



# VALLE Review

A report of the Valle Scholarship and Scandinavian Exchange Program at the University of Washington, Seattle

## The Director's Report

When summer comes to the University of Washington campus, the operations mode shifts to a greater emphasis on the research aspects of graduate education as our Valle scholars devote their efforts towards collecting valid data that can form the basis for thesis and project reports.

For the Valle Office it is a time to review the past academic year's events and the activities and written reports of our Valle scholars both past and present. It is an opportunity, as well, to reflect on the many benefits that have come through the gift of Henrik and Ellen Valle. For example, it is notable that this trust fund has provided, to date, over \$6 million dollars for scholar support, nearly double the total value of the trust at inception in 1980. Over the same period the trust principal has grown to well over \$11 million which is more than triple the original amount of the fund. To their credit, the trust officers and the bank have thus been able to maintain the intended support level and concomitantly provide substantial investment growth. The Valle Office works with all concerned to maintain this good stewardship of the Valle perpetual gift.

A second major benefit of the Valle Trust is the continual stream of news items about the Valle students and associated faculty, staff and friends. The little clips from their lives

in the pages that follow are but glimpses from their ongoing careers and only small excerpts from their more extensive reports and memos. Nevertheless these vignettes can give you an idea of the broad scope of their activities as they continue to develop their roles and careers and their positive contributions to society.

Finally, if the format of this newsletter looks somewhat different, do not be alarmed. Associate Dean Deines from Architecture and Urban Planning has been working with Bobbie and Joe in our office to come up with a new look for this report. Hopefully their efforts will meet with your approval.

## Valle Scholars, 1997-1998

This year the income from the Valle trust funds will provide support for 14 scholars.

Three exchange scholars will arrive from the Nordic Countries. The scholars from the University of Iceland are **Marta Danielsdottir** to study in the environmental engineering and science program and **Asberg Ingolfsson** to the Transportation, Surveying, and Construction Engineering Program. **Emil Rydin** will come to the Environmental Engineering and Science Program from the University of Uppsala.

American Valle scholars from

other universities are: **Patricia Henshaw**, EES, from UC, Davis; **Ryan Hofmeister**, SGEM, Stanford; **Jessica Shickman**, TSCE, Pennsylvania State U. University of Washington scholars are **David Lucas**, EES and **Stephen Muench**, TSCE.

University of Washington graduate students chosen for study opportunities in Scandinavia:

Norway: **David Bamford**, ARCH, to AHO and GAIA Group; **Christopher Brown**, ARCH, to Røros Kommune; **Katherine Hilton**, EES, to NIVA; **Robin Kirschbaum**, EES, to NVE; and **Sherrill Mausshardt-Lingel**, to NIVA.

Finland: **Erika Holt**, TSCE, to VTT.

## News and Comments

**Karen Villholth** wrote that after her return to Denmark from the UW she completed a PhD at the Technical University of Denmark (DTU). Since then she has been a teacher/advisor at DTU and VKI, the Water Quality Institute. During Autumn 1996 she taught a course for one term on water quality management at the Asian Institute of Technology.

**Katarina Grauers** works as a bridge engineer at the bridge and tunnel department of the Swedish National Road Administration in Borlange. Her specialty is concrete bridges

## VALLE SCHOLARS AND FRIENDS NEWS UPDATES

We would like to receive updates about our Valle scholars and friends. If you would take the time to complete the information below and send it to us either by mail or email it would be most appreciated.

Name: \_\_\_\_\_

Year/Degree: \_\_\_\_\_

Address: \_\_\_\_\_

Email address: \_\_\_\_\_

Phone: (home) \_\_\_\_\_ (work) \_\_\_\_\_

News:

Please mail information to:

Prof. Dale A. Carlson, Director  
Valle Scholarship & Scandinavian Exchange Program  
University of Washington  
Box 352130  
Seattle, WA 98195-2130, USA

and bridge foundations. Architecture Professor Emeritus **Phillip Jacobson** was a Spring Quarter 1997 visiting professor at the Royal Institute of Technology in Stockholm. He was also an invited guest lecturer and visitor at Lund University, Helsinki University of Technology, the Royal Academy of Fine arts at Copenhagen, the Oslo School of Architecture, and the Norwegian University of Science and Technology at Trondheim. In addition to discussing the Valle Program with Schools of Architecture, he pursued his own research on the influence of physical and cultural factors on architectural form and expression.

**Harri Koivusalo** visited in December after presenting a paper at the Fall meeting of the American Geophysical Union.

The paper, *Application of A Snow Cover Model (SNTHERM) to analyze Snow Depth and Snow Temperature Data from Southern Finland*, was based on work he did at the UW.

**Jan-Olaf Backman** sent greetings in October from Bonässund, Sweden.

**Thomas Blomberg** sent a copy of his Doctor of Technology thesis at Lund University entitled, *Heat Conduction in Two and Three Dimensions – Computer Modelling of Building Physics Applications*, May 1996, Report TVBH-1008. Blomberg is a researcher at the Department of Building Physics, Lund Institute of Technology in Lund, Sweden. His research area was concerned with the development of com-

puter programs for transient and steady state heat conduction in two and three dimensions. These and other programs developed by his group are now used by researchers and consulting engineers in more than twenty countries. Thomas has been invited to spend a professional leave in New Zealand.

**Lena Steffner** is a planning architect at the city of Uppsala. In her spare time she does watercolors. Her son Johan is now 10 years old and benefits from having spent his first year of school in the USA. He still speaks American fluently.

**Kjersti Dagestad** returned to NIVA in December after completing her degree at the University of Washington.

**Margareta Lundin** is a Civil Engineer with the City of Halmstad, Sweden.

**Bill Kurtz** called to let us know he is living in Phoenix, Arizona.

**Leigh Rountree Bangs** is working at Sverdrup on the Aberdeen-Hoquiam Corridor Project Environmental Impact Statement (US 101) and the SR 520, NE 40th Street Interchange (Redmond). She was married in June 1996 to David L. Bangs.

**Jane Boyce Baran** is at the State University of New York Institute of Technology at Utica/Rome as Assistant Professor. She and her husband Bruce have a son Nicholas who is 2 years old and they live on an inactive 30-acre dairy farm.

**Lynn Perkins** visited the Valle Office and donated Swedish English dictionaries. She lives in Seattle.

**James Strout** is working toward a PhD at Trondheim.

**Marianne Redanz** visited the campus in September 1997. Since she left Seattle she has been working in Germany for three years. She is, however, starting a new job in Copenhagen next month.

**Heli Mesiniemi** writes that she is working in Maine and enjoying its uniqueness.

**Bo Christiansen** in December wrote that he has a new job loaded with good challenges. He entered several competitions and was waiting to hear of the results. He also received support for a three-month study trip to Japan scheduled for April 1997.

## Recent Visitors

Dr. **Arild Eikum**, Valle representative in Oslo, was in Seattle in October 1996 to meet with prospective exchange students, review current and potential study areas and discuss research activities with Civil Engineering faculty.

In March 1997, Dr. **Tommy Lindell**, Valle representative in Uppsala, Sweden, met with faculty and staff to review current and potential study areas for Valle scholars and to discuss program goals and activities.

Dr. **Markku Leivo** of VTT, the Technical Research Center of Finland at Espoo, supervised the research of Erika Holt during her stay in Finland. Dr. Leivo came to the UW Seattle campus in April to be present at Erika's thesis defense and to meet with faculty.

**Thomas Christensen**, Professor at the Department of Environmental Science and Engineering at the Technical University of Denmark (DTU) visited the University of Washington in June 1997. He met with Engineering faculty to discuss possible collaboration in research. He also met with DTU alum Birgitte Hansen, currently a Valle scholar, and with Valle Program personnel.

**Ulf Ehlin** visited the Valle Program Office in December 1996. Ehlin completed his term of office as Executive Secretary for the Baltic Marine Environment Protection Commission (the Helsinki Commission) and has moved from Helsinki to Stockholm to take the position of Director for the new Stockholm International Water Institute. While he was at the University of Washington he presented a two-part seminar. In his initial remarks he discussed the envi-

ronmental status of the Baltic Sea and the Convention and action programs for protection of the Baltic Sea marine environment. He then presented the working tasks for the new Stockholm International Water Institute. A part of his role in this new institute will be to establish close contacts with international water related organizations and financial institutions. In December 1996, the Valle Program received visitors from Kalmar University. These guests from Sweden included Dr. **Åke Sivertun**, lecturer in social science and economics, Dr. **Torre Michel**, visiting professor in communications, and Dr. **Tomas Sörensson**, assistant professor in business administration. Their interest was in reviewing the possibilities for ties in the area of sustainable development.

Professor **Svein Thorolfsson** from the Department of Hydraulics and Environmental Engineering at the Norwegian University of Science and Technology (NTNU – formerly NTH) spent his sabbatical leave with the Environmental Engineering and Science Program in the Civil Engineering Department during the 1996-1997 academic year. He presented seminars on his work with urban runoff.

In May 1997, **Lynn Gustafsson** from Luleå University, Sweden visited the Valle Office to discuss common areas of interest in engineering education and present current courses in English taught in Civil Engineering at Luleå.

August 1, 1997, the Icelandic Consul General in Seattle, **Jon Marvin Jonsson** and his wife **Joanne** brought to the University of Washington campus The President of Iceland **Ólafur Ragnar Grimsson** and first lady

**Guðrún Katrín Þorbergsdóttir**, together with Ambassador to the US **Einar Benediktsson**. The purpose of their visit was to greet Icelandic students at the UW, to see the campus, and visit briefly with the Valle Program. The UW coffee hour was part of the President's tour of the United States and Canada.

**Bengt Nilsson**, Head of International Affairs at Lund University, Sweden, visited the Valle Office in October 1996 to discuss their new international programs. Lund University lies in the area that will be impacted by the construction of the new bridge between Denmark and Sweden which will have its northern terminus at Malmö, Sweden.

Dr. **Henning Therkelsen**, Director of Environmental Engineering at COWIconsult in Copenhagen, visited in June 1997, and met with faculty in the Environmental Engineering Program and with the Valle Office Director.

#### **VALLE SCHOLARS FUNDED 1996-97 ACADEMIC YEAR:**

Architecture:  
Peter Anderson  
David Bamford  
Mette Greenshields  
Heli Mesiniemi  
Shane Ruegamer  
Martin Stigsgaard  
Ivan Zidarov  
Are Øyasæter

Environmental Engr and Sci:  
Laura Bowling  
Kjersti Dagestad  
Thorhildur Gudmundsdottir  
Birgitte Hansen,  
Katherine Hilton  
Sherrill Lingel  
Logan McInnis  
Jaana Pietari  
Owen Reese

Structural, Geotechnical Engineering and Mechanics:  
David Baska  
Sveinn Bjornsson

Jason Black  
Cynthia Finley  
Thomas Hudgings  
Jörgen Johansson  
Douglas Lindquist  
Eric Soroos  
Frank Unocic  
Transportation, Surveying and Construction Engineering:  
Donald Billen  
Janine Fitzpatrick  
Erika Holt  
Tryggvi Jónsson  
Peter Mazurek  
Steven Read  
Tracy Reed  
Gudmundur Úlfarsson  
Brett Wallace

Urban Design and Planning:  
Laura Grosso

#### **VALLE SCHOLARS COMPLETING DEGREE REQUIREMENTS DURING 1996-1997 ACADEMIC YEAR:**

Master of Science (Civil Engr)  
Tracy Lynne Reed  
Donald L. Billen

Master of Science in Civil Engineering  
Peter Kyle Mazurek  
Steven Allen Read  
Sveinn Bjornsson  
Kjersti Dagestad  
Tryggvi Jonsson  
Laura Christine Bowling  
Cynthia Ann Finley  
Erika Elaine Holt  
Robin Lyn Kirschbaum  
Eric David Soroos

Master of Sci in Engr. (Civil)  
Jennifer Jan Pilling

Master of Architecture  
Robert E. Doyle  
Prentis Cobb Hale  
Heli Tuomikki Mesiniemi  
Kevin Lewis Mitchell  
Shane Alan Ruegamer  
Jim R. Sheldrup

Master of Landscape Arch  
Lauren Elizabeth Schmitt  
Jill Angela Eulate

Doctor of Philosophy  
**Angela Rae Bielefeldt**, Civil Engineering, Biotreatment of contaminated gases in a sparged suspended-growth reactor: Mass transfer and biodegradation model.

**Rodney George Sakrison**, Urban Design and Planning, Summer water use in compact communities: The effect of small lots and growth management plans on single-family water use in King County, Washington.

**Sigurdur M. Gardarsson**, Civil Engineering, Shallow-water sloshing.

**Sherrill Lee Lingel**, Civil Engineering, Scaling effects on the mixing processes of lock-exchange gravity currents.

#### **INCLUDED AMONG THE VALLE SCHOLAR REPORTS RECEIVED BY THE VALLE OFFICE**

*The following reports are available to read at the Valle Program Office:*

#### **CIVIL ENGINEERING**

**Donald L. Billen**, TSCE, MS Thesis, 1997, *One Ticket to Ride: Transit Fare Integration for Central Puget Sound*, Major Professor G. Scott Rutherford. Billen's thesis provides an evaluation of six fare integration alternatives for establishment of a seamless public transportation system for the Central Puget Sound area of Washington State. His short term recommendation is for central Puget Sound transit operators to accept passes and tickets from connecting carriers as payment toward second and subsequent boardings. Recommended for the long term would be a region wide zonal system employing electronic contactless debit cards.

**Kjersti Dagestad**, EES, MSCE Project Report, 1996,

*Economics of Waste Land Allocation Policies and the Effect of Long Term Pollution Planning – A Case Study for Spokane River Basin.* Major Professor Richard Palmer. Ms. Dagestad used the Spokane River Basin as a case study to compare the cost of various waste load allocation policies that were designed to meet water quality requirements for phosphorus in Long Lake, and then to determine how planning could reduce the cost of pollution control. Study tools included a simulation model for phosphorus control and a linear program model for cost optimization. Simulation of different waste allocation policies showed that there can be significant differences in the annual cost for various pollution action programs in the Spokane River Basin. The current management is shown to be a low-cost alternative in a short time period (1985 to 2000) but will not be cost effective after the year 2000.

**James M. Gelhar**, TSCE, MSCE thesis, 1996, *Transit-Oriented Development and Transportation Planning in Metropolitan Portland.* Major Professor Jerry B. Schneider. Gelhar studied transit-oriented development as a tool to combat traffic congestion, air pollution, and suburban sprawl. He notes that the State of Oregon land use planning system is designed to allow a small group of planners, officials and concerned bystanders to gather and debate what is best for the environment and the public good. The Oregon Transportation Planning Rule requires each local government to reduce both the vehicle miles traveled and the parking spaces per capita. With the support of the public, these concepts have helped Portland maintain a healthy

and diversified economy and pleasant city environs.

**Tryggvi Jonsson**, MSCE thesis, March 1997, *Adapting the Highway Design and Maintenance Standards Model to Icelandic Conditions*, Major Professor Joe Mahoney. Jonsson's project was to evaluate whether the World Bank's Highway Design and Maintenance Standards Model (HDM-III) could be applied to environment and conditions other than those for which it was originally designed. Since the model was designed for tropical climate and low traffic volume the possibility of adaptation to Icelandic conditions marked a severe change in design conditions. Tryggvi found the HDM-III easy to use and convertible to Icelandic road conditions. He also commented that a new HDM4 model will be available soon based on the HDM-III model and the calibrations done in this research will then be useful in adapting the later model to Icelandic conditions.

**Peter Mazurek**, MSCE Thesis, 1996, *Station Choice Model Estimation and Testing*, Major Professor Scott Rutherford. Mazurek examined computer models used for siting *park and ride* stations for public transportation systems. Peter noted that newer features of computer software and hardware have made it possible to remove some previous limitations to forecaster modelling of transit system design. He presented a new formulation for a station choice model and compared its features to a model of similar structure.

**Jennifer Pilling**, EES, MSE Thesis, December 1996, *Evaluation of Groundwater Extraction Scenarios for Aquifer Remediation In Kärkälä, Finland*, Major

Professor Joel Massman. Pilling studied alternatives for addressing groundwater contamination using groundwater extraction coupled with above ground biological treatment. The study site in Kärkälä was contaminated with chlorophenols, the source being a nearby sawmill using wood preservatives containing chlorophenols. Simulation studies by Jennifer indicated that a new extraction well should be added to increase contaminant mass removal. However, a monitoring well should be installed prior to adding the extraction well to confirm that the proposed well site actually has a significant amount of contamination as indicated by her studies. She also noted that groundwater reinjection actually resulted in less mass removal.

**Steven Read**, TSCE, MSCE Thesis, 1996, *Damage in Asphalt Concrete Pavements*, Major Professor Joe Mahoney. The purpose of Read's research was to determine the causes of premature deterioration of asphalt concrete overlap on roadways in Washington State. The process involves the early appearance of breakdown of the overlay at the wheel path area. The areas are permeable to water, tend to produce a depression in the road and then ravel and crack. The expected life of the overlay is reduced to roughly half of the expected 12 to 15 years of service. His research indicated differential cooling of the hot asphalt delivered by truck to the paving machine contributed to asphalt deterioration. His recommendations include mechanisms for reducing heat loss during transport of the hot asphalt mix.

**Tracy L. Reed**, MS thesis, January 1997, *Priority Programming under Financial Constraints*, Major Professor Scott Rutherford. Reed defined priority programming as a process of rank ordering projects so that a finite, and usually financially constrained, subset can be selected. She noted that it is an evolving art that has become more difficult over time and with increasingly limited transportation budgets. Most projects now must combine project efficiency or effectiveness calculations with measures of environmental, social and economic impacts. Tracy used the Washington State Department of Transportation (WSDOT) statewide priority planning methods as a case study of a flexible framework for assessing highway projects. She noted that weight distribution of ranking categories is very influential and should be used to reflect agency policy. Since her project reviewed sensitivity at the \$150 million level, she recommended further studies at other budget levels.

**Tracy L. Reed**, Exchange Program Progress Report, September 1996, *Inter-city Accessibility in Denmark*, This status report documents the application of a regional single index accessibility measure of the gravity model type to Denmark. The purpose of the report was to provide a small scale example of how such a measure could be used in strategic planning for the Trans-European and other large networks. She concluded that the gravity type model produced significantly different results than previously used isochronic indicators for strategic, inter-city accessibility planning. She noted several refinements that could improve the original gravity

model method.

**Brett Patrick Wallace**, MSCE Thesis, 1997, *Evaluation of Travel Demand Management Strategies in the Trip Generation Phase of a Network-Based Modeling Approach*, Major Professor G. Scott Rutherford. Wallace's thesis explored the viability of using trip generation models to evaluate the effectiveness of Travel demand management strategies. The six general categories of these strategies include: public mode support, employee based strategies, pricing, telecommunications, land use, and public policy and regulations. He concluded that the traditional fare step planning process was a viable mechanism for evaluating travel impacts related to travel demand management strategies. The four steps include trip generation, trip distribution, mode choice and trip assignment.

**Ulfarsson, Gudmundur F.**, TSCE, MS Thesis 1997, *Modeling Highway Free-Flow Mean Speed and Deviation in a Simulator Study*, Major Professor Fred Mannering. Ulfarsson used a simulator to study drive behavior and performance on a Snoqualmie Pass section of the I-90 highway in Washington State. A twelve mile test section of highway was used to examine mean driving speeds under varying geometric, environmental, and socio-economic conditions. The results indicated that young drivers drove faster and male drivers drove faster in line with previous studies. In terms of education, drivers with high school or technical school degrees drove faster while those with college degrees drove slower.

## ARCHITECTURE AND URBAN

## PLANNING

**Jill Eulate**, M Landscape Arch Thesis, 1997, *Feeding the Spirit: The Need for Natural Settings in Children's Learning Environments*, Major Professor Sally Schauman. Eulate's thesis addressed the potential for elementary school playgrounds to support learning and social/emotional development through the use of natural settings. Her studies examined the character of school grounds in terms of their effect on children's emotional and overall learning. She states that playground characteristics are related to emotional attribute development in terms of safety, comfort, sense of belonging, altruism, self esteem, sociability, creativity and motivation. Her findings were that natural settings serve as a powerful integrating mechanism allowing children to engage in learning physically and mentally.

**Laura Grosso**, Landscape Arch, *Water Supply Planning Case Study: Issues and Practices in Stockholm, Sweden*, Final Report, September 1997. Laura worked with the Stockholm Water Company to identify major issues and practices linked to water supply and sanitation planning and to determine the potential for using a computer aided modeling tool to facilitate communication and linkages in the water planning process.

**Heli Mesiniemi**, ARCH, March Thesis, 1996, *Design Proposal for the Renovations and Addition to Condon Hall*, Major Professor Folke Nyberg. Mesiniemi has provided a design for an extension and renovation to Condon Hall, the University building housing the Law School and its library. Her building design integrated into

the overall plans for developing Campus Parkway, the street system adjacent to Condon Hall. Her concepts extend from precepts of both American and Finnish architects and add a feminine touch to the brusque masculinity of Condon.

### GRE and TOEFL Test Information

The GRE (Graduate Record Examination) is required of all applicants to the University of Washington Graduate School, and the TOEFL (Test of English as a Foreign Language) is required for applicants whose native language is not English.

Tests should be scheduled early so that the results of the tests are available by the February 1 deadline for Valle applications.

Information in regard to the GRE and TOEFL is available on the internet at:  
<http://www.kaplan.com>

The general telephone number for the GRE and TOEFL tests administered by Kaplan is:  
 1-800-KAP-TEST  
 (1-800-527-8378)

### International Information

Orientation. The International Services Office (ISO) will conduct its annual orientation program September 17-21 for all new UW international students (except Canadians) entering the U.S. for the first time. New international students are required to pay a \$30 orientation fee.

Visas and Passports. Answers to questions in regard to passports, visas, extensions of stay, etc. are available from the ISO office.

Foundation for International Understanding through Students (FIUTS). International students who do not have a host or friendship family are encouraged to participate in the program. Applications are available from the FIUTS office.

Registration. International students are required to register full-time (graduate students -- 10 credits/qtr).

International Student I.D. Card. Be sure to keep

## University of Washington Class and Holiday Schedule, 1997-1998

### Autumn Quarter 1997

Applic. closing date	Dec. 1, Apr. 15 <sup>2</sup>
Classes begin	Sept. 29
Veterans' Day	Nov. 11
Thanksgiving recess	Nov. 28,28
Last day of instruction	Dec. 10
Final examinations	Dec. 11-18
Quarter break <sup>1</sup>	Dec. 19-Jan. 4

### Winter Quarter 1998

Applic. closing date	Oct. 15 <sup>2</sup>
Classes begin	Jan. 5
Martin Luther King, Jr. Day	Jan. 19
VALLE APPLICATION DEADLINE	Feb. 1
Presidents' Day	Feb. 16
Last day of instruction	Mar. 13
Final examinations	Mar. 16-20
Quarter break	Mar. 21-29

### Spring Quarter 1998

Applic. closing date	Jan. 15 <sup>2</sup>
Classes begin	Mar. 30
Memorial Day	May 25
Last day of instruction	June 5
Final examinations	June 8-12
Commencement	June 13
Quarter break	June 13-21

### Summer Quarter 1998

Applic. closing date	Apr. 15 <sup>2</sup>
Classes begin	June 22
Independence Day observed	July 3
Quarter ends	Aug. 21
Quarter break	Aug. 22-Sept. 27

### Autumn Quarter 1998

Applic. closing date	Dec. 1, Apr. 15 <sup>2</sup>
Classes begin	Sept. 28
Veterans' Day	Nov. 11
Thanksgiving recess	Nov. 26,27
Last day of instruction	Dec. 9
Final examinations	Dec. 10-17
Quarter break <sup>1</sup>	Dec. 18-Jan. 3

<sup>1</sup>Holidays occurring during the break between Autumn and Winter quarters are Christmas, Hanukkah and New Year's Day.

<sup>2</sup>There is an earlier deadline for international students of Dec. 1 for Autumn Quarter. If enrollment quotas are filled before the application closing date, it may not be possible to offer enrollment, although an applicant may be scholastically eligible for admission.

### Nordic Consular Offices in Seattle

Consulate of Denmark  
6204 E Mercer Way, Mercer Island  
Tel: (206) 230-0888

Consulate of Finland  
PO Box 40598, Bellevue  
Tel: (425) 451-3983

Consulate of Iceland  
5610 20th NW  
Tel: (206) 783-4100

Consulate of Norway  
Joseph Vance Building  
Tel: (206) 623-3957

Consulate of Sweden  
1215-4th Ave., Suite 1019  
Tel: (206) 622-5640

### Valle Trustees

Paul R. Cressman, Sr.

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Denice Denton

### Faculty Scholarship Review Committee:

Katrina Deines  
Robert Holtz  
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### VALLE PROGRAM OFFICE PERSONNEL

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John F. Ferguson, PhD, Associate Director;  
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### Offices in Scandinavia

Prof. Arild Eikum  
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Centrum för bildanalys  
Lägerhyddvägen 17  
S-75237 Uppsala, Sweden  
Telephone: 46 18 18 34 64  
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### REMINDER TO APPLICANTS — PLEASE CHECK ALL APPLICATION DEADLINE DATES



For further information, applications, or additional copies of this report, please contact this office by email, telephone, mail or fax, or refer to the web site for further information and application forms.

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Tel: (206) 685-2312 Fax: (206) 543-2907  
Valle web site: <http://www.engr.washington.edu/activities/valle/>

Information Requested

Your Name

Organization

Office Street Address

City, State

Zip Code

Country

Email address