

MINUTES OF THE ANNUAL MEETING
OF THE
MOUNT DESERT ISLAND BIOLOGICAL LABORATORY CORPORATION

Maren Auditorium, Salisbury Cove, Maine

The following were in attendance at the Annual Meeting of the Corporation of the Mount Desert Island Biological Laboratory on Thursday, July 25, 2019:

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| Amber Alcindor | Ivan Falsztyn | Janet Meryweather |
| Peter Allen | Anna Farrell | Alan Miller |
| Stephanie Anderson | Susan Fellner | Amy Morley |
| Brandon Aponte | John Forrest | Bob Morris |
| Cait Bailey | Catherine Forrest | Wistar Morris |
| Vjera Bakovic | Sarah Foust | Kayleigh Morrison |
| Katharine Bancroft | Gary Frashier | Jim Mroch |
| Sam Beck | Gert Fricker | Trisha Mukerjee |
| Peter Benson | Joel Graber | George Murray |
| Ed Benz | Janelle Grendler | Margaret Myers |
| Jessie Bolduc | Ute Haller | Simone Nevills |
| Jacqueline Bolt | Hermann Haller | Austin Orecchio |
| Frederic Bonnet | Patricia Hand | Calvin Partin |
| Jerilyn Bowers | Mark Hanscome | Amy Pelletier |
| Patricia Boyce | Pat Hassett | Cammie Phalan |
| Tom Boyd | Nancy Hazard | Robert Preston |
| Phoebe Boyer | Elizaeth Hodder | Mary Ratner |
| Jim Boyer | Karl Karnaky | Dean Read |
| Max Brenninkmeyer | George Kidder | Amy Richards |
| Abby Bridgers | Allan Kleinman | Ezektul Robinson |
| Judith Burger-Gossart | Anne Kozak | Adriana Rodriguez |
| Emily Burke | Junyeong Lee | Aric Rogers |
| Sally Clark | Anne Lehmann | Jarod Rollins |
| Jim Coffman | Will Lehmann | Tom Rush |
| Lisa Crockett | Kyle Little | Jilliane Sawyer |
| Kay Dawson | Phil Long | Roland Schmitt |
| David Dawson | Claudine Lurvey | Pat Schroder |
| Caroline Del Real | Anne Mahringer | Joe Shaw |
| Suyesh Deodhar | Karlee Markovich | Juyoung Shim |
| Chuck Dinsmore | Liz Marnik | Patricio Silva |
| Jane Disney | Stefanie Matteson | Chris Smith |
| Iain Drummond | Kyle McGadney | Judy Sproule |
| Jonathan Epstein | Roy McMorran | Lynne Staggs |
| Spencer Ervin | Anette Melk | Bruce Stanton |

Clare Stone
Erika Stroh
Andrea Tilden
Lydia Tilley
Claire Tobin

Daphne Trotter
Dustin Updike
Rhayven White
Andrew Wilcox
Analise Wittenberg

Amber Wolf
Elliot Youth
Anne Yu

Acting Chair, Edward Benz, M.D., called the annual meeting of the Corporation to order at 10:10 a.m. He welcomed all those present and noted that he is standing in as Acting Chair in place of Chair, Peter Allen who is stepping aside due to new work responsibilities. A search for a new Chair is underway.

COMMITTEE REPORTS

Secretary's Report

Acting Secretary Alan Miller reported that there are currently 237 members of the Corporation.

Full Members: 16

Associate Members: 31

Honorary Members: 3

Life Full Members: 153

Life Associate Members: 34

Acting Chair Benz asked for a motion to approve the Secretary's report. The motion was made, seconded, and approved.

Nominating Committee Report

Chair of the Nominating Committee, Edward Benz, MD, submitted the recommendation for the following slate of nominees for re-election to the Board of Trustees:

The following slate of nominees is respectfully submitted to serve as Officers of the Board of Trustees class of 2022:

I. Elected Officers of the Board of Trustees

Edward J. Benz, Jr., M.D.

Thomas A. Boyd, Ph.D.

Ms. Phoebe C. Boyer

Alan W. Kornberg, Esq.

Josephine A. Sollano, PhD

Bruce A. Stanton, PhD

Ms. Daphne W. Trotter, Esq.

The following slate of nominees is submitted for the 2019 – 2020 Nominating Committee; a mix of trustees and members at large of the corporation:

Edward J. Benz, Jr., M.D., as Chair
Barbara Beltz, PhD
Jerilyn M. Bowers
Allen B. Miller, Esq.
I. Wistar Morris III
Patricio Silva, MD
Daphne W. Trotter, Esq.

NOMINEES FOR ASSOCIATE MEMBERSHIP

Abby Bridgers
Emily Burke

NOMINEES FOR LIFETIME ASSOCIATE MEMBERSHIP

Amy Richards

Vice Chair Benz asked for a motion to approve the Nominating Committee report. The motion was made, seconded, and approved.

Treasurer's Report

Dr. Tom Boyd, Treasurer, presented the Treasurer's Report to the Corporation.

Statement of Financial Position: The MDI Biological Laboratory retains a strong cash position. Funds that were set aside for strategic growth are important to maintain, and the institution keeps that in focus.

Cash decreased at 2018 year-end by \$1.4 million, with corresponding increases in the following areas: grants receivable increased by \$500 thousand, to reflect increased activity and spending at year-end and assets held in investment-type accounts increased by \$360 thousand, although investment returns were negative for the year. To date in 2019, these assets have increased in value to \$7.4 million.

The Institution continues to pay down the \$5 million-dollar bond that helped finance the Morris Laboratory Building in 2007. Regular principal and interest payments are made. The debt of \$4 million remains to be paid off by the year 2036.

Net Assets as of December 31, 2018: The Total Net Assets were \$23.8 million at year-end which are distributed among 45 different Funds and categories. All are tracked and accounted for separately. The Maine Community Foundation manages the Salisbury Cove Research Fund, established by Tom Maren and The Maren Foundation. Funds are made available each year and they made a very generous grant this summer to fund Visiting Scientists, and we remain grateful for this support.

Funding for Operating Expenses:

The financial statements were formatted in 2018 to adapt to new federal accounting

standards and to better reflect generally-accepted-accounting-principal standards for classification of Board Designated Funds and recording internal service fees. Activities are now reported by the Presence or Absence of Donor Restrictions.

The institution's operating expenditures were \$11.4 million (excluding depreciation). An overview of how those expenses were covered show over 60% (63% in 2018) continuing to come in the form of Federal Grants and Contracts. Forty-one percent covers costs at the MDI Biological Laboratory and 22% (\$2.5 million) is distributed to colleges and universities within the state through the IDeA Networks of Biomedical Research Excellence, (INBRE) grant.

Two federal grants from the National Institutes of Health provide major support to the Institution. The INBRE grant provides \$1.5 million to the institution and \$2 million to subawards annually. The 5-year renewal application was recently awarded. The Centers of Biomedical Research Excellence (COBRE) grant provides \$2.2 million in support of faculty annually. The 5-year renewal application was awarded last year.

Vice Chair Benz asked for a motion to approve the Treasurer's report. The motion was made, seconded, and approved.

Audit Committee Report

Maximiliaan Brenninkmeyer presented the Audit Committee report. The committee met with Annette Gould, the auditor from HMV LLC, on Tuesday, July 23, 2019. In the auditor's opinion dated July 13, 2019 the financial statements present fairly in all material respects the financial position of MDI Biological Laboratory as of December 31, 2018 and the changes to its net assts and cash flows for the year ended in accordance with the accounting principles generally accepted in the United States of America.

Ms. Gould reported that this year's audit went very smoothly and that no changes had to be made in numbers presented by the laboratory. The Finance Office staff are to be congratulated for work well done.

Vice Chair Benz asked for a motion to approve the Audit Committee Report. The motion was made, seconded, and approved.

Vice Chair Benz asked for a motion to adjourn the business portion of the meeting. The motion was made, seconded, and approved.

The Vice Chair made note that this is Max Brenninkmeyer's last meeting as a trustee. He is retiring after many years of service on the board. The board thanks Max for all that he has done on behalf of the lab.

It has been a very eventful year. We have a new President, Hermann Haller, who has stepped in and moved quickly, decisively and collegially to move the lab in the direction that we have all felt important. He will now make his report.

President's Report

President Haller begins his remarks and expresses his appreciation to all of his predecessors. It was a long year and it is a challenge. His presentation was a review of what has happened and our plans for the future.

To begin with faculty working on Mechanisms of Organ Regeneration. We have recruited Dr. Iain Drummond, as senior scientist and scientific director. Voot Yin was promoted to Associate Professor. The Haller lab moved to the Morris building to share a space with the Drummond lab. We are introducing renal organoids which is new to the lab. James Godwin received the first German post-doc and we unfortunately, we had to say goodbye to Vicki Losick.

We are in the process of recruiting junior faculty. Of 47 applicants we ended with 12. The applicants are very good caliber researchers. We will take the best of the ones available and look to improve diversity. We have a promise for funding for a third research group which may allow us to recruit three, rather than two.

For Mechanisms of Aging, Aric Rogers is on the verge of receiving his second RO1. We have begun the promotion process for Dustin Updike to Associate Professor.

We have a long history of environmental research at the lab but we must structure it within our existing groups. Jim Coffman's group works most closely with issues of environment. He received his RO3 recently. With the help of Bruce Stanton and others we will add to the existing research groups grants with an environmental aspect.

Finally, we have associated research groups including Bruce Stanton and Joe Shaw and a research from University of Maine Orono who works with zebrafish with a renal disease which is environmentally caused. These groups will form the basis of a third program of Environmental Research.

Our bioinformatics core is very important. More and more data must be managed and used in a useful way. We recruited a new microscopist, Frederic Bonnet who is setting us up to be a great resource for us as well as in education, for visiting scientists, and for use by other institutions. Our animal core is run by Voot Yin. We are in the process of enlarging the facility and become a center for zebrafish research.

Between our animal models and the mice at The Jackson Lab there is no other place in the western hemisphere with these resources. Our relationship with The Jackson Lab is developing very nicely and we will work more and more with them.

Strategic goals for the faculty are publications, presentations at conferences, developing NIH funding, collaboration with The Jackson Laboratory and our Visiting Scientist program. We had our first scientific retreat at the Schoodic Institute last February.

We need support for new research groups, for new microscopes and the animal facility expansion. We will host an NIH site visit. The Visiting Scientist program brought 16 researchers from the US and Europe. We brought in a wide range of summer students.

We have begun to renovate our campus. Our cottages are being renovated a few at a time. We are trying to keep the rustic charm but make them year-round housing. We still have a lot to do. We had to restore the Hamilton Pond Dam.

The education program is a huge program on campus. Our INBRE has been renewed for another five years. It is a competitive grant and we are consistently rated as the best INBRE in the country. Jane Disney then received a large SEPA grant and an REU grant. That is a very successful record and makes us a center for biomedical research education in the state of Maine and the region.

Lastly, Judy Sproule and I are working to develop a biotech incubator space – Biospace. We are being cautious but it is important because within Maine we are one of the few biomedical institutions and they expect that we take part. We met with the new governor in July and we talked about the development of the lab, and education with the INBRE program are important to the state. We will try to convince her that our Biospace, although small, will be important to the state.

The year has not been without difficulties, but everyone has contributed in an exceptional way and we will continue to move forward.

Iain Drummond

Dr. Haller provided an introduction for Dr. Iain Drummond, noting his distinguished career as a nephrologist at Harvard University and his role in developing zebrafish as a model for kidney disease and regeneration.

Dr. Drummond discussed the opportunity to come to MDIBL as a natural fit for him and how he appreciates the warm welcome that he has received. At Mass General Hospital they were beginning the big zebrafish genetic screens and it was a once in a lifetime opportunity to get in on the ground floor of a new model system. One of the projects that is keyed into regeneration is how zebrafish regenerate their kidneys and who might that help us overcome kidney failure.

Chronic kidney disease is a major medical issue in this country with tremendously high costs for treatment. The need far out shadows the available for organs for transplant. The issue is that the kidney is a very complex organ. How can we build such a complex organ?

Dr. Drummond discussed his research on kidney regeneration how can we be more like a fish. Can we find a bridge between the “magical” powers of fish regeneration and our own more limited powers of regeneration? Transplantation needs cannot be met. Dialysis is very costly and extremely demanding in time and effort. The challenge is how to make such a complex structure as a kidney.

Vice Chair Benz thanked Dr. Drummond for an excellent presentation and welcomed him to the MDIBL community.

Chairman’s Closing Remarks

Dr. Benz presented Dr. Peter J. Allen, current Chair of the Board, with a resolution recognizing Dr. Allen’s years of service to MDIBL and his many accomplishments, both here and elsewhere. On behalf of the Board, Dr. Benz proclaimed the community’s enormous gratitude to Peter J. Allen, MD. and noted that although he will continue to be actively involved in board leadership, he will step back from his responsibilities as Chair of the Board as he assumes his new role as Chief of Surgical Oncology at Duke University Medical Center.

Vice Chair Benz asked for a motion to enter the proclamation into the record of the meeting. The motion was made, seconded, and unanimously approved.

Vice Chair Benz presented Dr. Allen with an outdoor bench for the campus on which his name and years of service as the Chair of the Board of Directors are engraved. In addition, the Trustees have donated \$50,000 for the Peter J. Allen Discretionary Fund to be used by the President of the lab.

Dr. Allen then expressed his gratitude and talked about his history with the lab as well as the vision of so many people over the years. The future of this organization rests on scientific substance. We believe that our core mission is in regenerative biology but we will need to continue to evolve.

Vice Chair Benz comments on the level of positive energy and activity on the campus, thanked everyone for coming and invited all attendees for lunch.

Vice Chair Benz adjourned the 2019 MDI Biological Laboratory Annual Meeting at 11:45am for lunch.