



**Start up meeting
TRAMA Project**

May 11th 2007



CINVESTAV
México

Pablo-Rogelio Hernández Rodríguez



CINVESTAV, MEXICO



Cinvestav is an mexican institution created in 1961, dedicated to research and postgraduate education.

This institution has been highly ranked in Mexico because of its outstanding scientific production, technological developments, and the number of graduates awarded with M. Sc and Ph.D. degrees.

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Postgraduate education in CINVESTAV is supported by 56 academic programs: 30 for M. Sc. and 26 for Ph. D.

SOCIAL SCIENCES AND HUMANITIES

BIOLOGY & MEDICINE

CHEMICAL SCIENCES

MATHEMATICAL AND PHYSICAL SCIENCES

ENGINEERING

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ELECTRICAL ENGINEERING

Bioelectronics

Communications

Solid State Electronics

Mechatronics

Engineering projects

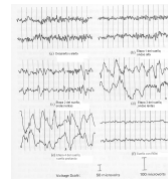
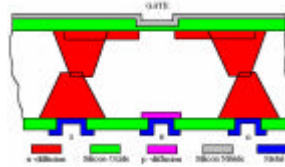
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Bioelectronics

- ? Integrated Circuits Design
- ? Chemical and Physical Sensors Design
- ? Bioinstrumentation
- ? Biosignals Processing
- ? Rehabilitation

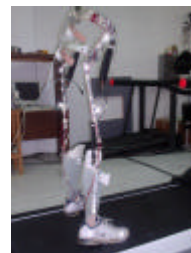


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REHABILITATION

- ?Movement analysis
 - Gait kinematical parameters
 - Prosthesis and Orthosis Evaluation
 - *Post-surgery Hand Evaluation
 - *Falling Syndrome
- ?Prosthetics
 - Upper Limb Prosthesis for above-elbow amputees
- ?Orthotics
 - Mimetic Orthosis
 - Bilateral Active Orthosis





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Equipment for movement analysis

- ?Optical system for movement analysis, Basic version, Ariel-APAS (USA)
- ?Video card interface (Picolo Tetra, Euresys, USA)
- ?4 Video cameras (Rainbow, USA)
- ?Treadmill (Trackmaster, Full Vision Inc., USA)
- ?Pulley-based body support (homemade)
- ?Working space: 7x5.5 m

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Equipment for clinical studies
(Neurorehabilitation Center "Abril", Mexico)

- | Optical system for movement analysis, Basic version, Ariel-APAS (USA)
- | Baropedometer
- | Stabilimeter

Current studies:

- mielomeningocele ? affects movements
- Movement analysis? definition of rehabilitation therapies and their effectiveness evaluation

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?Aids
Collateral Effects Prevention
Walking
Hearing



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Grant Holder

Eladio Cardiel Pérez

Communications and Electronics Engineer

Assistant Researcher

↓
Movement Analysis for orthosis
and prosthesis evaluation

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GRAZIE TANTE

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