INNOVATION CENTER DENMARK

SILICON VALLEY



Funding Opportunities for Research Collaboration

Road to a 100% Renewable Energy System, August 1-2, 2011

Opportunities...

- 1. Why collaborate in the first place?
- 2. Danish resources to support network activities:
 - Bilateral Network Program
 - Innovation Center Denmark, Silicon Valley
- 3. Danish resources to support research collaboration
 - Danish research funding framework
 - The Danish Strategic Research Council
 - The Danish Independent Research Council
 - The Danish National Research Foundation
- 4. US resources to **support research** collaboration
 - National Science Foundation (NSF) programs
- 5. Examples of collaborative projects

Why collaborate with California?



- Knowledge: The best universities in the world: 1/3 of the world's
 20 best universities is in California. UC: best public university system
- 2. Capital: 1/3 of world's VC is placed in Silicon Valley (Sand Hill Rd)
- Workforce: The largest concentration of High educ. workers in US.+ 300.000 researchers, engineers and technicians in Silicon Valley
- 4. Business: Home to the leading technology companies in the world
- 5. Culture: a unique ecosystem where researchers, VCs and entrepreneurs collaborate in an open and dynamic environment
- **6.** Legislation: Business friendly climates.



Why collaborate with Denmark?

#1 ICT leading nation in the world (3. year in a row)

Source: World Economic Forum, Global Information Technology Report, 2008-2009 "Denmark is the most networked economy in the world"

#1 ICT ready country in the world

Source: Economist Intelligence Unit together with IBM "E-readiness rankings" 2009

#1 Most hospitable country to foreign capital investment

Source: Forbes Capital Hospitality Index, '10 "Most Hospitable Countries to Foreign Capital Investment"

#4 most competetive country in the world

Source: The Global Competitiveness Report 2009-10

#1 ranking universities in Scandinavia +1 pct. on GDP spent on public R&D in 2011



Danish Bilateral Network Program

- 2.5 million USD to support bilateral network activities.
- Who can apply? Researchers employed at Danish universities and at R&D companies in DK
- Deadline: Fall 2011
- Applications for the following grant types are invited:
- Exploratory bilateral scientific workshops and conferences with participation of researchers from Denmark and USA
- Visiting Scientist Grants Travel between Denmark and the US to identify collaborative projects and p

Danish Agency for Science Technology and Innovation

Ministry of Science Technology and Innovation

CITRIS-Denmark Program

- Goal: Support exchange and bilateral network activities.
- 2-3 yearly events on research areas of mutual interest
- Annually 24 months of visiting scholarships at the 4 UC's part of CITRIS, Berkeley, Davis, Merced and Santa Cruz
- Who can apply for visiting scholarships? Researchers employed at Danish public research institutions.
- Deadline: October 5, 2011
- Most recent call <u>here</u>. (call about program with Stanford <u>here</u>)
- Evaluations from previous visitors <u>here</u>.



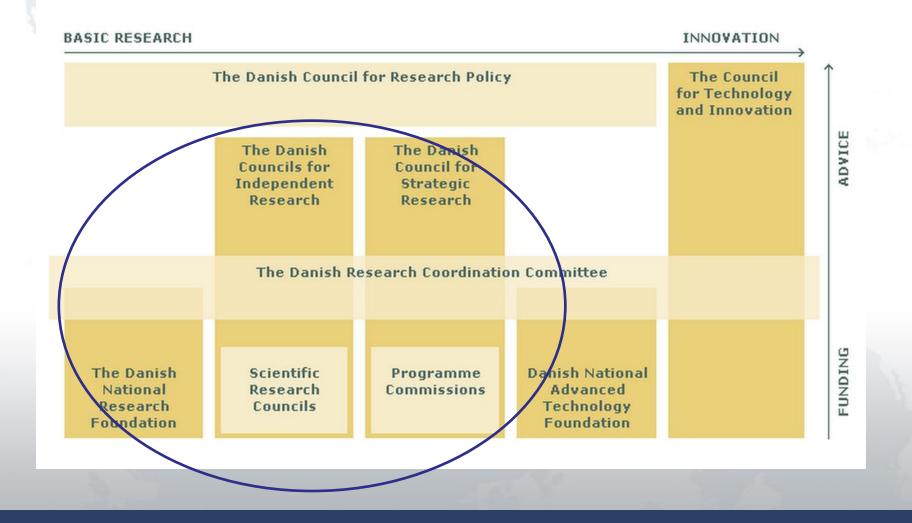
Denmark-sponsored California events

- Smart Grid Applied Week (June 2011)
- Workshop: Road to a 100 pct. fossil Free System (August 2010)
- UC-DK Summer School on Renewable Energy (August 2011)
- UC-DK Int. Workshop on Synthetic Biology (August 2011)
- UC-DK Workshop on Indoor Environment Technology (Sep. 2011)
- Explosions of Virtualities Workshop w. Stanford (October 2011)
- "Smart Grid Applied part II" in Denmark (October 2011)
- Foods for Health Workshop with USDA and UC Davis (Nov. 2011)
- US-DK Photonics Workshop III (Jan. 2012)





Danish support of research collaboration



DCSF support of research collaboration

- Overall yearly budget: 1.1 billion DKK in 2010
- 20 pct. of budget can be transferred to international calls
- 54 pct. of all funding goes to applicants with international partners
- International dimension = key criterion in the assessment
- Anyone may apply for funding and participate. Funded research activities has to promote and strengthen Danish research.
- international participation is covered, e.g. costs associated with collaborative research, procurement of research from foreign research environments and bringing guest researchers to Denmark.
- For more information see also http://en.fi.dk/ under Councils and Commissions > The Danish Council for Strategic Research.



DCIR support of research collaboration

- Overall yearly budget: 1.4 billion DKK in 2010
- 20 pct. of budget can be transferred to international calls
- Anyone can apply. Objective: To support the best Danish research
- DCIR can at any time support and match the objective of a strong
 Danish participation in international research collaboration.
- **Examples:** Int. guest researchers, postdoc scholars abroad and efforts to attract top int. research talents to Denmark.
- Mutual int. mobility: DCIR and NSF: Joint special effort to give information on postdoc's funding or research stay in DK or US.
- More <u>here</u>.



DNRF support of research collaboration



- Nordic Research Opportunity Program (NROP): Partnership w. NSF: Visiting scholarships to graduate research fellows at DNRFs Centers of Excellence for up to 12 months. More here.
- Professorship programs: The "Niels Bohr Visiting
 Professorship" and the "DNRFS's Professorship", More <u>here</u>.
- Talent Recruitment: New special talent-recruitment initiative targeted to the DNRFs existing Centers of Excellence. More <u>here</u>.
- More info here: http://www.dg.dk/en/



NSF support of research collaboration

- Nordic Research Opportunity Program (NROP): A partnership with NSF: Visiting scholarships to graduate research fellows at the foundation's Centers of Excellence for up to 12 months. See here.
- International Research Experiences for Students (IRES): a threeyear NSF grant to support a Danish-U.S. collaboration for post. docs; "the best and brightest". Learn more <u>here</u>
- Learn more about possibilities through NSF here: http://www.nsi.sov/

Success story I Ipower

25 million USD/5 y
32 partners
UC Berkeley (CITRIS) partner



IPower Platform

In 2025, 50% of Denmark's electricity comes from wind energy. This ambition will iPower Platform honor by developing an intelligent and flexible energy system that can handle a fluctuating power generation.

WWW.ipower-net.dk

Success story II UC Davis-UC Santa Cruz-Aalborg: USD 70 K

2011 CITRIS Seed Funding Awards

June 2, 2011

Intermittency-friendly and Super-efficient Tri-generation (Combined Production of Electricity, Heating, and Cooling) to Support Large-scale Penetration of Renewable Sources in Buildings and Cities

Ali Shakouri, UC Santa Cruz, Morten Blarke, Aalborg University and Bryan Jenkins, UC Davis

http://citris-uc.org/news/2011_citris_seed_funding_awards

omia - Denmark Summer Workshop

able Energy, August 1st - 19th, 2011

US-DK RESEARCH

FACILITATING DANISH-AMERICAN RESEARCH COLLABORATIONS

RESEARCH AGREEMENT

News

Impressive Number of Grants to Danish American Research Projects



Welcome to US-DK Research Funding, an online tool that facilitates Cross-Atlantic research collaborations.

SILICON VALLEY

INNOVATION CENTER DENMARK

Denmark was proud to sign the bilateral science and technology agreement with the US in September 2009. Within a range of areas our two

countries have some excellent research communities with far-reaching potentials for further

collaboration.

To strengthen the future collaboration between the two countries, this site is a gather of relevant information for students, researchers, scientists, and others who want to enhance research collaboration between Denmark and the US. Here you can find a database of Danish and American research funds, information on research agreements between Denmark and the US

See: http://usdkresearch.squarespace.com/

Or contact me: lbn@innovationcenterdenmark.com