

# Proposal Presentation

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Fixing the most representative  
physicochemical and biological  
variables Medellín Parque Norte lake,  
as a basis for mathematical modeling of  
the bioremediation

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# Talking points

1. Introduction
2. Approach to the problem
3. Research practice goals

# Talking points

4. Justification and scope
5. Methodology and schedule
6. Intellectual property

# 1. Introduction



Taken from: Wikipedia

# 1. Introduction



Taken from: El Colombiano

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# 1. Introduction

# Mathematical Modeling



## 2. Overall goal

Statistically analyze secondary information relevant to the wetland Parque Norte Lake from Medellin, Antioquia in order to provide a basis for studies to bioremediation by mathematical modeling.

## 2. Specific goals

To determine the relationship between physical, chemical and biological variables which are the most representative and the key on the ecological functioning of the lake.

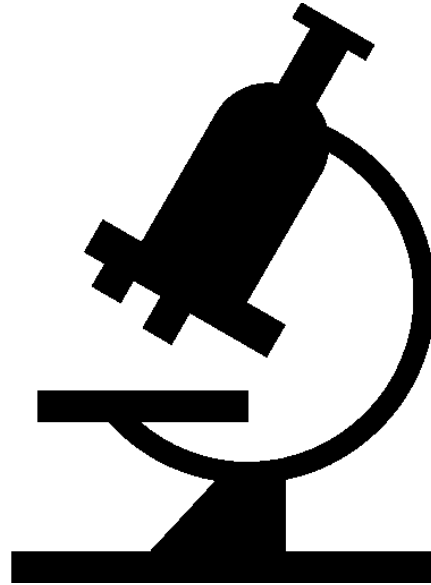
## 2. Specific goals

Select appropriate quantitative data describing the aquatic ecosystem from previous research.

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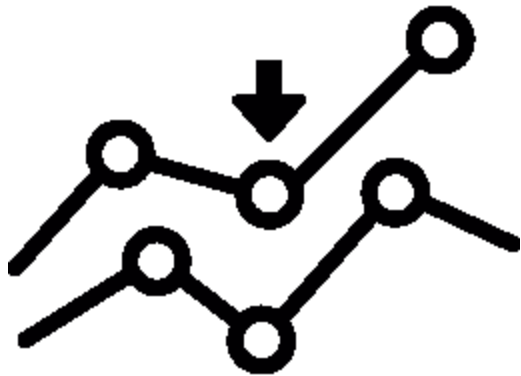
Suggest significant variables to structure the dynamic model that modulates the ecological functioning of the Parque Norte Lake.

# 3. Justification



Why could it be a determinant mathematical model to understand the lake functioning?

# 3. Scope



Understanding the ecological functioning of the lake

Requires further studies to bioremediation conclusions

# 4. Methodology and schedule

- I. Appropriation and review of secondary information that addresses the issue of the aquatic component of the lake.

Weeks:1-5



# 4. Methodology and schedule

II. Selecting quantitative data that describe aquatic ecosystem from previous research.

Weeks: 6-9

# 4. Methodology and schedule

II. Synthesizing the selected data.

Weeks: 10-13

# 4. Methodology and schedule

III. Suggest significant variables to structure the dynamic model that modulate the ecological functioning of Parque Norte lake

Weeks:14-17

# 4. Methodology and schedule

IV. Final report writing

Weeks:18-19

# 5. Intellectual property

The project is framed under government contracting company Metroparques who performed with private enterprise In Sithu, intellectual property should cover both the procurement and the regulation of intellectual property EAFIT University.

Thanks for your attention

questions?

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