T-Wave, and the CSEG Foundation for their backing. Thank you all for your generosity, particularly in such tough times for the oil and gas industry; our program relies on your contributions and we and the recipients of funds are extremely grateful.

In 2016, we received a record number of 42 applicants for university geophysics scholarships (32 graduate, 10 undergraduate). The committee awarded 11 scholarships of \$2,000 in this category to students at eight institutions across Canada. We also awarded one scholarship of \$1,000 in the technologist category. In the summer of 2016, the committee also awarded three \$500 scholarships to high school students entering a science-based university program in the fall of the same year.

#### University student and technologist scholarship recipients in 2016 were:

Recipient	Institution	Sponsor
Adriana Gordon	U Calgary	Arcis
Chris Williams	Memorial	Imperial & Ian Watson
Deep Inamdar	McMaster	Repsol Oil & Gas Canada
Sarah McPeak	Carleton	Rob Shugg Memorial Fund
Shahpoor Moradi	U Calgary	CGG
Taylor Finks	SAIT	SeisWare
Yichuan Wang	U Saskatchewan	Hampson-Russell
Jacqueline Huggins	Laurentian	CSEG T-Wave & CSEGF
Mauricio Reyes Canales	U Alberta	Apache
Max Salman	Waterloo	"In the Rings" Doodlespiel Scholarship
Meghan Sharp	UBC	Athena Resources
Melanie Postman	Western	Pulse Seismic



# High school recipients of scholarships, entering into university science programs in the fall of 2016 were:

Recipient	Institution	Sponsor
Ashley Hards	UBC	Matt Klukas and Family
Bryan Willis	U Toronto	Perry & Karen Kotkas
Ginelle Mah	U Calgary	Perry & Karen Kotkas

# **Foundation Travel Grants and Learning Subsidies Committee Report**

Kun Guo, Chair and Director Committee: Kun Guo, Daniel Loas

The role of the Travel Grants and Learning Subsidy (TGLS) program is to provide student and professional CSEG members with financial support to develop awareness, knowledge, and skills in geoscience. In 2016, Andreas Cordsen has once again supported the TGLS program through a sponsorship commitment to the CSEG Foundation. Thank you Andreas; our committee sincerely appreciates the continued generous support.

The TGLS committee strives to provide easily accessible funding to our applicants and to build and maintain relationships with our numerous recipients. In turn, we ask our funding recipients to provide written summaries of their educational experiences which are published in the CSEG Recorder to share with the CSEG community.

In 2016, the CSEG Foundation Travel Grant and Learning Subsidy committee was granted a budget of \$10 000 despite the economic downturn. This has allowed the TGLS program to approve, as of this report, over \$8 000 in funding for over 25 applicants to travel or participate in events during the 2016 calendar year. We are proud to have been able to assist members of the CSEG professionals as well as students from the following universities:

University of Alberta
University of British Columbia
University of Calgary
Dalhousie University
Université Laval
University of Saskatchewan
University of Toronto

The TGLS committee is focused on continuous improvement to ensure that funding is effective and easily accessible, and that our guidelines are flexible in accommodating the needs of both individual and group applicants for events in Canada and around the world. The TGLS committee is pleased to report that the development of an online application form to streamline the application process for applicants, has been successful. The TGLS committee has requested a budget of \$10 000 for the 2017 calendar year, and will be undertaking efforts to increase our exposure with under- and un-employed CSEG members, with a focus towards providing funding for skills maintenance and ongoing professional development.



The 2017 TGLS Committee would like to continue developing the relationship with university student groups and facilitating their applications for annual events (GeoConvention, GIFT, SEG Annual Meeting, geophysical field schools). Then the TGLS yearly budget can be drafted based on the number of delegates that student groups are planning to send, and the CSEGF can provide more realistic budget funding to these groups. The 2017 committee would also like to reinforce partnerships with existing and new educational or professional development initiatives (CSEG Emerging Professionals Program, others), to overcome financial barriers and promote continuing geoscientific and geophysical education.

The CSEG Travel Grant and Learning Subsidy program continues to provide CSEG members with opportunities to learn about, develop and share geoscience in a variety of ways. We would like to extend our sincere gratitude, on behalf of our committee volunteers and all of our funding recipients, to the CSEG Executive, the CSEG Foundation, as well as the CSEGF Outreach, CSEGF USO, and CSEG Symposium committees for promoting the program and providing support. We would also like to thank our numerous applicants for continuing to make this program a success.

## **Foundation Communications Committee Report**

#### **Helen Isaac, Chair and Director**

The Communication Committee has the responsibility of coordinating CSEG website updates and communications between the Foundation and the general membership. The website updates keep the membership informed about activities such as scholarships, the mentorship program, GIFT, the travel grant and learning subsidy, and the CDL tour. The Foundation page on the website also includes information about the board of directors, all the activities we support, annual reports and audited statements, Governance and By-laws. Webpage updates are sent to the digital media committee for forwarding to the website manager and the Foundation repays the CSEG for website maintenance.

In 2016 we added a new webpage on Planned Giving and Memorial Funds. The Planned Giving website became active in December, and gives details about the many ways a person can contribute now or leave a legacy to the Foundation. The Memorial Fund section has information about the funds and bios and photos of the five individual honorees.

All the photographs in our collection were uploaded to the Google drive, which can be accessed by anyone through the CSEG webpage --Students - K12 & Teachers - Educator Resources.

A major avenue for the Foundation to communicate to the membership is through the Recorder. In 2016 the Recorder published articles on activities which receive funding from the Foundation, such as Earth Science for Society, Seismic in Motion for Students, the Mentorship program, scholarships, and GIFT. We also published the annual article thanking our donors for their generosity.

All communications from the Foundation to its members are edited for grammar, syntax, content and appearance to give a consistent message. In 2016, Communications worked closely with the Fund Development Committee. We finalized the Planned Giving brochure and website content. We also edited letters thanking donors or soliciting funds for potential new donors. We assisted by editing the CSEG Sponsorship brochure and the TGLS funding document.



# **Canadian Distinguished Lecturer Committee Report**

Dr. Don Lawton, Chair

Laurie Weston Bellman, 2016/2017 Distinguished Lecturer

The Foundation operates the national CSEG Canadian Distinguished Lecture Tour, which is an annual event that started in 2005. Many post-secondary Geoscience departments across Canada host an industry or academic expert who delivers a presentation highlighting topics of current interest.

The 2016/2017 Distinguished Lecturer is Laurie Weston Bellman, a well-known Calgary-based geophysicist. Laurie's career as a geophysicist in the oil and gas business has spanned almost 30 years so far. During that time, she has seen the science (and the business) from many different perspectives. She has been part of the evolution of exploration objectives and analysis techniques, both as an interested observer and an active contributor. Originally a Physics/Astronomy graduate from the University of Victoria in B.C., Laurie has enjoyed a variety of career challenges in Canada and internationally. Laurie is presenting her talk "Data Interpretation and Integration from a Seismic Perspective – The Excitement of Innovation" to various different universities and institutions across Canada and depending on available budget, the USA and into Alaska, wrapping up in April, 2017.

To date, she has given her presentation at 15 different venues and a further 12 are scheduled for January and February. She has now either visited or arranged a visit to every institution that had expressed interest except Alaska. Without exception, she has been welcomed warmly and treated respectfully. Her hosts have all contacted her a few days in advance to confirm her arrangements, provide maps and directions and invited her to various social events ranging from coffee to dinner, meetings with grad students and faculty, and tours of labs and facilities.

