DALTONIANA

NEWSLETTER OF THE INTERNATIONAL RESEARCH GROUP ON COLOUR VISION DEFICIENCIES

President: Prof A ROTH (Switzerland)

General Secretary, Treasurer & Newsletter Editor Prof J D MORELAND Department of Communication & Neuroscience Keele University KEELE Staffordshire ST5 58G UK

MARCH 1995

No. 84

IRGCVD NEWS

Colour Vision Deficiencies XIII, PAU

The organisation of the Pau Symposium is now well advanced and this issue includes the preliminary programme of papers, posters and social events. The papers programme is now full and any further submissions received will be considered for the posters session. Late submissions can be made up to 25 May and approved abstracts will be attached to the bound abstract book as loose-leaf additions.

Registration forms for accommodation and submissions are included with this issue together with a membership subscription form.

Committee Nominations

The term of office for all elected Directorial Committee members except for the President and General Secretary will end in July 1995. The retiring members are Adams, Birch, Dain, Drum, Kitahara, Marré, Mollon, Pokorny, Sperling and Zrenner.

Nominations must be received in time for the Members Business Meeting at the Pau Symposium on 30 July. After obtaining the nominees consent, kindly send your nomination to Professor J D Moreland.

Proceedings Editor

Dr Bruce Drum has now relinquished the office of Proceedings Editor and Professor Dick Cavonius has agreed to take on this burden.

The Group owes Bruce an enormous debt of gratitude. When Guy Verriest's illness prevented him from carrying on alone, he asked Bruce to help him edit the Proceedings of the Annapolis Symposium, 1987. Following Guy's death, Bruce took over and has worked steadily and determinally to raise the standard of our published proceedings by introducing the current system of peer review. He has edited the Proceedings of the Cagliari 1989 and Sydney 1991 Symposia and, despite mounting personal difficulties, the Tübingen 1993 Symposium as well. Bruce's current professional commitments prevent him from continuing as Proceedings Editor and I am glad to use these columns to record, on behalf of the IRGCVD, our thanks to him for his splendid work.

Treasurer

It is a great pleasure (and no small relief) to announce that Dr Ted Sharpe has agreed to take over the office of Treasurer of the Group. Ted moved recently from Freiburg to Tübingen and we hope to be able to announce the date of the formal change over in the near future.

Preliminary Programme

THURSDAY 27 JULY A.M.

8:30-9:30

IRGCVD DIRECTORS MEETING

9:15-10:45

Registration

10:20

Coffee

10:45

Opening Remarks (President: Professor A Roth, General Secretary:

Professor J D Moreland, Organizer: Dr J Leid)

11:10

VERRIEST MEDAL SESSION: Moderator: A Roth

Verriest Lecture: How Much Light Reaches the Retina? J POKORNY, V SMITH (Invited)

THURSDAY 27 JULY P.M.

12:00-14:00

Lunch

SESSION 1 - Moderator: S Buck

Special Topic: Colour Vision and Field Defects.

14:00	H KRASTEL Colour Vision and Field Defects. (Invited)
14:40	OGILVIE, RUDDOCK, WRIGHT. Colour Vision Without Pattern Discrimination in a Human Hemianope.
14:55	WILLIAMS, BARBUR, HARLOW, FORSYTH. Light Scattered in the Eye and its Effect on the Measurement of the Colour Constancy Index.
15:10	BARBUR, WILLIAMS, PLANT. Studies of Instantaneous Colour Constancy in subjects with Cerebral Achromatopsia.
15:25	Break

	SESSION 2 - Moderator: J Birch
15:45	KUDO, TOYOGUCHI, KURUSU, ROKUGO, OHTA, USUI. Colour Vision on Macular Hole Patients.
16:00	MALBREL Evolution of the Colored Senses of the Glaucomatous Patient Following the Gravity of the State.
16:10	VOLA, DEVIN, OUDAHIS, CONRATH, MSELAT!, BERRUS. Peripheral Colour Vision In the Course of Retinal Detachments.

SESSION 3 - Moderator: C R Cavonius

16:20	MORLAND, RUDDOCK. The Identification and Categorization of Colours by Human Observers with Colour Vision Deficiencies.
16:35	BRISTOW, MORLAND, RUDDOCK. Limits of Colour Constancy in Humans with Normal Colour Vision.
16:50	MOLLON, JORDAN, REGAN, SARKIES. A Case of Tritanopia of Sudden Onset.
17:05	VINGRYS, METHA. Psychometric Functions in the Central Visual Field.
17:20	PEASE, VAJOCZKI. Cone Monochromacy: A Case Report.
18:00	Reception by the Mayor of Pau: City Hall, Salle du Conseil
19:00	Open Grand Chistera ville de Pau, Stadium de la Gare

FRIDAY 28 JULY A.M.

SESSION 4 - Moderator: V Smith

Special Topic: Variation of Colour Vision: Genotypes and Phenotypes.

8:30 DEEB. Levels of Expression of the Red and Green Pigment Genes in the Human

Retina. (Invited)

9:05 MOLLON. Polymorphisms and Photopigments: A Primer. (Invited)

9:40 Break

10:00 NIETZ. Variety of Photopigment Genes Underlying Red-Green Color Vision. (Invited)

10:35 SHEVELL Phenotypes of Normal and Anomalous Trichromacy. (Invited)

11:10-11:45 Round Table Discussion

FRIDAY 28 JULY P.M.

12:15 Group Photograph

12:30-14:00 Lunch

SESSION 5 - Moderator: S Shevell

14:00	HAGERSTRÖM, NEITZ, NEITZ. Ratio of L/M Pigment Gene Expression Increases with Retinal Eccentricity.
14:20	JORDAN, MOLLON. Unique Hues in Heterozygotes for Protan and Deutan Deficiencles.
14:40	SWANSON, FIELDMAN. Sensitivity and Spectral Tuning of the Red-Green Chromatic Pathway in Heterozygous Carriers of Congenital Color Vision Defects.
14:55	NEITZ, NEITZ. Fusion Genes in Normal and Anomalous Color Vision.
15:10	KREMERS, WEISS, MAURER, ZRENNER. Responsivity of LGN-Cells in Marmosets with Molecular-Genetically Determined Cone Pigment Deficiencies.
15.25	TANABE, HUKAMI. Results of Clinical Color Vision Tests of "Pigmentfarbenanomalie".
15:40	Break

SESSION 6 - Moderator: G Jordan

16:00	PARAMEY, CAVONIUS. Color Spaces of Normal and Anomalous Trichromats Reconstructed from Reaction Time and Rating Measures.
16:15	REGAN, MOLLON. The Relative Salience of the Cardinal Axes of Colour Space in Normal and Anomalous Trichromats.
16:30	KNOBLAUCH, BIEBER, WERNER. Detecting Color Deficiency in 4- and 8-Week Old Human Infants Using the VEP.
16:45	SCHEIBNER, ORAZEM. Features of Foveal Dichromacy Illustrated by Deuteranopia.
18:00	Visit to Chateau de Pau
20:00	Reception at the Parlement de Navarre

SATURDAY 29 JULY A.M.

Special Topic: Structure and Function in	Colour Vision	Moderator: J Pokorny
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8:30 LEE. Structure and Function in Primate Retina (Invited)

SESSION 7 - Moderator: J Mollon

9:10	AHNELT, RÖHLICH, HOKOG. Four Cone Subtypes in a Primitive Mammal - The South American Opossum - Immunocytochemical Characterization.
9:25	KULIKOWSKI, MCKEEFRY, ROBSON. Selective Stimulation of Colour Vision Primates.
9:45	SPERLING. Color Processing is Complete in the Retina.
10:00	BUCK. Influence of Rod Signals on the Perceptual Opponent Color Channels.
10:15	FRUMKES, EYSTEINSSON, LEMBESSIS, VOLLARO. The influence of Monocular and Interocular Adaptation upon Color Vision.
10:30	Break
10:30-12:00	POSTER SESSION - Moderator: J D Moreland

SATURDAY 29 JULY P.M.

12:00-14:00 Lunch

11:15

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Business Meeting

14:00 Exploring Béarn

SUNDAY 30 JULY A.M.

SESSION 8 - Moderator: F Viénot

8:30	WALRAVEN, ALFERDINCK. A Colour Deficiency Simulator for the Display Designer.
8:45	SPALDING. The Effect of Inherited Defective Colour Vision on the Clinical Skills of Doctors.
9:00	COLE, MADDOCKS. Defective Color Vision is a Risk Factor in Driving.
	SESSION 9 - Moderator: E Zrenner
9:15	MORELAND, ALEXANDER. Effect of Macular Pigment on Colour Matching with Field Sizes in the range 1-10.
9:30	SOMMERHALDER, PELIZZONE, MORELAND, ROTH. Influence of Stimulus Luminance on Automated Moreland Matches.
9:45	ICHIKAWA, TANABE, HUKAMI, YAMADE, KONO, TAGAI. Automated Examination Method of Anomaloscope.
9:55	IONICA. Ionica's Color Vision Test.
10:05	BIRCH. The Clinical Use of Saturated and Desaturated Munsell Panel Tests.
10:15	KITAHARA. The Simulation of the Hue Changes after Intraocular Lens Implantation.
10:25	Break .
	SESSION 10 - Moderator: K Knoblauch
10:45	WATANABE, SMITH, POKORNY. Psychometric Function for Chromatic Discrimination.
11:00	GAUDART, CRÉBASSA, PÉTRAKIAN. Colour-Opponent Wavelets and Chromatic Receptive Fields.

SUNDAY 30 JULY P.M.

12:00-14:00 Lunch SESSION 11 - Moderator: W Swanson KURTENBACH, SCHIEFER, ZRENNER, NEU. The Colour Vision Meter and Young 14:00 Diabetics. CHADUTEAU, MENU, CORBE, COSCAS. New Colour Test of Lanthony in Low Vision 14:15 Patients. MĀNTYJĀRVI, TUPPURAINEN. Color Vision in a Family with Butterfly-Shaped Pigment 14:30 Dystrophy of the Fovea. FOSSARELLO, ZUCCA, PIRASTU, BERTINI, GALANTUOMO, SERRA. Colour Vision 14:45 Deficiencies in 2 Sardinian Families with Butterfly-Shaped Macular Dystrophy Break 15:00 SESSION 12 - Moderator: H Krastel BIRCH. Acquired Tritanopla in Diabetic Maculopathy. 15:15 PINCKERS, TILANUS. Color Vision in Macular Gliosis, Cysts, Holes and Edema. 15:30 An Approach to Depth-Localization. PAULUS, SCHWARZ, STEINHOFF. Influence of Anticonvulsive Drugs on Colour 15:45

POSTERS

AKITA, MIYAHARA. EEG Color Topographic Analysis for Colored Lights with the Maximum Entropy Method.

BARBUR, COLE, PLANT. Testing Chromatic Discrimintion with both Congenital and Acquired Colour Vision Deficiencies.

BERENDSCHOT, VAN NORREN, VAN DE KRAATS. Foveal Cone Packing and Visual Pigment Density in Dichromats.

BUCK, SANOCKI, KNIGHT. Do Rod Signals Add with S-Cone Signals in Increment Detection?

ERB, ADLER, STÜBIGER, WOHLRAB, THIEL. Evaluation of the Desaturated Roth 28 Hue-Colour Test.

GONELLA, MATTIELLO, TONTI. Clinical Experience with AVICO Color Vision Analyzer.

GUNJI, YAMAMOTO, OYAMA, KUBO, KITAHARA. Spectral Sensitivity Characteristics for Two Polymorphic Variants of Normal Red Pigment.

IBATULIN. Color Vision and Ambiyopia.

Perception.

16:00

17:30

END OF MEETING

Escaladieu Abbey

JORDAN, MOLLON. The OSCAR Test as a Means of Identifying Carriers of Red-Green Colour Defects.

KEUNEN, DELINT, VAN SCHOONEVELD, WENT. Tritanopia as a Sign of Dominant Cone Dystrophy.

KRASTEL, ST LEERS. Chromatic Acuity and PIC-Plate Tachystoscopy as Improved Tools in the Evaluation of Acquired Colour Vision Defects.

LANTHONY, GOBERVILLE. Influence of Lightness (Munsell-Value) on Desaturated Panel D-15.

LEID, PLANTEY, LEID. A Protocol for Monitoring Treatment by Synthetic Anti-Malarial Drugs, using a Colour Vision Test Combination with a Novel Para-Macular Perimetric Test.

LEID, SOULEYMANOU, POLETTI. Evaluation of Yu's Chinese Pseudo-Isochromatic Plates for Acquired Dyschromatopsia.

LE ROHELLEC, VIÉNOT. Distant Colour Induction on Fechner-Benham Top.

MAGUIRE. Voltage and Ligand-Gated Currents of Amacrine and Biopolar Cells in the Primate Retinal Slice.

MATTIELLO, BIONDINI, SALINAS. Yellow-Blue Opponent Color Responses as a Function of Retnal Eccentricity.

MATTIELLO, BIONDINI, SALINAS. Metameric Achromatic Color: Evoked Potential and Psychophysical Measurements.

MORELAND, ALEXANDER. Temperature and Rayleigh Matching on Moreland's Anomaloscope.

MORELAND, BRADSHAW. "Nagel" dichromats who Reject R≡G.

NESTERUK. Color Campimetry in the Diagnosis of Eye Diseases.

NIMSGERN, LANG, KRASTEL. Lang's PC-Colour Test: Clinical Application in Congenital and Acquired Colour Vision Defects.

PEFFERKORN, CHIRON, VIÉNOT. Setting an Heterochromatic Spatial Photometry Technique.

REITSAMER, PFLUG, RÖHLICH, AHNELT. Topographic Differences of Spectral Sensitivity in Rabbit Retina. Small Field ERG Recordings and Immunohistochemistry.

RONCHI, CETICA. Color Reproduction Biasing the Inferences on Painter's Defective Color Vision.

ROUGIER, RISS, LE REBELLER. Short-Wavelength Color Perimetry: an Interesting Macular Investigation?

ROY, GOURAS, MACKAY. Detecting Blue Cone Monochromats by Electroretinography.

RÜTTIGER, KURTENBACH, ZRENNER. Colour Discrimination in a Monoptic and Dichoptic Task.

SHAMSHINOVA. Topographic VEP and Color Vision.

SPERLING. Comparison of Increment and Decrement Spectral Sensitivity.

TAUSCH. About the Influence of Specular Highlight to Lightness and Colour Constancy.

VIÉNOT, OTT, M'BAREK. Screening Colour Vision with an LMS Calibrated Display.

VINGRYS, MAHON. Stalrcase Stepsize for Colour Luminance Testing.

VITAL-DURAND, KNOBLAUCH, BARBUR. Age-Matched Comparisons of Chromatic Thresholds for Normal and Strabismic Observers.

REGISTRATION FORM No. 1: SYMPOSIUM & ACCOMMODATION BULLETIN D'INSCRIPTION No. 1: SYMPOSIUM & ENREGISTREMENT

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REGISTRATION FORM No. 2: CALL FOR CONTRIBUTIONS BULLETIN D'INSCRIPTION No. 2: APPEL A COMMUNICATION

I would like to attend the symposium. Je souhaite participer au symposium
I would like to submit a contribution/s. Je souhaite soumettre une communication.

Return this form to Prof. MORELAND before 25 May 1995 and a copy to Dr. LEID. J'adresse ce bulletin d'inscription au Pr. MORELAND avant le 25 Mai 1995 et une copie au Dr. Jean LEID.

TOPICS OF THE SYMPOSIUM

- Variation of Colour Vision: Genotypes and Phenotypes. Invited speakers: Samir DEEB, John MOLLON, Maureen NEITZ, Steven SHEVELL. Moderator, round table discussion: Vivianne SMITH.
- 2. Structure and Function in Colour Vision: Invited speaker: Barry LEE.
- 3. Colour Vision and Field Defects: Invited speaker: Hermann KRASTEL
- Free papers will be accepted (methods of examination of central and peripheral colour vision, congenital and acquired defects, practical aspects, etc ...)

The principal/presenting author must be a member of the IRGCVD and is asked

- to request only poster contributions (the paper programme is now full). Poster presentations
 are, in principle, unlimited. Posters, which have the same status as papers, have been allocated
 session time in the programme.
- to send for each contribution, before 25 May 1995, an abstract (maximum 200 words: 2 copies to Professor MORELAND and 2 to Dr. LEID. The document should be written with a good quality printer or type writer, inside a square frame of 18 cm (7") x 18 cm (7"), must include title (in capital letters, bold type), authors (presenting author underlined), institution, city, country, followed by the abstract. All abstracts, will be reviewed and those accepted will be enclosed with the Symposium Abstract booklet. Abstracts will be reproduced photographically exactly as received and reduced x 1/2. Late or wrongly formatted abstracts may not be included in the programme.
- to submit before the end of the symposium the manuscript/s (in good english) for publication in the proceedings.

THIS PAGE MAY BE PHOTOCOPIED FOR MULTIPLE CONTRIBUTIONS
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POSTER THEME: SPECIAL TOPIC 1 2 3 or FREE (Please mark)
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NEW MEMBERS AND MEMBERSHIP RENEWALS: Please use the form on the next page.

INTERNATIONAL RESEARCH GROUP ON COLOUR VISION DEFICIENCIES

Membership Subscription: 1994/95

The full subscription is UK£40 (full members; payment of the 1994 and 1995 subscriptions will guarantee automatic entitlement to the 1995 Pau Symposium Proceedings. New members joining in 1995 should pay £80 to receive the Proceedings volume) or UK£10 (student and retired members). All members receive the IRGCVD newsletter *Daltoniana*.

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