



# ACM Workshop on Wireless Networks and Systems for Developing Regions (WiNS-DR)

Sep 19, 2008  
San Francisco, CA, USA  
In Conjunction with ACM MobiCom

## Chairs' Welcome

Charlie Perkins, Elizabeth Belding, Ravi Jain



# Vision

- ICT for rural & underserved regions of the developing world
- Technology
  - not a panacea, but can be a catalyst
  - not a luxury, but vital to economic & social well-being
  - wireless technology seems particularly promising



# Focus and Goals

- Focus is wireless networking and systems, but consider the entire system and its lifecycle
  - economic modeling, applications, design, deployment
  - network planning, UX research, networked applications and middleware, architecture and protocols
- Goals
  - Advance state of the art for innovative, practical, deployable systems
  - Develop a sustainable, vibrant R&D agenda



# System Challenges

- Infrastructure: Power, connectivity, know-how
- Ability to pay
- Literacy, language
- Diversity of user populations
- But beware myths and generalizations
  
- Mainstream research does not focus on these



# Topics of Interest

- Policy and economics of rural access networks
- Rural network planning and spectrum management
- User experience research, including impact of language and literacy
- Shared access devices and infrastructure, including personalization and privacy concerns
- Delay tolerant networking
- Low-power and intermittent-power protocols
- Energy-efficient and intermittent-energy devices, networks and systems
- Mechanisms for emergency and urgent communications
- Middleware and mechanisms for minimizing energy, latency and storage
- Networked applications and services
- Testing, deployment and evolution



# Chairs Present in Spirit



Charlie Perkins  
Technical Fellow, WiChorus  
Formerly Nokia Fellow  
*General Chair*



Prof Elizabeth Belding  
Dept of Computer Science  
Univ California Santa Barbara  
*TPC Co-Chair*

# Future Chair



Ashton Benjamin Belding  
Arrived 7 Sep 2008



# Agenda

- 8:45 – 09:00: Opening Remarks
- 9:00 – 10:30: Deployment Experience (Ravi Jain)
- 10:30 – 10:50: Break
- 10:50 – 12:20: Delay Tolerant Networking (Mahesh Marina)
- 12:20 – 14:00: Lunch & Keynote (Prof Alex Hills)
- 14:00 – 15:30: Policy, Platforms, Architecture (Anders Lindgren)
- 15:30 – 15:50: Break
- 15:50 – 17:00: Panel (Prof Richard Wolff)



# Welcome

