

I MINA'BENTE NUEBI NA LIHESLATURAN GUÅHAN
2008 (SECOND) Regular Session

Executive Committee
Resolution No. 255

Introduced by:

J. T. Won Pat, Ed.D.
Tina Rose Muña Barnes
Dr. David L.G. Shimizu
Frank F. Blas, Jr.
Edward J.B. Calvo
B. J.F. Cruz
James V. Espaldon
Mark Forbes
Judith. P. Guthertz, DPA
F. T. Ishizaki
J. A. Lujan
v. c. pangelinan
A. B. Palacios, Sr.
R. J. Respicio
Ray Tenorio

Relative to congratulating and commending Dr. Sven-Erik Bursell for his contributions in educating the community on the prevention and control of diabetes, and to welcoming him to Guam as a Guest Speaker at the Ninth (9th) Annual Guam Diabetes Association Conference.

1 **BE IT RESOLVED BY THE EXECUTIVE COMMITTEE OF I**
2 ***MINA'BENTE NUEBI NA LIHESLATURAN GUÅHAN:***

3 **WHEREAS**, Mr. Sven-Erik Bursell, Ph.D., is an Investigator in the
4 Section on Eye Research and the Director of the Joslin Vision Network, as well
5 as an Associate Professor of Ophthalmology at Harvard Medical School; and

6 **WHEREAS**, after receiving his doctoral degree in Biophysics from
7 Boston University, he began biomedical and biophysical research at Joslin
8 Diabetes Center, focusing on diabetic complications in the eye; and

9 **WHEREAS**, Dr. Bursell studies molecular and biochemical events and
10 mechanisms leading to the development of pathological changes and
11 subsequent vision impairment. He has also developed diagnostic and
12 therapeutic instrumentation for assessing ocular physiology; and

13 **WHEREAS**, Dr. Bursell is a reviewer for a number of prestigious
14 journals in ophthalmology and diabetes, and has been a scientific reviewer for
15 National Eye Institute study sections of the National Institutes of Health; and

16 **WHEREAS**, Dr. Bursell pioneered the development of the Joslin Vision
17 Network eye care program and the Joslin Vision Network Comprehensive
18 Diabetes Management program; and

19 **WHEREAS**, diabetic retinopathy (a disorder of the retina that can lead
20 to vision loss and/or blindness) will, at some point, affect everyone with
21 diabetes. However, fifty percent (50%) of people with diabetes do not receive
22 appropriate eye care in time to prevent vision problems or preserve vision.

1 Dr. Bursell is combating diabetic eye disease on two (2) fronts: early detection
2 and accessibility to treatment; and

3 **WHEREAS**, the retina is the neurosensory “brain” of the eye and
4 becomes compromised with insufficient blood flow. Dr. Bursell and his
5 colleagues pioneered physiological diagnostic tests and were the first to show
6 that blood flow to the retina is reduced in patients with poorly controlled
7 early-stage diabetes even before they have developed eye disease; and

8 **WHEREAS**, in collaboration with George L. King, M.D. and Lloyd P.
9 Aiello, M.D., Ph.D., Dr. Bursell also found that this reduced blood flow
10 follows activation of protein kinase C-beta (PKC-beta). During the past
11 decade, Drs. Bursell, King and Aiello developed and tested several novel
12 therapies, including, a PKC-beta inhibitor that may halt damaging
13 proliferation of blood vessels in the retinas of people with diabetes. The
14 results from these trials have demonstrated the efficacy of the PKC-beta
15 inhibitor for reducing the risk of moderate vision loss, and have supported an
16 application to the Food and Drug Administration, which has deemed the drug
17 “Approvable” pending additional study data; and

18 **WHEREAS**, drawing on his background in theoretical physics,
19 biophysics and bioengineering, Dr. Bursell was instrumental in developing
20 noninvasive systems for measuring retinal blood flow, useful not only for
21 early diagnosis but also for rapid evaluation of the effectiveness of therapeutic
22 agents; and

1 **WHEREAS**, working with Lloyd M. Aiello, M.D., Dr. Bursell developed
2 the Joslin Vision Network (JVN), which uses Joslin’s advanced diagnostic
3 technology to evaluate patients for diabetic eye disease in ambulatory and
4 primary care settings at more than sixty (60) sites around the United States.
5 The tests take about ten (10) minutes, do not require dilation of the pupil and
6 can be administered by non-physicians. The images are then transmitted
7 through a telemedicine network to Joslin specialists who analyze them,
8 prescribe treatments or referrals as necessary and transmit the information
9 back to the site in the case of emergent conditions, before the patient leaves;
10 and

11 **WHEREAS**, studies have shown that these examinations through the
12 non-dilated pupil have diagnostic accuracy comparable to a dilated exam and
13 at a much lower cost. To date, some forty thousand (40,000) patients have
14 been evaluated in sites that include Native American Health Services and
15 Veterans Administration clinics. Dr. Bursell predicts that in the next decade,
16 Joslin will be able to offer not only diagnosis in remote locations, but also
17 corrective treatment with robotic lasers operated through remote-control
18 telemedicine networks, using surgical simulation technologies; and

19 **WHEREAS**, the JVN increases access to appropriate eye care, reduces
20 patient costs and, through the use of participating Centers of Excellence,
21 provides patients with the best eye care regardless of geographic or cultural
22 barriers; and

1 **WHEREAS**, Dr. Bursell’s extensive knowledge and experience in
2 diabetes-related vision impairment diagnosis, treatment and prevention will
3 be very helpful to the people of Guam; and

4 **WHEREAS**, Guam is proud and honored to welcome Dr. Sven-Erik
5 Bursell to be a Guest Speaker at the Ninth (9th) Annual Guam Diabetes
6 Association Conference to share his expertise in the prevention and control of
7 diabetes-related vision impairment; now, therefore, be it

8 **RESOLVED**, that the Executive Committee of *I Mina’Bente Nuebi Na*
9 *Liheslaturan Guåhan* does hereby, on behalf of *I Liheslaturan Guåhan* and the
10 people of Guam, commend and congratulate Mr. Sven-Erik Bursell, Ph.D., for
11 his contributions in educating the community on diabetes, and does welcome
12 him to Guam as a Guest Speaker at the Ninth (9th) Annual Guam Diabetes
13 Association Conference; and be it further

14 **RESOLVED**, that the Speaker and the Chairperson of the Executive
15 Committee certify, and the Secretary of the Legislature attest to, the adoption
16 hereof and that copies of the same be thereafter transmitted to Mr. Sven-Erik
17 Bursell, Ph.D.; to the Guam Diabetes Association; and to the Honorable Felix
18 P. Camacho, *I Maga’lahen Guåhan*.

DULY AND REGULARLY ADOPTED BY THE EXECUTIVE COMMITTEE
OF *I MINA'BENTE NUEBI NA LIHESLATURAN GUÅHAN* ON THE 7TH
DAY OF NOVEMBER 2008.



JUDITH T. WON PAT, ED. D.
Speaker and
Chairperson, Executive Committee



TINA ROSE MUÑA BARNES
Senator and
Secretary of the Legislature